



EIRA

ENERGY INVESTMENT RISK ASSESSMENT

2022

 COMMON RULES FOR **GLOBAL ENERGY SECURITY**



E I R A

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2022

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ABOUT THE INTERNATIONAL ENERGY CHARTER

In the early 1990s, after the end of the Cold War, the Dutch Prime Minister at the time, Ruud Lubbers, took the initiative to establish cooperation in the field of energy between the East and the West. His efforts paved the way for the Energy Charter Treaty (ECT) which was signed in December 1994 at Lisbon and entered into force in April 1998.

The ECT establishes a unique multilateral legal framework to facilitate international energy cooperation. Its key principles, namely, openness of energy markets, investment protection and non-discrimination stimulate foreign direct investment and cross-border trade. As of 25 June 2022, the ECT has 53 Signatories and Contracting Parties (including the European Union and Euratom).

The *International Energy Charter* is the informal working name of the Energy Charter Conference, its subsidiary bodies and the Energy Charter Secretariat. It was adopted in 2016 to reflect the global nature of the Organisation better.

The Energy Charter Conference is the governing and decision-making body of the Organisation. Each year its Chairmanship is entrusted to a different Contracting Party of the ECT. In 2022, Mongolia holds the Chairmanship. The Members and Observers of the Energy Charter Conference represent governments and regional intergovernmental organisations from six continents, including all significant energy producing, transit and consuming regions.

The Energy Charter Secretariat is based in Brussels, Belgium. It is headed by Secretary-General Guy Lentz. The main functions of the Energy Charter Secretariat include:

Providing administrative support and facilitating the work of the Energy Charter Conference and its subsidiary bodies;

Monitoring the implementation of the ECT;

Assisting governments in enhancing their investment climate through various instruments;

Offering support for dispute settlement and conflict resolution;

Developing regulation and model agreements for cross-border energy projects;

Organising capacity building and training sessions related to the ECT;

Assisting Observer countries with ECT accession.

FOREWORD

Achieving an effective energy transition, especially in developing countries lacking financial resources, is critical to fulfilling the SDG goals and combating climate change. While development aid continues to be relied upon for socio-economic growth, especially in least-developed countries, its primary purpose is not to substitute FDI but to make these countries attractive investment destinations, increase domestic savings and promote technological innovation. In this regard, the Kyoto Protocol and the Paris Agreement encourage investment flows from countries with financial resources to those that require support. Indeed, foreign investments will be the backbone of the energy transition and the key to reaching carbon neutrality in the longer term.

However, various risks can demotivate foreign investors despite political will, investor interest and supportive policies. The principal barriers to FDI in clean energy are not technology-related or economic but rather regulatory and legal. Legal and regulatory risks involve the probability that government actions may disrupt business operations, often leading to the cancellation of projects, withdrawal of investment, or disputes with host countries.

Sustaining the high levels of FDI in clean energy needed to achieve development goals will require sound strategies to minimise or eliminate legal and regulatory risks. Our research indicates that of the 150 publicly known investment arbitration cases under the Energy Charter Treaty, 60 % are related to renewables and are by small and medium enterprises. As a result, over the last years, the Energy Charter Secretariat has developed

its flagship publication – the Energy Investment Risk Assessment (EIRA) – to assist governments by identifying legal and regulatory risks to energy investments and providing them with recommendations to mitigate these risks.

EIRA guides governments in adopting best practices and designing an enabling environment for investment inflows. At the same time, it informs the investor community about the most recent legal and regulatory changes made by governments in the energy sector.

It is worth mentioning that this edition of EIRA has been revised substantially to include new topics that reflect the global pledges made at COP26 by countries to achieve net-zero emissions by the mid-century. Moreover, public accountability and anti-corruption have been introduced to assess transparency in energy governance more effectively. I am confident that the report's updated scope will support governments in accelerating access to clean and sustainable energy and achieving a progressive energy transition while ensuring policy consistency and risk reduction.

Finally, I would like to express my sincere gratitude to the countries, the external parties participating in EIRA 2022, and its authors. I hope that EIRA will pave the way for growing the Energy Charter constituency in the coming years and bring benefits to its Members and Observers.

Guy Lentz
Secretary-General
Energy Charter Secretariat
Brussels

MESSAGE OF THE IAP CHAIR

The International Energy Charter Industry Advisory Panel (IAP) is a consultative body to the Energy Charter Conference comprising energy companies, international business associations and financial institutions. The IAP aims to facilitate dialogue between the public and private sectors on the main directions of the Energy Charter Process, particularly risk mitigation and improvement of the business climate.

It is a widely acknowledged fact that meeting the enormous cost of decarbonisation will require an increase in the role of the private sector. Energy companies will need to make informed decisions that accelerate the deployment of clean and smart technologies and hedge the risk of stranded fossil-fuel-based assets. At the same time, governments will have to develop resilient, transparent, and predictable legal and regulatory frameworks to encourage investments in new markets, particularly those with insufficient public funding.

In this context, as the Chair of the IAP, I welcome the fifth edition of the EIRA report, which supports policy-makers in identifying legal and regulatory risks to investments in the energy sector and taking action to mitigate these risks.

I believe this year's EIRA report will go a long way in informing the investor community about the 'state of play' in different countries. EIRA's coverage of new and relevant topics – including energy transition, environmental protection, corporate social responsibility, competition and public accountability – make it a good reference point for companies looking to invest in new jurisdictions. Investors can also use it to track the latest legislative and regulatory changes in those countries where they are already operating.

On behalf of the IAP, I congratulate the Energy Charter Secretariat for developing this well-timed and comprehensive report. It is my hope that political decision-makers and the business community will widely utilise EIRA to navigate the clean energy transition and ensure a progressive, just and sustainable development.

Rafael Cayuela Valencia

Chair of the International Energy Charter Industry
Advisory Panel
Chief Strategy Officer and Corporate Chief
Economist
Dow EMEA

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EIRA 2022 has been prepared by the Implementation Unit of the Energy Charter Secretariat (ECS), headed by Deputy Secretary General Atsuko Hirose. It was developed by a core team managed by Ishita Pant and comprising Ruslan Rakhmetov, Edward Safaryan, Anna Pitaraki and Ardit Cami. The biographies of the authors are available at the end of the report.

The ECS expresses its appreciation to the countries that volunteered for EIRA 2022. We thank the government-appointed focal agencies and other participating government institutions for their intensive engagement with us and valuable contribution to this year's report.

EIRA 2022 is made possible through the expertise and generous input of external partners who have contributed to the report pro bono.

Intergovernmental organisations, legal and energy experts, members of the academia, financial institutions, think tanks, business consultants, accountants, and other professionals actively engaged in the participating countries provided the ECS with in-depth on-the-ground information and data. They are duly acknowledged in the Contributors section of the report.

The ECS is grateful to the Energy Charter Implementation Group delegates, peer reviewers, and the Energy Charter Industry Advisory Panel for their guidance and constructive feedback on enhancing EIRA's scope to cover new and emerging global energy issues. We hope that EIRA's comprehensive coverage will support governments in reducing risks to achieving the clean energy transition and help them meet their commitments under the Paris Agreement.

ABBREVIATIONS

BIT	Bilateral Investment Treaty
CO ₂ e	Carbon Dioxide Equivalent
ECT	Energy Charter Treaty
EIRA	Energy Investment Risk Assessment
EITI	Extractive Industries Transparency Initiative
EU	European Union
EUR	Euro
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GHG	Greenhouse Gas
IEA	International Energy Agency
IIA	International Investment Agreement
kV	Kilovolt
KW	Kilowatt
LT-LEDS	Long-Term Low Emissions Development Strategy
MDA	Ministries Departments and Agencies
MIGA	Multilateral Investment Guarantee Agency
Mt	Million tonnes
MW	Megawatt
NDC	Nationally Determined Contributions
NECP	National Energy and Climate Plans
SDG	Sustainable Development Goals
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar
VAT	Value-Added Tax
Wh	Watt-hour
WTO	World Trade Organization

TABLE OF CONTENTS

ABOUT THE INTERNATIONAL ENERGY CHARTER	i
FOREWORD	ii
MESSAGE OF THE IAP CHAIR	iii
ACKNOWLEDGEMENTS	iv
ABBREVIATIONS	v
INTRODUCTION TO EIRA	1
RISK AREAS AND INDICATORS FOR EIRA	4
What are the risks assessed by EIRA?	4
How are the EIRA indicators selected?	4
What are the EIRA indicators?	5
Indicator 1: Framework for a sustainable energy system	6
Sub-indicator 1: Policy planning on clean energy transition	6
Sub-indicator 2: Enabling measures to support clean energy transition	6
Sub-indicator 3: Environmental protection, human rights and gender	7
Sub-indicator 4: Energy resilience	7
Indicator 2: Foresight of policy and regulatory change	8
Sub-indicator 1: Communication of vision and policies	8
Sub-indicator 2: Robustness of policy goals and commitments	8
Indicator 3: Management of decision-making processes	9
Sub-indicator 1: Institutional governance	9
Sub-indicator 2: Transparency and anti-corruption measures	9
Indicator 4: Rule of law (compliance with national and international obligations)	10
Sub-indicator 1: Management and settlement of investor-State disputes	10
Sub-indicator 2: Respect for property rights	10
Indicator 5: Regulatory environment and investment conditions	11
Sub-indicator 1: Regulatory independence	11
Sub-indicator 2: Electricity industry market structure and competition	11
Sub-indicator 3: Restrictions on FDI	11

EIRA METHODOLOGY	12
How are the respondents for EIRA selected?	13
What is the data collection and validation process for EIRA?	14
How are risks assessed in EIRA?	15
Scoring system	15
Country profile outline	16
COUNTRY PROFILES	19
Albania	20
Bosnia and Herzegovina	28
Colombia	36
Eswatini	44
Georgia	52
Guyana	60
Indonesia	68
Jordan	76
Kazakhstan	84
Mauritania	92
Montenegro	100
Nigeria	108
Panama	116
Republic of Moldova	124
South Sudan	132
The Gambia	140
Turkmenistan	148
Uganda	156
Uzbekistan	164
Viet Nam	172
ANNEX I: EIRA QUESTIONNAIRE	180
ANNEX II: EIRA SCORING GUIDE	190
ANNEX III: ORBIS CROSSBORDER INVESTMENT GLOSSARY AND INDUSTRY CLASSIFICATION	194
CONTRIBUTORS	197
AUTHORS	201

INTRODUCTION TO EIRA



Adjustments to legal and regulatory frameworks and policy planning approaches are inevitable – and even necessary – for countries to successfully achieve a clean energy transition. As a result, governments worldwide are dramatically revising their public policy goals to ensure climate-compatible development, decarbonise high-emission sectors, and achieve net-zero emissions by mid-century.

Undoubtedly, the current energy transition will create new dependencies and energy security concerns, which will cause further changes to long-term policy trajectories. Countries will consider and apply the most appropriate policy, legal, and regulatory measures to reduce dependency on imported fossil fuels, promote resource diversification, and secure critical raw materials to support renewable energy technologies.

Due to these various considerations and resulting course corrections, financial flows into renewable energy sources and energy-efficient technologies have steadily increased in the last decade. While this is encouraging, it is relevant to note that attracting investments for renewable energy remains challenging, particularly in developing and least-developed countries. According to UNCTAD’s Investment Trends Monitor (Issue 40, January 2022), SDG-relevant investment projects in least-developed countries declined by 30% in 2020 and fell further by 17% in 2021. Though the total value of projects increased by 20%, this was only due to a single large renewable energy project.

While international donor agencies and State funding will contribute to financing the clean energy transition, the lion’s share will come from private sector investments. These investments, particularly in innovative and new technologies, will be made by small and medium-sized enterprises needing certainty that legal and regulatory conditions under which investments were made will not be subject to sudden and unilateral changes. Moreover, the global fuel and financial crisis resulting from the war in Ukraine and the COVID-19 pandemic has significantly diminished risk appetite, and it is unlikely that emerging markets will be able to attract the required investments without a reliable regulatory framework.

As a treaty-based organisation, the International Energy Charter recognises the need for countries to strengthen the rule of law and promote energy security through open and competitive energy markets while respecting the principles of sustainable development and sovereignty over energy resources. Its mandate, unique under international law, encourages countries to implement well-designed legal and regulatory frameworks to considerably reduce the risk of lost investments and disputes between investors and States.

In this context, EIRA is an effort of the International Energy Charter to guide governments in making their legal and regulatory frameworks resilient and increase their preparedness for the energy transition. At the same time, the

report aims to offer the investor community insights into countries’ policy planning, their ability to mitigate legal and regulatory risks to energy investments and recent efforts to offer the private sector certainty on investment conditions.

In 2022, the Energy Charter Conference approved changes to EIRA’s scope after more than three years of intensive analysis and discussions. The updated scope reflects the commitments made by countries under the Paris Agreement and the global efforts to combat climate change. It assesses whether countries have taken – or are taking – policy, legal and regulatory measures to build resilient energy systems and achieve a clean energy transition considering environmental, gender and corporate social responsibility issues. The report also examines measures to decarbonise high-emission sectors, reduce macroeconomic GHG emissions, adapt to climate-neutral energy systems, and coordinate clean energy generation with grid infrastructure development. It includes more detailed information on policy monitoring and evaluation mechanisms to assess whether countries are on track to achieving their policy objectives in the energy sector.

EIRA assesses legal and regulatory risks that can be managed and mitigated through government action.

EIRA is based on the understanding that countries must establish open and competitive energy markets that promote sustainable development while preserving governments’ right to regulate.

Given the critical importance of public accountability in policy implementation, EIRA now covers anti-corruption issues and transparency in public procurement processes. Through a new sub-indicator, there is added emphasis on steps being taken to liberalise electricity markets, promote competition, and make the power sector financially attractive for potential investors.

Various international and multinational organisations examine different aspects of foreign investment and energy, such as energy economics, technologies and resources, and the macroeconomic investment climate.

EIRA adds to this literature by exclusively assessing countries' legal and regulatory environments in line with the International Energy Charter's core mandate and area of competence.

Finally, EIRA has expanded its scope in evaluating the rule of law. It now also examines governmental efforts to establish dispute prevention policies and early warning mechanisms and address investor grievances before they precipitate into full-scale disputes. On property rights, the report covers in more detail issues of indirect expropriation, evaluation of compensation and interest in the case of compulsory expropriation of property, and access to political risk insurance, among others.

With its comprehensive coverage, EIRA intends to help countries make smart regulatory choices and develop

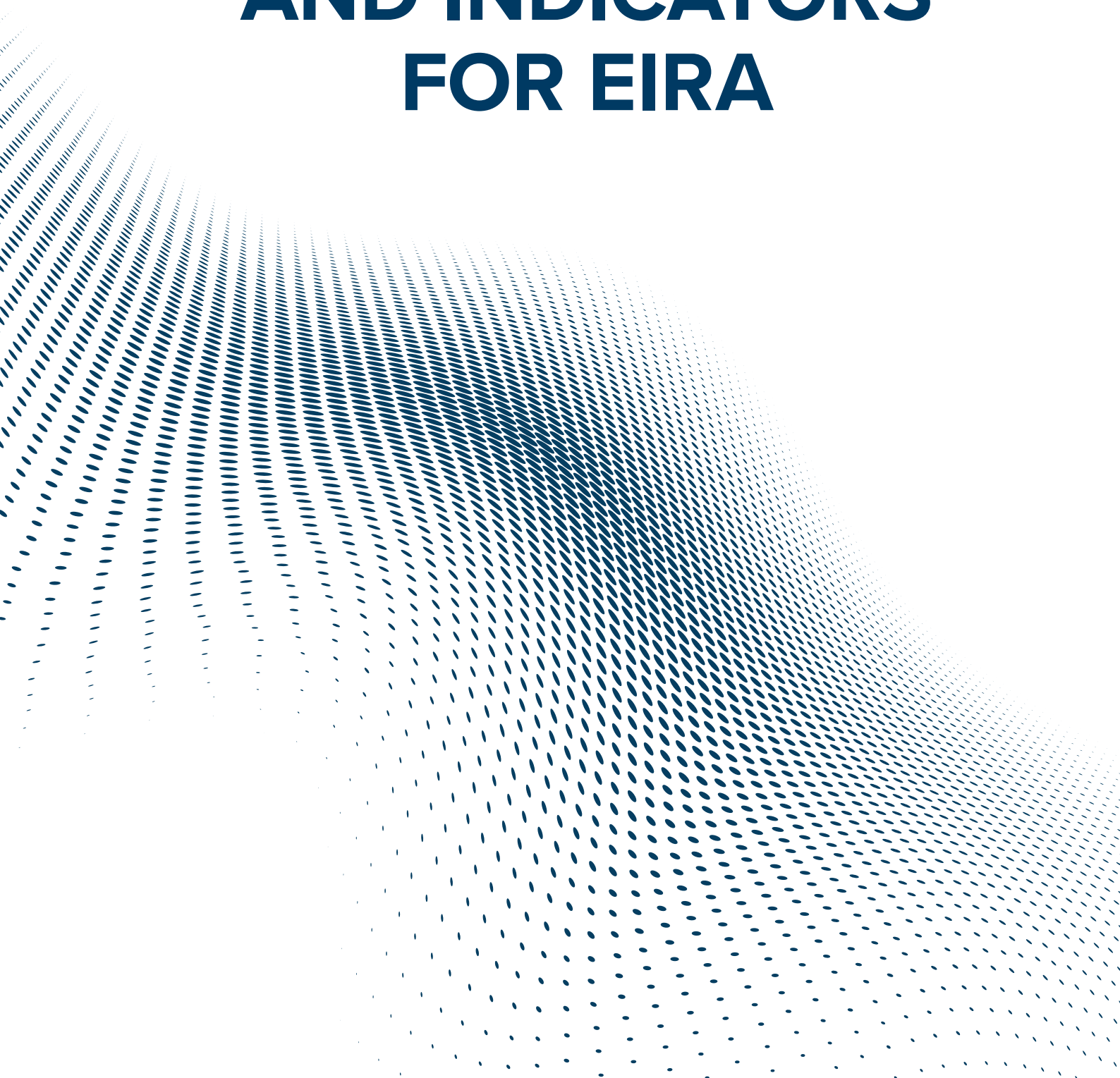
effective strategies that ensure investor confidence is established and retained over time. It aspires to deliver a range of practical benefits for countries and the international investment community by:

- **Informing national and international stakeholders of the most recent legal and regulatory measures taken by countries to improve the investment climate in the energy sector;**
- **Providing support in identifying policy, legal and regulatory gaps and developing strategies to close these gaps;**
- **Tracking the progress made by countries in implementing the EIRA recommendations on mitigating legal and regulatory risks.**

The EIRA report's eventual goal is to aid global efforts to accelerate clean energy access, stimulate progressive reforms to facilitate the clean energy transition, and systemically reduce legal and regulatory risks in countries that hope to attract much-needed investments.

EIRA has been tailored to serve the needs of the International Energy Charter constituency and help its Members and Observers identify measures to improve their investment environment.

RISK AREAS AND INDICATORS FOR EIRA



EIRA evaluates risks to energy investment that can be mitigated through adjustments to legal and regulatory frameworks. The risk level in each country is assessed through five indicators. The indicators reward countries for effectively mitigating and managing these risks through long-term policy planning, transparent decision-making processes, competent market oversight, and dispute prevention policies.

What are the risks assessed in EIRA?

EIRA analyses the following risks:

Unpredictable policy and regulatory change

Governments have the prerogative to adopt legislative and regulatory measures necessary to pursue legitimate public policy objectives. Nevertheless, a sudden and arbitrary change to established rules can detrimentally affect the interests of foreign investors. It can lead to increased or stranded costs for operating a business, reduce the attractiveness of investments, and distort competition. As a result of unpredictable legal and regulatory changes, foreign investors may reconsider investing in the country or relocate the investment. Therefore, governments must ensure consistency in policy planning and implementation and engage with investors before effecting legal and regulatory changes.

Discrimination between domestic and foreign investors

Foreign investors need clarity on whether markets are competitive and offer a level playing field to all investors. This risk area assesses the

likelihood of an unfair advantage to domestic investors, as recipients of rights and privileges, and of protectionist practices that give rise to foregone investment gains for domestic investors. It should be noted that while discrimination can take various forms, such as between energy resources, technologies and types of investors, EIRA only focuses on discrimination between domestic and foreign investors.

Breach of State obligations

Disputes brought by investors against a State can disrupt the relations between the parties and even damage the country's overall investment climate. Investors must be confident that they will have recourse to robust grievance redressal and dispute resolution mechanisms and can enforce their rights if governments default on their obligations. Such obligations include protection against discrimination, expropriation and nationalisation, breach of investment treaties, and access to alternative dispute settlement avenues.

How are the EIRA indicators selected?

The indicators are constructed from a wide range of variables. They are based on the key principles of the ECT and the objective of governments to guarantee investors a secure, predictable, and transparent investment environment.

Five criteria are applied to determine the appropriate indicators:

Functionality/actionability – The indicators should be 'reform-oriented'. They should reflect best practices through which countries can manage legal and regulatory risks, capturing aspects of policy-making and regulation under the control of governments.

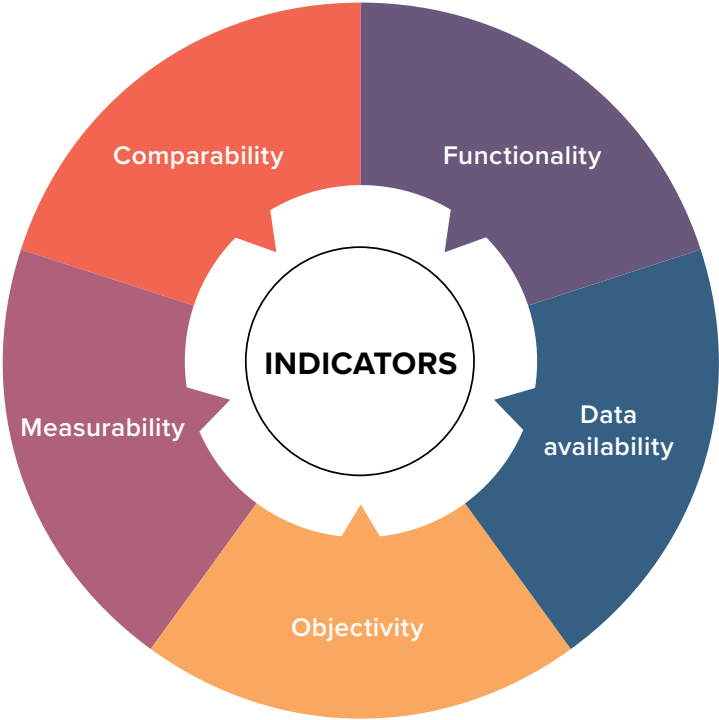
Data availability – Data for the indicators should be available from reputable and reliable sources. The indicators should be based on data that is relevant, readily accessible and easy to collect.

Measurability – The indicators should provide a quantifiable assessment, be robust, and remain unaffected by minor changes to their methodology.

Comparability – The indicators should be comparable over time and across countries, energy sub-sectors, and the energy value chain.

Objectivity – The indicators should accurately reflect the countries' policy, legal, and regulatory realities.

Figure I.1 – Criteria for the selection of indicators



What are the EIRA indicators?

Based on the above criteria, the following five indicators have been developed to assess countries:

- | Framework for a sustainable energy system
- | Foresight of policy and regulatory change
- | Management of decision-making processes
- | Rule of law (compliance with national and international obligations)
- | Regulatory environment and investment conditions

Table I.1 – Correlation between the EIRA risk areas and indicators

RISK AREAS	INDICATORS				
	Framework for a sustainable energy system	Foresight of policy and regulatory change	Management of decision-making processes	Rule of law	Regulatory environment and investment conditions
Unpredictable policy and regulatory change	✓	✓	✓	✓	✓
Discrimination between domestic and foreign investors			✓	✓	✓
Breach of State obligations	✓			✓	✓

INDICATOR 1

Framework for a sustainable energy system

While the world has witnessed energy transitions in the past, a complete shift from fossil fuel to sustainable energy systems is unprecedented. Given its scale, the ongoing energy transition will undoubtedly play a dominant role in shaping countries' short- and long-term social, economic and environmental priorities. It will place new demands on the existing legal and regulatory frameworks and decision-making structures. As a result, countries will need to plan well in advance and communicate clearly to investors legal and regulatory changes needed to achieve the clean energy transition successfully. Governments will need to develop and implement concrete policy and regulatory measures, enabling legislation, programmes and actions to facilitate a smooth transition and mitigate the risk of unpredictable changes.

SUB-INDICATOR:

POLICY PLANNING ON CLEAN ENERGY TRANSITION

Energy planning poses more complex challenges than before. The energy transition requires changes to policy-making approaches, new legal and regulatory frameworks to develop and deploy green technologies, re-distribution of investment flows, and new energy infrastructure. As a result, governments and investors will need to make strategic, forward-looking energy decisions aligned with the global efforts to decarbonise economies and account for new trends and uncertainties in technologies and markets. Consistency – with a degree of flexibility – in policy planning will be critical to building sustainable energy systems, accessing finance, de-risking clean energy investment, and structuring market-based instruments that lower the transition cost.

This sub-indicator examines whether governments are setting well-defined long-term policies to ensure climate-compatible development. It evaluates the robustness of their ambition and pathway to climate neutrality by examining policy measures in place, including concrete actions and strategies for grid infrastructure development, scaling up renewable power generation, reducing GHG emissions across sectors, promoting low-emission transportation modes, improving efficiency in the heating and cooling sector, and deploying energy storage solutions.

SUB-INDICATOR:

ENABLING MEASURES TO SUPPORT CLEAN ENERGY TRANSITION

While accuracy and consistency in policy planning are key to a successful energy transition, the effective implementation of these policies is as much – if not more – of a determining factor for their success. Appropriate market incentives, realistic short-, medium- and long-term policy targets and a coordinated approach to integrating higher shares of clean energy into the existing energy mix will reduce legal and regulatory risks and make the transition process smoother and efficient.

This sub-indicator assesses whether countries have introduced market instruments and set high-level, legally binding targets to accelerate the clean energy transition, phase out the use of hydrocarbons for power generation and promote renewable fuels and sustainable renewable electricity production. It also identifies GHG measurement, monitoring mechanisms, and penalty systems if specific targets are not met.

**SUB-INDICATOR:
ENVIRONMENTAL PROTECTION, HUMAN RIGHTS
AND GENDER**

A just and inclusive energy transition will be critical to empowering people, protecting ecosystems, and driving innovation that supports sustainable business models. As a result, legal and regulatory frameworks to support the transition will have to be cross-cutting, going beyond the energy sector to include environmental protection, human rights, corporate social responsibility and gender mainstreaming.

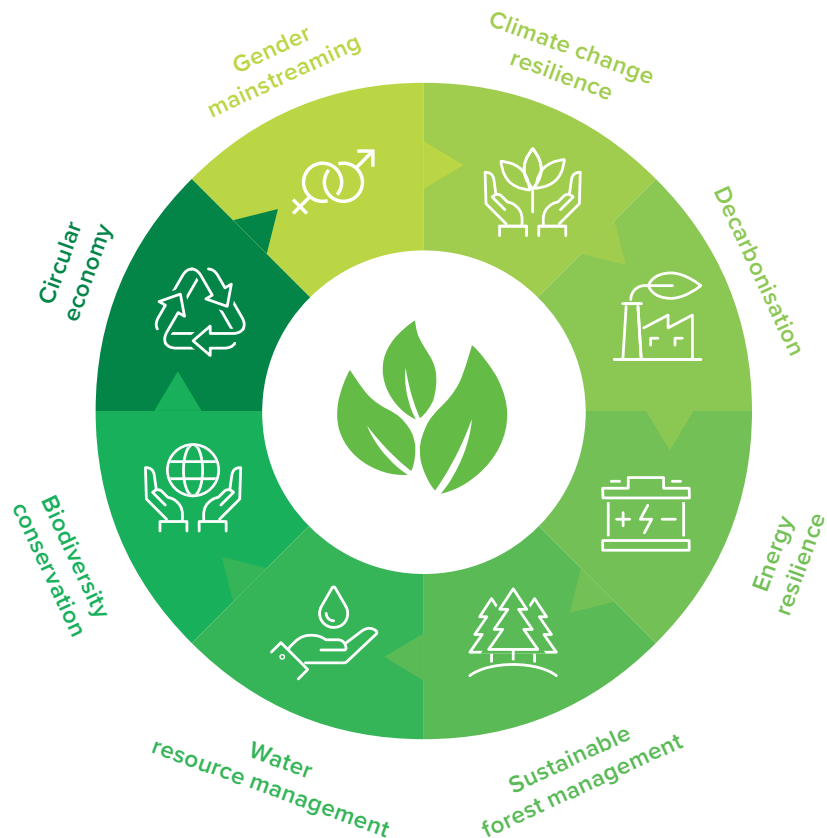
This sub-indicator examines whether countries are developing long-term policy and legal frameworks to achieve a holistic energy transition. It analyses the measures and strategies governments employ to close gender gaps in the energy sector, including capacity-building and national-level initiatives to increase the participation of women in renewable energy jobs. It also assesses if governments are integrating environmental concerns in energy policy planning, such as by setting mid-century net-zero emissions targets, reducing methane emissions and undertaking inclusive environmental impact assessments.

**SUB-INDICATOR:
ENERGY RESILIENCE**

With the introduction of modern energy systems, policy-makers and investors are prioritising energy resilience to address supply disruptions. Concerted efforts are being made to reduce energy dependence and absorb supply shocks by diversifying the energy production and supply sources. In addition, measures are also being taken to secure a steady supply of critical materials needed for clean energy technologies and encourage circular economy activities.

This sub-indicator assesses actions of governments to ensure the security of energy supply and lower energy consumption through energy efficiency policies and programmes. Moreover, it examines whether governments are taking adequate measures to ensure the supply of critical materials, promoting the reuse and recycling of these materials, and addressing the effects of mining activities on biodiversity, water resources and affected communities.

Figure I.2 – Framework for a sustainable energy system



INDICATOR 2

Foresight of policy and regulatory change

Policy priorities and investment patterns will substantially evolve as countries decarbonise their economies. Meeting new objectives will result in policy, legal and regulatory revisions and governments will need to communicate these revisions to investors in time so they can hedge long-term investments and modify their business portfolios as needed. Any adjustments to energy policy objectives must be consulted with affected investors and conveyed well in advance. Investors and governments will need realistic plans and benchmarks to cope with these changes while creating minimal impact on the country’s investment climate.

SUB-INDICATOR:
COMMUNICATION OF VISION AND POLICIES

This sub-indicator evaluates how effectively governments communicate their short- and long-term energy sector vision to investors. It examines the progress toward achieving the immediate and future energy sector targets and implementing the supporting policy, legal and regulatory frameworks.

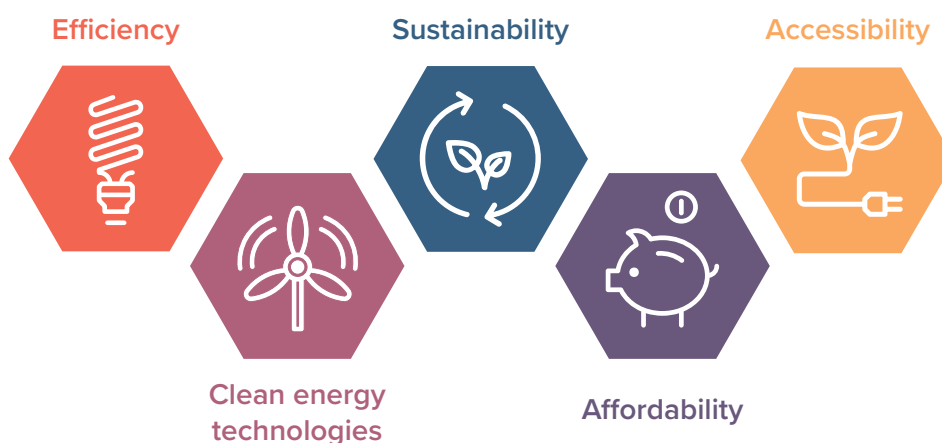
Risk management requires a view of the future. Understanding the energy landscape and how it is evolving is a central element of investment planning. National policies are the most relevant documents for informing investors about the goals governments intend to pursue and their timeframes for achieving these goals. Accordingly, governments must make investors aware of their current and future national energy priorities and any course corrections in these priorities by adopting clear and timely energy policies. By doing so, they will be able to better retain investors’ confidence, keep them updated on the need, pace, and nature of policy changes, and avert risk.

SUB-INDICATOR:
ROBUSTNESS OF POLICY GOALS AND COMMITMENTS

The impact of a policy, legal or regulatory measure remains uncertain before its implementation. However, by conducting rigorous cost-benefit analyses and stakeholder consultations, policy-makers can effectively quantify the likely impact of the proposed measure. Effective and continual monitoring mechanisms help citizens and investors assess how far governments have progressed in achieving their policy goals. It is equally essential to establish a financially and institutionally independent authority to objectively assess the government’s performance and give investors confidence that policy revisions will be proportionate to the situation and backed by evidence-based evaluations.

This sub-indicator evaluates policy monitoring and evaluation processes and their implementation. It analyses whether governments have created independent and inclusive policy monitoring processes to give investors confidence that policy revisions will be proportionate to the situation, subject to evidence-based evaluations, and not due to arbitrary and unsupported reasons.

Figure I.3 – Energy priorities under the UN Sustainable Development Goal 7



INDICATOR 3

Management of decision-making processes

The third indicator addresses the importance of coordinated and transparent policy planning and decision-making phases. The roles and responsibilities of the national and sub-national government levels must be defined in law to ensure structured decision-making processes. Investors must also be well informed and consulted whenever governments intend to revise laws or regulations. Stakeholder engagement will increase public accountability and allow foreign investors to actively participate in decision-making processes and take well-informed and timely decisions.

SUB-INDICATOR:

INSTITUTIONAL GOVERNANCE

Formulating investment and energy policies requires the engagement of multiple government levels. Provinces, municipalities, and regional and local authorities participate in framing and implementing these policies. Multi-level governance can make the decision-making process complex and result in the risk of overlapping or contradictory decisions.

This sub-indicator measures how well governments coordinate the decision-making process in their respective countries. While the degree of centralisation in each country may differ significantly, one central body should ultimately be responsible for coordinating different government levels and reconciling the diverging perspectives of public agencies. Therefore, effective intra-governmental coordination in policy design and implementation is essential for minimising unpredictability and maintaining an investment-friendly climate.

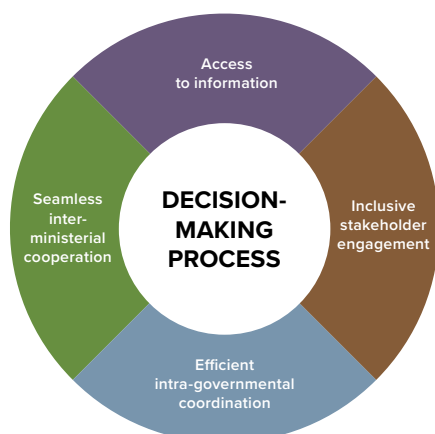
SUB-INDICATOR:

TRANSPARENCY AND ANTI-CORRUPTION MEASURES

Policy and regulatory changes that are systematised and transparent give investors time to plan and align their business models, operations, and finances according to the changing circumstances. While transparency benefits all types of investors, it is particularly crucial for foreign investors who have to cope with regulatory systems and administrative frameworks that may be unfamiliar to them. This sub-indicator measures the inclusiveness exercised by governments in designing and implementing their laws and policies.

Governments can enhance the quality and predictability of their regulatory framework by reviewing and publishing administrative decisions, codifying legislation, disseminating regulatory materials, and developing registers of the existing and proposed regulations. These measures will ensure that investors are aware of the policies affecting them. Prior consultation on investment- and energy-related governmental actions can provide investors with foresight on the conditions in the host countries. For instance, it may reveal indirect discrimination in secondary measures, even though the enabling legislation does not intend it. Moreover, affording interested parties the right to comment on policy options and regulatory decisions will allow policy-makers, legislators and regulators to take stock of different opinions, parameters and considerations before modifying the existing framework.

Figure I.4 – Key aspects of effective decision-making processes



INDICATOR 4

Rule of law (compliance with national and international obligations)

EIRA relies on the definition of ‘rule of law’ presented in the UN Report ‘The rule of law and transitional justice in conflict and post-conflict societies’.¹ It focuses on three aspects of this definition. First, fair and effective implementation of national laws and international commitments arising from treaties and international agreements; second, settlement of investor-State disputes promptly and according to due process; and third, respect for the property rights of foreign investors. Peace, security and human rights are outside the purview of EIRA.

SUB-INDICATOR:

MANAGEMENT AND SETTLEMENT OF INVESTOR-STATE DISPUTES

This sub-indicator examines the efficiency of case management and dispute settlement procedures. International companies tend to invest in low-risk host countries that provide transparent and predictable legislation and avoid retrospective changes to laws. Moreover, investors will also consider whether countries have established early warning and grievance redressal mechanisms to de-escalate conflicts before they precipitate into disputes and have granted access to alternative dispute resolution mechanisms to settle matters without unnecessary cost or delay.

Well-organised judicial procedures help foster trust between investors and the State. Timely and cost-effective enforcement of foreign judgements and awards assure investors that the domestic courts of host countries will safeguard and uphold their rights. Similarly, the existence of appeal mechanisms and domestic dispute mitigation instruments, such as an investment ombudsperson and mediation, provide additional avenues for resolving conflicts between investors and States. Beyond the national legal system, governments must provide an extra layer of protection to investors by granting them recourse to dispute settlement mechanisms under international law. They may give foreign investors this benefit either through BITs or on a case-by-case basis.

SUB-INDICATOR:

RESPECT FOR PROPERTY RIGHTS

This sub-indicator assesses the risk of companies losing ownership or control of their investment due to government action. Arbitrary property acquisition by the State can also lead to the risk of discrimination when foreign investors suffer a loss.

In this sub-indicator, ‘investment’ refers to tangible and intangible assets, including IP rights. It assesses whether direct and/or indirect expropriation, nationalisation or confiscation (or any action equivalent to these) was undertaken for a legitimate public purpose, following the due process of law, in a non-discriminatory manner and with adequate compensation.

There are some steps governments may take to reduce the risk of perceived arbitrariness. For instance, they should define in the national laws (1) activities and areas of ‘public interest’ that are grounds for expropriation, (2) the process for determining expropriation compensation, and (3) a timeframe for paying the compensation. Such legal provisions will increase security for foreign investors operating under BITs and, at the same time, protect investors not covered by international investment agreements. Investors will also be able to better assess whether the host country’s laws, mechanisms and guarantees align with international practice and investment agreements.

Figure I.5 – Rule of law elements covered by EIRA



¹ EIRA interprets ‘rule of law’ as “a principle of governance in which all persons, institutions and entities, public and private, including the State itself, are accountable to laws that are publicly promulgated, equally enforced and independently adjudicated, and which are consistent with international human rights norms and standards. It requires, as well, measures to ensure adherence to the principles of supremacy of law, equality before the law, accountability to the law, fairness in the application of law, separation of powers, participation in decision-making, legal certainty, avoidance of arbitrariness and procedural and legal transparency”. United Nations, Report of the Secretary-General, The rule of law and transitional justice in conflict and post-conflict societies (2004). UN Member States reaffirmed their commitment to uphold ‘rule of law’ in the United Nations, Declaration of the High-level Meeting of the UN General Assembly on the Rule of Law at the National and International Levels, A/RES/67/1 (30 November 2012).

INDICATOR 5

Regulatory environment and investment conditions

This indicator evaluates the independence energy regulators exercise in taking decisions, setting tariffs, and performing their functions. Regulatory independence guarantees neutrality and helps avoid situations where decisions are continuously revised to the detriment of some market actors and investors. The indicator further examines the restrictions faced by foreign investors in the energy sector. Despite the increasing realisation that international capital flows are crucial for developing the energy sector, persisting restrictions deter foreign investors. Key FDI restrictions include investment screening, local content and other performance requirements, and currency- and investment-related capital transfer limitations.

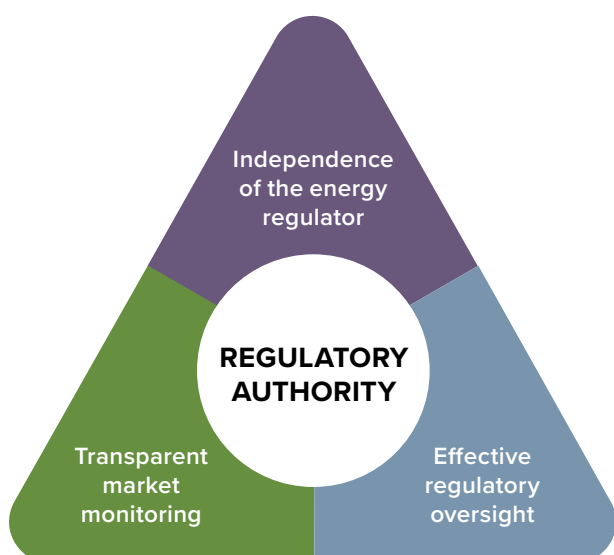
SUB-INDICATOR:

REGULATORY INDEPENDENCE

When an independent and specialised institution monitors the market, there is a lower risk of biased decision-making, discriminatory rules, and anti-competitive behaviour. Political distance gives regulatory authorities credibility because it limits governmental influence and guarantees to investors that political events will not interfere with regulatory decision-making.

This sub-indicator examines the autonomy of energy regulators through various parameters, such as their legal basis, funding sources, financial accountability to independent institutions, and their relationship with ministries and other public authorities. It also assesses the level of transparency exercised in selecting regulatory staff.

Figure 1.6 – Regulatory environment and investment conditions



SUB-INDICATOR:

ELECTRICITY INDUSTRY MARKET STRUCTURE AND COMPETITION

Regulatory uncertainty is a critical barrier to investment and is considered one of the most prominent risks by energy project developers/investors worldwide. For example, the inability to recover the cost of new generation via electricity tariffs is a critical constraint to investing in new large-scale power generation and transmission projects. Without a cost-reflective tariff, utility providers will find it difficult to enter any market, however large the market.

This sub-indicator examines the measures taken by policy-makers and regulators to ensure healthy competition in the power sector, boost its financial viability, and avoid sudden regulatory changes. The establishment of financially and functionally independent regulatory entities, the vertical and horizontal unbundling of integrated national monopoly utilities, the introduction of cost-reflective network tariffs, and the deregulation of retail electricity prices are some of the issues assessed by this sub-indicator.

SUB-INDICATOR:

RESTRICTIONS ON FOREIGN DIRECT INVESTMENT

Policy and regulatory measures that discriminate between domestic and foreign firms restrict inward investment flows. They can obstruct foreign investments or make the cost of operations financially unviable. Foreign investors commonly face restrictive measures such as lengthy investment screening and approval procedures, regional investment restrictions, and operational controls.

This sub-indicator assesses the commitment of countries to accord non-discriminatory treatment to foreign investors. It evaluates whether domestic and foreign investors receive equal treatment in applying domestic laws and regulations. It also gives attention to sectoral restrictions, limits on the transfer of profit and repatriation of capital abroad, and onerous local content requirements.

EIRA METHODOLOGY



EIRA assesses three types of risk to energy investment. It applies five indicators to (1) identify the actions needed to address these risks and (2) define the corrective measures countries must take to mitigate them.

The implementation of legal and regulatory frameworks is critical to ensure that governments can successfully achieve their policy goals and objectives. EIRA 2022 recognises this and tries to give a clear picture regarding the enforcement of laws and regulations in the participating countries. The profile of each country shows the implementation of the existing policies, laws and regulations and highlights its progress in translating commitments into actions. The profiles of countries that have participated in EIRA previously include a ‘status of recommendations’ page with detailed information on the actions governments are taking to implement the improvements suggested through EIRA. Depending on the work undertaken, the progress is categorised as fully implemented, partially implemented, ongoing, or pending.

In 2022, the Energy Charter Conference approved a new questionnaire for EIRA to reflect the additions made to the report’s scope. The indicator scores are derived from the new questionnaire developed after four years of intensive discussion within the subsidiary working groups of the Energy Charter Conference. The new questionnaire allows comparability across energy sub-sectors and captures trends over time. The questions are user-friendly and ensure that the responses can be easily verified. While most are binary, requiring simple ‘yes’ or ‘no’ answers, some are cascading and multiple-choice.

How are the respondents for EIRA selected?

The EIRA questionnaire is provided to the national governments in the participating countries. It is also sent to selected external parties to secure an objective viewpoint.

The unit of analysis for EIRA is a country. The policies taken into consideration are those framed and implemented at national level. In federal arrangements, the central government is designated as a single point of contact responsible for collecting and processing inputs from relevant ministries/departments at State and municipal level.

External parties are chosen from a pool of experts comprising local and international law firms, legal practitioners, business councils, accounting and consulting firms, think-tanks, energy associations, chambers of commerce, international institutions and non-governmental organisations operating in the assessed countries. The ECS conducts extensive research on various aspects, such as their expertise, renown, and previous participation in other international reports. All the external parties contribute to the project pro-bono.

The main parameters for selecting the external parties are:

Expertise in the energy sector: Active involvement in different stages of energy projects, and experience of providing consulting services in multiple energy sub-sectors and on regulatory issues.

Diversity and neutrality: Vast experience working with governmental entities as well as private investors. This ensures the external party has a holistic understanding of issues in the energy sector and contributes to a more balanced approach.

Reputation: Parties with extensive global reach or local partner groups. For law firms, international guides identifying leading providers of legal services (local and global) in each country are consulted.

What is the data collection and validation process for EIRA?

In 2022, data was collected in a standardised manner through the EIRA questionnaire. The ECS received responses from the national government focal points and the external parties over five months. The respondents provided copies of the source documentation to support their responses.

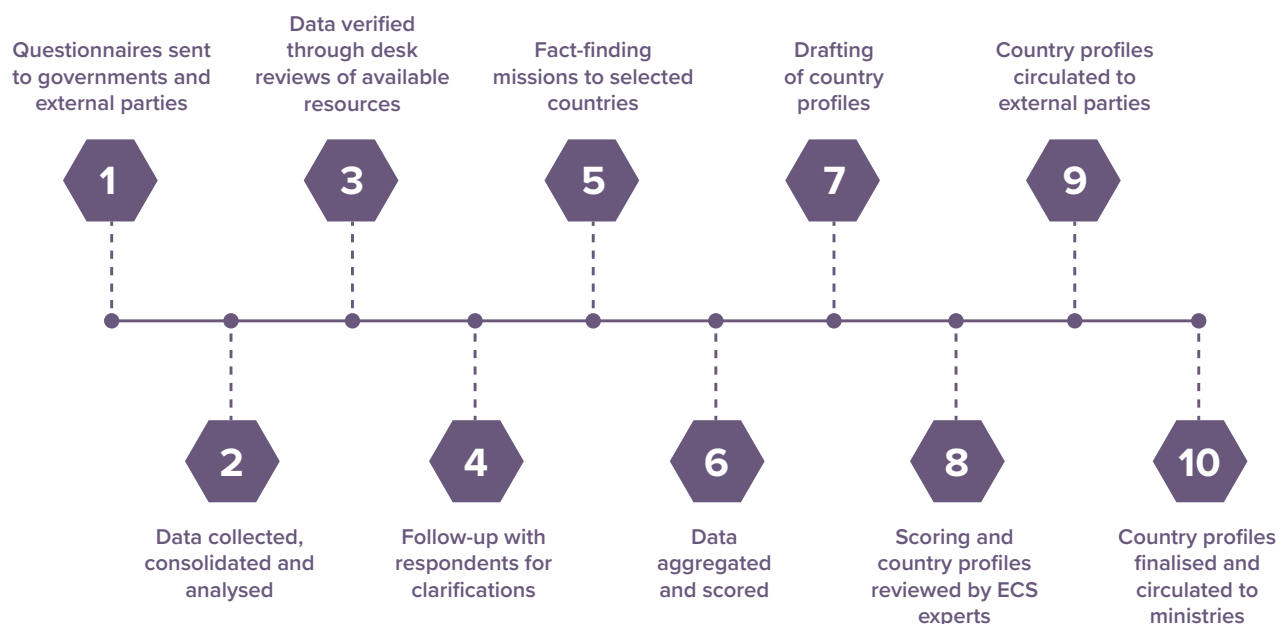
The answers provided by the respondents were accepted only to the extent that they relied on laws, regulations, national plans, and strategies that are currently in force. The cut-off date was 1 April 2022. Accordingly, countries have been scored only on legislation, regulation, policies, legislative initiatives and regulatory reforms that came into force before this date.

Upon receiving responses to the questionnaire, the ECS in-house experts engaged in an extensive data-validation process. They confirmed that the respondents correctly understood each question, and that the submitted documents supported the responses. In the absence of supporting documents, or if respondents gave conflicting answers, the ECS experts sought clarifications from government officials and external parties through correspondence and phone interviews.

The ECS took steps to address the issue of low data availability in certain countries, but the spread of the COVID-19 pandemic made this challenging. There were no EIRA fact-finding missions organised this year. As an exception, due to the lack of external parties, the country profile of Indonesia was based on the information provided by the Government of Indonesia and the desk research conducted by the ECS in-house experts. At the same time, the national government focal points and external parties made substantial efforts to ensure that the ongoing global crisis has minimal impact on the report's quality by providing the ECS with exhaustive information and documents, and continual updates.

Overall, the process of data collection and validation lasted five months, from May 2022 to September 2022.

Figure I.6 – Data collection and validation process



How are risks assessed in EIRA?

EIRA assesses countries through a quantitative and qualitative analysis. The quantitative assessment is by a scoring system that shows the performance of the countries on the EIRA indicators. The qualitative evaluation is through 'country profiles' that describe their strengths and identify areas for improvement.

Scoring system

All indicators carry equal weight. The score of each indicator is the average of its component

sub-indicators. The score of each sub-indicator is calculated through a set of questions. The questions are scored between 0 and 100 and are equally weighted. The highest possible score for each question is 100. All the scores are rounded off for the risk areas and the indicators. A country's total indicator score is the average of (1) the score received on the government questionnaire, and (2) the combined average of the external party scores.

Figure I.7 – Scoring an indicator for individual respondents

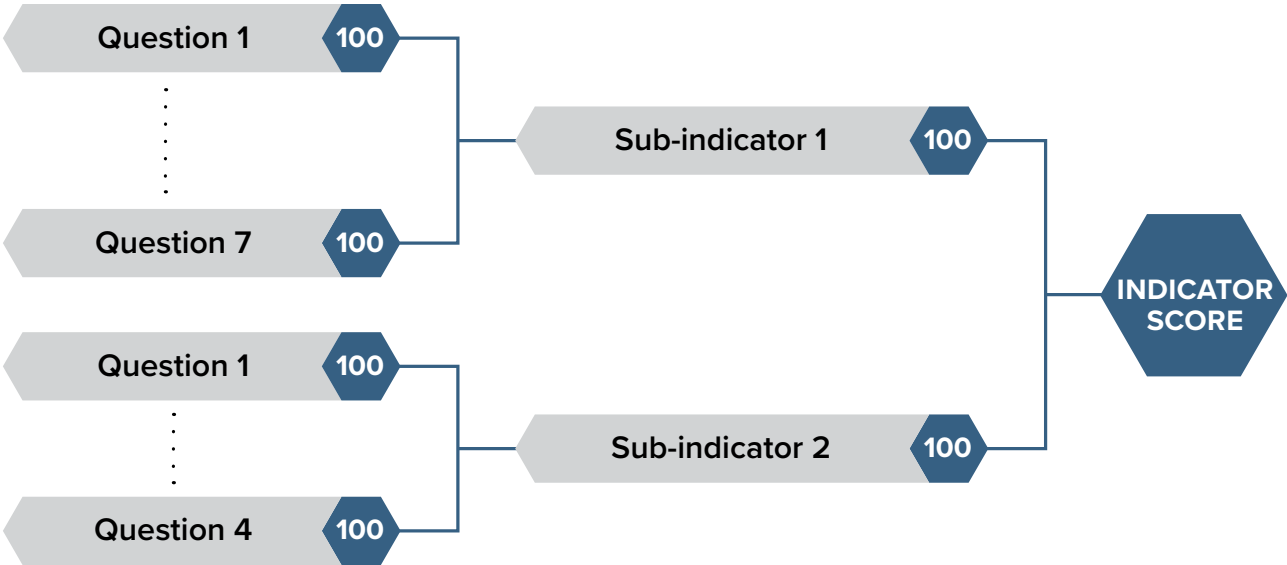
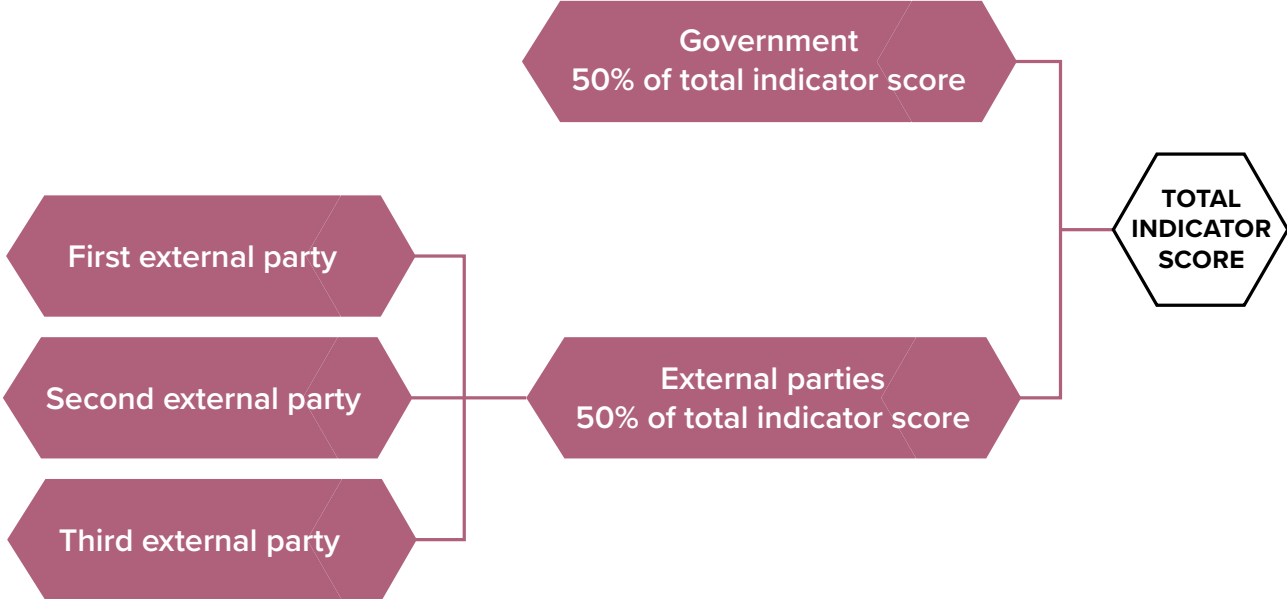


Figure I.8 – Total score of an indicator



Country profile outline

The qualitative assessment for each country is through an eight-page profile. The first page gives background information on the assessed country. It features a table of key metrics on area, population, GDP per capita, total energy supply, net energy imports, the share of renewables in final

energy consumption, and total CO₂ emissions. It also includes information from Orbis Crossborder Investment on energy projects and deals completed between 2015-2022 in the participating countries.

INDICATOR 1 score **48**

Framework for a sustainable energy system

QUICK FACTS

I The country submitted its revised NDC to the UNFCCC Secretariat in March 2021.
 II In November 2020, The country signed the Sofia Declaration on the Green Agenda (Sofia Declaration), under which it is obliged to become climate neutral by 2050.

STRENGTHS

The country is change migt economic sect primary score for 2030 is 12 additional mkt 175% compare emissions redt sector, mktion Gg CO₂ eq unit CO₂ mkt in 2019 more ambico eq, which is 88 emissions in 19

The country is its commitment it has not set owned electric The country h mechanisms fo from operate included in its environmental

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INDICATOR 2 score **53**

Fore sight of policy and regulatory change

QUICK FACTS

I The Council of Ministers (CoM) of the country adopted the Framework Energy Strategy until 2035 (FES 2035) in 2018.
 II The Framework Energy Strategy until 2035 and the Energy Strategy of Republika Srpska 2030 are aligned with FES 2035.

The country's overall risk level against the assessed areas is **moderate**.

Among the three risk areas, the risk of discrimination between foreign and domestic investors is lower than the risks of breach of State obligations and unpredictable policy and regulatory change.

The country has a good performance on one EIRA indicator and a moderate performance on four indicators. Regulatory environment and investment conditions is the highest-scoring indicator at 65. Its score on rule of law is 59, while foresight of policy and regulatory change is 53 and management of decision-making processes is 51. Its score on framework for a sustainable energy system is 48.

On a more detailed level, the country's overall sub-indicator performance is moderate. The highest-scoring sub-indicator is regulatory independence at 89. The country's score is good on four sub-indicators, namely restrictions on FDI at 76, management and settlement of investor-State disputes at 69, robustness of policy goals and commitments at 67, and policy planning on clean energy transition at 64. The country's score is moderate on six sub-indicators, namely transparency and anti-corruption measures at 53, institutional governance at 50, respect for property rights at 48, environmental protection, human rights and gender at 44, energy resilience at 43, and enabling measures to support clean energy transition at 42. The lowest-scoring sub-indicators are communication of vision and policies at 40 and electricity industry market structure and competition at 30.

While the country is enforcing its regulatory independence, more efforts must be made to improve its electricity market structure and competition.

FLAG

Country name

Population ¹	3,323,929
Area (km ²)	51,210
GDP per capita (USD) ²	6,072.18
TES/GDP (GJ/thousand 2015) ³	16.62
Net Energy Imports (TJ) ⁴	82.48
RE share in Final Energy Consumption (%) ⁵	37.0
Total CO ₂ emissions (MtCO ₂) ⁶	22.35

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022⁷

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	3 new projects	Austria 1 RE project of 15.2 mEUR United Kingdom 1 FF project of 15.2 mEUR China 1 RE project of 4 mEUR

Sources:
 1. The World Bank 2018
 2. IEA (2022), World Energy Balances (https://www.iea.org/data-and-statistics). All rights reserved.
 3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period April 2015 - 1 April 2022.
 For more information see Annex II of this report.
 4. Renewable energy based electricity production
 5. Fossil fuel based electricity production
 6. Transmission and Distribution of electricity

RISK LEVEL

INDICATOR PERFORMANCE

SUB-INDICATOR PERFORMANCE

KEY METRICS

Population and surface area: Data refer to year 2020 (for surface area) and 2021 (for population). *The World Bank 2020 and 2021, World Development Indicators, World Bank national accounts data and OECD National Accounts data files, https://data.worldbank.org/ (accessed on 9 September 2022).*

GDP per capita (current USD): Data refer to year 2021. *The World Bank 2021, World Development Indicators, World Bank national accounts data and OECD National Accounts data files, https://data.worldbank.org/ (accessed on 9 September 2022).*

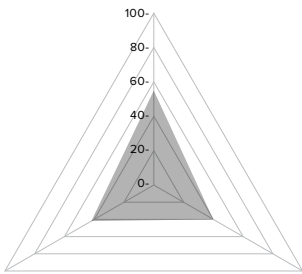
Total Energy Supply (TES) by GDP (GJ/thousand 2015): TES is made up of production + imports - exports - international marine bunkers - international aviation bunkers ± stock changes. Note, exports, bunkers and stock changes incorporate the algebraic sign directly in the number. It is expressed as Gigajoule per thousand 2015 USD and is based on national GDP. Data refer to the year 2019. *IEA (2022), World Energy Balances (https://www.iea.org/data-and-statistics).* All rights reserved.

Net Energy Imports (TJ): Imports minus exports for total energy expressed in Terajoule. Data refer to the year 2019. *IEA (2022), World Energy Balances (https://www.iea.org/data-and-statistics).* All rights reserved.

Renewable Share in Final Energy Consumption (SDG 7.2) (%): Percentage of final consumption of energy that is derived from renewable resources. Data refer to the year 2019. *IEA (2022), World Energy Balances (https://www.iea.org/data-and-statistics).* All rights reserved.

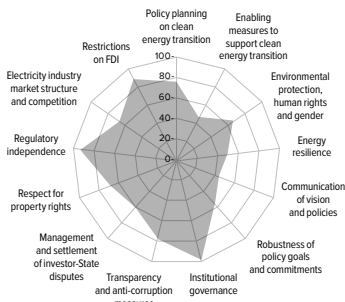
Total CO₂ Emission (MtCO₂): Total emissions per metric million tonnes of carbon dioxide. Data refer to the year 2019. *IEA (2022), IEA Greenhouse Gas Emissions from Energy (https://www.iea.org/data-and-statistics/data-product/greenhouse-gas-emissions-from-energy).* All rights reserved.

The second page of the profile contains three charts showing the risk level across the assessed areas, the performance of the country on the five indicators, and the score on the sub-indicators. A five-colour-coded bar chart depicts the indicator scores. Dark green represents the highest band of scores, while the colour red represents the lowest. In the radial chart, representing the sub-indicator scores, 0 denotes the weakest performance, and 100 is the strongest. The following five pages of the profile describe the country's strengths on the EIRA indicators and the main areas for improvement. The final page reflects the implementation status of the recommendations provided to governments through EIRA between 2018 to 2022. There is no status of recommendations page for the countries participating in EIRA for the first time this year.



RISK LEVEL

The risk level is displayed by the grey triangle. Each axis represents a risk area. The smaller the size of the grey triangle, the lower the level of risk.

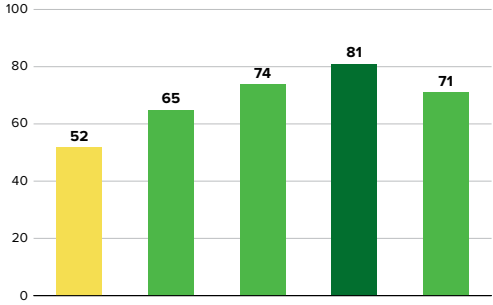


SUB-INDICATOR PERFORMANCE

Each axis represents a sub-indicator. The larger the size of the grey area, the better the country's performance.

**DATA FROM ORBIS
CROSSBORDER INVESTMENT**

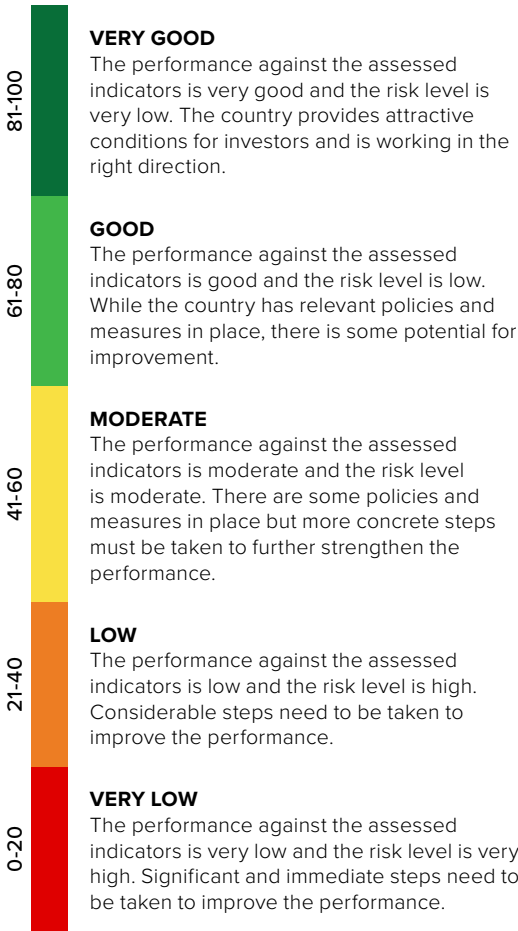
Energy projects and deals completed between 2015-2022.

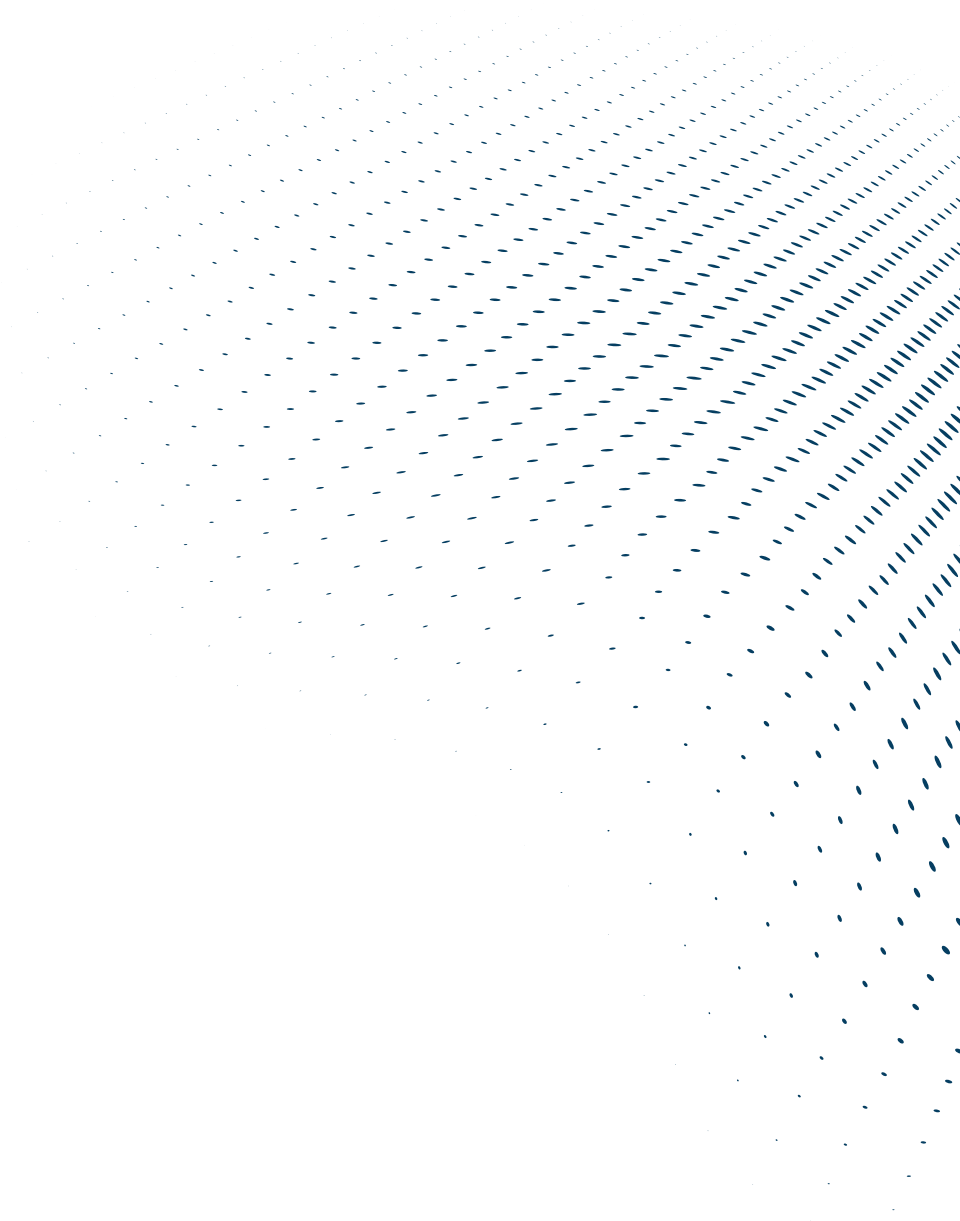


INDICATOR PERFORMANCE

The indicators affect the risk areas differently. For example, the indicators *rule of law* and *regulatory environment and investment conditions* have the highest impact since they influence all three risk areas. For details on the correlation between the indicators and the risk areas, see Table I.1.

The bars are colour-coded. Each colour corresponds to a performance level.





COUNTRY PROFILES

The background of the page features a decorative pattern of small blue dots. These dots are arranged in a grid that is most dense on the left side and gradually tapers and becomes more sparse as it moves towards the right side of the page. The overall effect is a sense of depth and movement, creating a modern and technical aesthetic.



Albania

Population ¹	2,866,376
Area (km ²) ¹	28,750
GDP per capita (USD) ¹	5,284.38
TES/GDP (GJ/thousand 2015) ²	7.50
Net Energy Imports (TJ) ²	31.52
RE share in Final Energy Consumption (%) ²	40.2
Total CO ₂ emissions (MtCO ₂) ²	3.4

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	1 new project	Norway: 1 RE project of 72.4 mEUR
Extraction of natural gas and crude petroleum	2 acquisition deals	Netherlands: 1 deal of 39.5 mEUR Value of 1 deal (United States of America) is N/A

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
 2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
 3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.
- RE: Electricity generation from renewable resources

Albania’s overall risk level against the assessed areas is **low**.

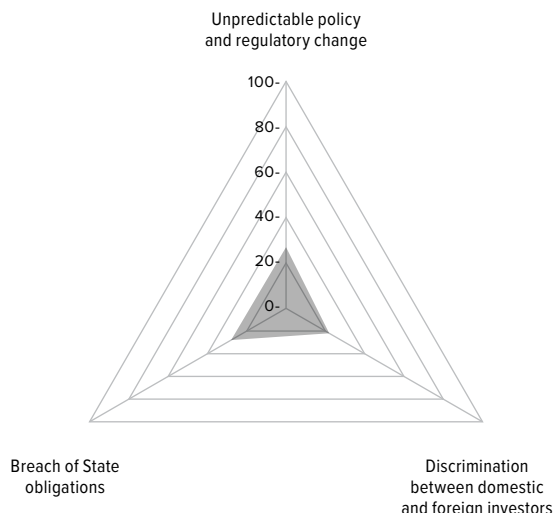
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *unpredictable policy and regulatory change* and *breach of State obligations*.

Albania has a good performance on four EIRA indicators and a moderate performance on one indicator. *Management of decision-making processes* is the highest-scoring indicator at 80, followed by *regulatory environment and investment conditions* at 78. Its score on *rule of law* is 77, while *foresight of policy and regulatory change* is at 68. Its score on the indicator *framework for a sustainable energy system* is 60.

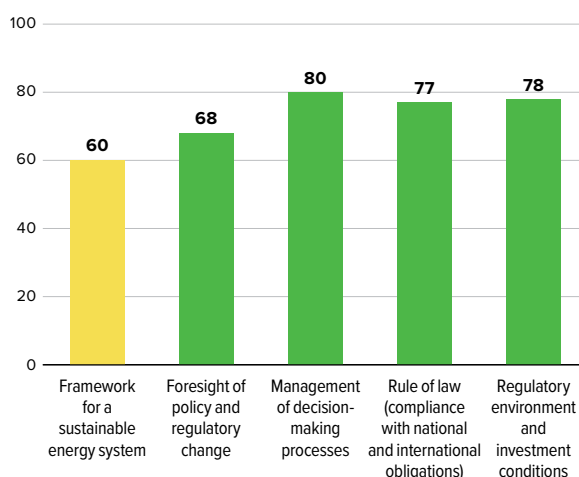
Albania’s overall sub-indicator performance is good. The highest scoring sub-indicators are *regulatory independence* at 89, *restrictions on FDI* at 89, *respect for property rights* at 85 and *institutional governance* at 83. The country’s score is good on six sub-indicators, namely *policy planning on clean energy transition* at 80, *transparency and anti-corruption measures* at 76, *communication of vision and policies* at 72, *management and settlement of investor-State disputes* at 69, *robustness of policy goals and commitments* at 64 and *environmental protection, human rights and gender* at 61. The lowest-scoring sub-indicators are *electricity industry market structure and competition* at 56, *energy resilience* at 53 and *enabling measures to support clean energy transition* at 48.

While Albania is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to improve the resilience of its energy system and create an enabling environment to achieve a clean energy transition.

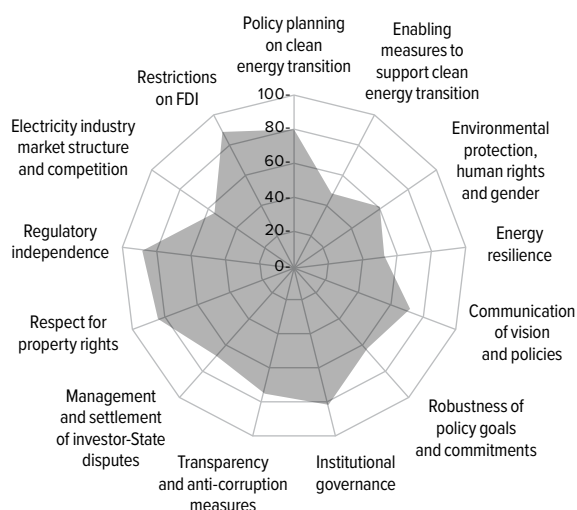
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

Albania submitted its revised NDC to the UNFCCC Secretariat in October 2021.

In December 2021, Albania became the first contracting party of the Energy Community Secretariat to adopt a National Energy Climate Plan (NECP). It has submitted its NECP to the Energy Community Secretariat for detailed recommendations.

STRENGTHS

Albania is progressing with its climate change mitigation and adaptation plans in line with its international and regional commitments and national objectives. Its revised NDC introduces climate change adaptation measures and aims to integrate these into the respective sectoral strategies. Covering the period from 2021 to 2030, the revised NDC raises the ambition of mitigation efforts by increasing the total GHG emission reduction target from 11.5% to 20.9% compared to the business-as-usual (BAU) scenario. The final objective is to reach net-zero emissions by 2050. While the country's first NDC was limited to the energy sector, the revised one extends to the Agriculture, Forest and Other Land Use (AFOLU) and waste sectors. In addition to CO₂, it includes other gases not there in the first NDC, namely CH₄, N₂O and F-gases. Albania's NECP also introduces measures to reduce methane emissions, such as the construction of methane capture installations in landfills. As per the NECP's provisions, the Government will ensure the recovery of 10% of CH₄ emissions from landfills between 2025 and 2030. Emission reductions will also be achieved by changing wastewater management practices and moving away from direct river discharge to well-managed sites without methane emissions.

The Government has set strategies and targets to integrate clean fuel into the transportation system, the country's largest energy-consuming sector. As per the revised NDC, the Government intends to increase the share of biofuels vis-à-vis total fuel consumption in the transport sector to 10% by 2030 compared to 3.55% in 2015. Moreover, the Tirana municipality has adopted the Strategy for Sustainable Development 2018-2022, which requires the use of electric vehicles for public transportation. To this end, in May 2021, the Governments of Albania and Germany signed an agreement to implement the Green Transport Project in Tirana, financed by a EUR 50 million loan from the German development bank KfW. The project will promote green urban transportation in the capital using new eco-friendly public buses.

The recently adopted NECP provides financial incentives, regulatory mechanisms, and education-based schemes to support renewable energy and energy efficiency in the heating sector. The expected effect of these measures is an increase in solar water heating of 12% by 2030 and 20% by 2050 and heat pumps substituting 50% of electric space heating by 2050. On renewable power generation, the NECP states that the physical and regulatory connectivity of renewables to the electricity grid will remain a priority until 2030. Although 98% of Albania's domestic electricity generation is from hydropower, it is trying to diversify its energy supply by integrating solar and wind energies into the grid. For this purpose, the Ministry of Infrastructure and Energy (MIE) has established

procedures to authorise distribution grid connections for small solar self-consumption plants with an installed capacity of up to 500 kW.

The Government is trying to address cross-cutting priorities of climate change, gender, environmental protection and circular economy. Law no. 155/2020 'On Climate Change' outlines the need for dedicated awareness-raising campaigns on the role of women in climate change adaptation and mitigation. The revised NDC describes the international obligations to gender equality (binding and non-binding), gender distribution, gaps and structural barriers, and gender-differentiated vulnerabilities to climate change.

Law no. 57/2020 'On Forests' sets a regulatory framework for forest sector management based on the principle of sustainable development. Although there is no legal framework to implement the circular economy concept in Albania, in 2020, the Government adopted the National Integrated Waste Management Plan with a sectoral approach. Moreover, Albania is a part of the EU-funded RESEERVE initiative, which maps the mineral sources of six East and South-East Europe countries. The project aims to create a West Balkan Mineral Register for primary and secondary mineral resources, integrate the region into the pan-European Minerals Intelligence Network, and bring it closer to the common minerals market.

AREAS FOR IMPROVEMENT

Due to the seasonality of hydropower, Albania relies substantially on costly imports to meet its electricity demand during seasons with low rainfall. For this reason, it is recommended to develop short- and long-term policies for deploying large-scale renewable electricity storage, increasing the flexibility of energy systems and diversifying the country's energy supply. At the same time, the Government should establish a least-cost development plan to expand and coordinate the transmission and distribution infrastructure so the grid can accommodate higher shares of variable renewable energy while reducing electricity losses and optimising peak load management.

Since Albania is in the process of EU integration, it can refer to the EU Green Deal's Circular Economic Action Plan to develop its national strategy in this respect. A robust policy and regulatory framework on circular economy activities, especially in the mining sector, will facilitate Albania's access to critical raw materials, reduce pollution and environmental degradation, boost competition and innovation, and increase sustainable investments.

Foresight of policy and regulatory change

QUICK FACTS

The MIE develops national policies for the energy sector and updates the National Energy Strategy (NES) every two years. The current NES runs from 2018 to 2030.

In addition to the NES and the NECP, Albania's energy goals and targets are stated in the legislative acts governing the sector, namely Law no. 43/2015 'On Power Sector', Law no. 7/2017 'On the Promotion of the Use of Energy from Renewable Sources' and Law no. 124/2015 'On Energy Efficiency'.

STRENGTHS

Albania's NECP informs investors of the country's progress towards aligning with the EU Green Deal. It encompasses the five dimensions of the EU – climate action and decarbonisation, energy security, a fully integrated internal energy market, research, innovation and competitiveness, and energy efficiency. There are targets for each dimension and a detailed list of measures to achieve these targets. The Government aims to increase the share of renewables in final energy consumption from 33.5% in 2030 (with existing measures) to 54.4% (with additional measures). In the additional measures scenario, the final energy consumption targets compared to the 2018 baseline are expected to increase to 20.8% by 2030 and 46.5% by 2040. In the transport sector, the NECP aims to ensure 10% electrification of the public transport system by 2030. It also describes measures to promote renewable energy in heating, implement the Emission Trading Scheme (ETS) in Albania, and organise auctions for new renewable capacities. In terms of improving energy efficiency, the NECP focuses on implementing the minimum energy performance requirements in residential and non-residential buildings, long-term renovation of public and private buildings, and energy audits for large energy consumers engaged in industrial activities.

The energy sector policies establish inclusive monitoring and evaluation mechanisms. For instance, the NECP's monitoring and evaluation process requires the participation of civil society, local governments, consumers, the Energy Community Secretariat and investors. According to the NECP, civil society and end-users will monitor Albania's energy efficiency obligation schemes and alternative measures, as well as the implementation measures. Moreover, local governments are engaged in monitoring and evaluating measures to increase the share of electric vehicles in the national car fleet. Energy operators and investors participate in monitoring policies on the metering strategy and digitalisation of the power sector.

In 2021 and 2022, the Government informed stakeholders, including investors, about its financial and operational performance in the energy sector. State institutions operating in the energy sector are subject to the Albanian Supreme State Audit's (SSA) public control. To this end, in 2021, the SSA prepared monthly and yearly evaluation performance reports on the State-owned electricity distribution company OSHEE sh.a and the electricity generation company KESH sh.a. The reports evaluated and audited the budget implementation of these entities and the fulfilment of financial and compliance regulations. In November 2021, the SSA audited and published a report on the compliance policies of the State-owned oil and gas company Albpetrol sh.a and in December 2021 on the State-owned gas company Albgaz sh.a. Throughout

2021, the SSA audited and reported on the financial compliance and performance of the MIE.

Moreover, the MIE published the Summary Report on Implementing Performance Indicators/Products Regarding the Support for Energy Program in the public domain and reported its expenditures from January to April 2021. The Energy Regulatory Authority (ERE) published its report on the energy market data concerning public and private utilities operating in the energy sector during 2021. The National Natural Resources Agency (AKBN) released its report on mining indicators realised in Albania in 2021. The Ministry of Tourism and Environment (MTE) submitted its First Biennial Update Report, developed in cooperation with United Nations Development Programme, to the UNFCCC Secretariat in July 2021. This report provides, for the first time, data concerning the national GHG inventory. In July 2021, Albania also submitted the fourth progress report on promoting and using renewable energy sources under the Renewable Energy Directive 2009/28/EC. The report monitors the implementation of renewable energy targets and programmes. In December 2021, Albania published the fifth annual report under the EU Energy Efficiency Directive on the country's performance on energy efficiency targets and programmes.

AREAS FOR IMPROVEMENT

While Law no. 155/2020 'On Climate Change' gives legislative backing to the country's ETS, the Government should now develop the subsidiary regulations and by-laws to operationalise the ETS and define its functions and procedures. The ETS will allow the Government to establish a firm limit on emissions and utilise the revenue raised to support investments in renewable energy projects. Secondary regulations should be designed to explain the procedures of issuing GHG permits and instruct industrial operators on setting up a monitoring plan and verification and reporting mechanism as required under Law no. 155/2020 'On Climate Change'. The monitoring plan, verification, and reporting mechanism should record annual emissions and data. In addition, the sector emissions the scheme will include should be pre-established.

The Government should communicate to the UNFCCC Secretariat as soon as possible its mid-century, long-term low GHG emission development strategy with absolute targets for emission reduction. Such a strategy must define step-by-step measures to decarbonise high-emission sectors, set the future trajectory of the country's energy sector in line with its climate neutrality by 2050 target, and inform investors of the Government's long-term ambitions and priorities in this respect.

Management of decision-making processes

QUICK FACTS

The MIE is responsible for developing short- and long-term national energy policies.

The MTE ensures the implementation and monitoring of the country's NDC.

While the Ministry of Finance and Economy (MoFE) develops Albania's cross-sectoral investment policy, the MIE defines the strategic direction of investments in the energy sector.

Law no. 146/2014 'On Notification and Public Consultation' was enacted by the Albanian Parliament to improve accountability in the public sector.

STRENGTHS

In 2021 and 2022, ministries and State agencies responsible for the financial and energy sectors coordinated their decision-making to improve public finances in the energy sector. To this end, in November 2021, the MoFE, in cooperation with the State-owned electricity distribution operator OSHEE sh.a, presented the Normative Act no. 31/2021 'On the budget Review 2021' in the Albanian Parliament to offset the impact of rising energy prices in the international markets. Through this Law, the Government will support OSHEE sh.a financially, as declared by the Decision of the Council of Ministers no. 584 dated 22 October 2021 'On Declaring a State of Emergency in the Supply of Electricity', allowing the company to sell electricity surpluses in the market.

The Albanian Investment Development Agency (AIDA) provides business support in Albania and gives investors opportunities to find business partners, establish contacts, and enter cooperation contracts for energy-related sectors. In 2021, AIDA and Enterprise Europe Albania, as co-organisers, invited businesses in the renewable energy, oil, gas and similar fields to participate in online 'Energy Business Meetings'.

State agencies released financial and operational data in 2021 and 2022. The electricity generation company KESH sh.a, the transmission operator OST sh.a and OSHEE sh.a published their financial data for 2021. The financial statements of these companies were audited monthly and yearly by the SSA. ERE published its decisions for 2021 on the service prices and tariffs for natural gas transmission and electricity distribution at 35 kV and 20 kV. Moreover, in 2021, ERE published the registry of companies licensed to undertake electricity transmission, distribution and generation activities. This registry also lists the companies licensed in the transmission and distribution of natural gas. For 2021, ERE published the periodic table of the electricity sale prices of the Supplier of Last Resort. The prices are subject to ERE's monthly approval and documented in its Board of Members' decision. The data showed an increasing trend in the price from 10.80 Albanian lek (ALL)/kWh in January 2021 to ALL 31.73/kWh in December 2021.

To maintain transparency in the work of public agencies, in 2021, the Office of the Information and Data Protection Commissioner reported on the complaints received from private institutions regarding the violation of their rights under Law no. 146/2014 'On Notification and Public Consultation'. The Commissioner's Office highlighted that it processed 992 such complaints. Moreover, in 2021, the Official Publishing Centre (QBZ) published 206

Official Gazettes, including decisions of public authorities competent in the energy and climate change sector.

State agencies and ministries actively engaged with stakeholders and energy companies while deciding on policies, laws and regulations. For instance, in October 2021, the MIE notified stakeholders of the NECP's final draft and invited them to provide comments and recommendations within 20 days from the date of the notice. In October 2021, the National Environmental Agency of Albania also conducted a public consultation for the Environmental and Social Impact Assessment of underground gas deposits in the Dumrea area. Similarly, in June 2021, the MIE conducted a public hearing with the community and stakeholders regarding the Ionian-Adriatic Pipeline's Environmental and Social Impact Assessment.

Albania is progressively developing a framework for identifying the ultimate beneficial owners of companies operating in its territory to prevent illegal activities, such as corruption, tax evasion, and money laundering. In 2021, Albania's Registry of Beneficial Owners, an electronic database hosted by the National Business Center of Albania, was established and operationalised. The database is updated regularly and is accessible upon payment of a service fee ranging from ALL 100 to ALL 1000.

AREAS FOR IMPROVEMENT

State agencies and ministries generally publish online budget allocation and utilisation reports. However, some central government institutions in the energy sector, including the MIE and the AKBN, could be more proactive by regularly updating this data in the public domain. The Government should also consider establishing a single online open data platform to make budget allocation and utilisation reports of ministries and State agencies publicly available, unify reporting approaches, offer more updated information, and increase public accountability.

The MIE grants approvals for energy projects while it is also the central policy-maker in the energy sector. To decouple policy-making functions from day-to-day business, the Government may consider establishing a specialised body with adequate competencies to approve energy projects. The specialised body could also house a one-stop online shop to register and approve new energy projects. On the other hand, it could consider transferring this function to AIDA to provide speedy approval for renewable energy projects, mining operations, and gasification activities.

Rule of law

QUICK FACTS

- | Albania ratified the ECT on 15 December 1997.
- | Albania has been a member of the WTO since 2000.
- | Albania is a member of MIGA.

STRENGTHS

Albania has established institutional mechanisms to address investors' grievances before these precipitate into full-scale disputes. According to the Decision of the Council of Ministers no. 294 dated 8 April 2015 'For the Establishment of the Investment Council', the Albania Investment Council (IC) is in charge of preventing, managing, and monitoring investor-State disputes. The IC is chaired by the minister responsible for the economy and is composed of representatives from the Government, the private sector and development partners. It identifies obstacles to establishing and operating businesses in Albania and proposes strategies to reduce administrative barriers. In 2021, the IC published 29 recommendations to promote innovation in entrepreneurship, update the new Business and Investments Development Strategy 2021-2027, and revise the draft law 'On the Development of Micro, Small, and Medium Enterprises'. Moreover, based on Law no. 10385/2011 'On Mediation in Dispute Resolution' (as amended) and the Minister of Justice Order no. 89 dated 23 February 2021, Albania's National Chamber of Mediators initiated training for individuals who applied for the Mediators License in the country.

The Government and the judiciary are trying to improve the management of domestic cases and the performance of national courts. The latest amendments to the Civil Code through Law no. 44/2021 'On Amendments to the Civil Code' oblige courts and administrative tribunals to set a deadline for parties to file appeals. The deadline to request a review against the decision of the Court of First Instance is 30 days, and for filing appeals and special recourses, it is five days. An aggrieved party can file an appeal before the Court of Appeals against the Court of First Instance's decision within 15 days from when the decision is rendered. The Supreme Court can hear appeals within 30 days from when the Court of Appeals awards its decision.

Information related to pending judicial cases is available online for all domestic courts. In 2021, the status of each case, scheduled hearings, briefs and motions, and the latest orders and judgments were made available online by the district courts, the Courts of Appeals, and the Supreme Court. In 2021, the District Court and the Court of Appeals of Tirana published monthly statistics on pending cases and decisions awarded in civil cases.

Albania has signed 45 BITs and six regional trade agreements with investor-State dispute settlement mechanisms for investments across sectors, including energy. Of these agreements, 40 are currently in force. In 2021, the United Kingdom and Albania signed

the Partnership, Trade and Cooperation Agreement guaranteeing the free movement of natural elements used in the energy and fuel sector.

The BITs signed by Albania consider intellectual property as an 'investment' and grant protection against all forms of expropriation through the unqualified operation of Most-Favoured-Nation and National Treatment obligations. IIAs signed by Albania also include explicit provisions on the payment of compensation if the State expropriates a foreign investor's assets or investments. For instance, its recent BIT with the United Arab Emirates mentions that in the case of compulsory expropriation, the State shall compensate an investor for the investment's real market value in a freely usable currency. The compensation shall include interest based on the six-month LIBOR rate from the date of expropriation.

Law no. 8561/1999 'On Expropriations and Temporary Possession of Private Property for a Public Interest' also safeguards foreign investments against expropriation. It identifies a list of activities for which the State may expropriate an investment in the public interest. Law no. 7764/1993 'On Foreign Investments' guarantees foreign investments against direct and indirect expropriation, barring in exceptional cases in the interest of public use provided by law, without discrimination and with prompt, appropriate and effective compensation following legal procedures.

AREAS FOR IMPROVEMENT

Currently, the IC Secretariat reviews legal and administrative complaints initiated by investors in the energy sector. Building on this, the Government should consider establishing a foreign investment ombudsperson to address conflicts arising between foreign investors and public agencies during project execution. This competence may be attributed by law to the IC or AIDA to provide an additional avenue for resolving conflicts between investors and the State. Reference can also be made to the Energy Charter Model Instrument on Management of Investment Disputes, which aims to assist States in handling investment disputes while keeping in mind their particular needs and circumstances.

The Albanian Parliament should adopt the draft arbitration law, pending since 2013, as soon as possible. The law will allow expeditious resolution of investor-State conflicts, enable flexible procedures, and lower administrative costs.

Regulatory environment and investment conditions

QUICK FACTS

| ERE regulates Albania's electricity and natural gas sectors. OST sh.a is the national transmission system operator.

| In May 2020, the Albanian Parliament amended Law no. 43/2015 'On Power Sector'.

STRENGTHS

In 2021 and 2022, ERE issued several decisions to increase its revenue, boost competition in the energy market, and protect end-users. In June 2021, it adopted Decision no. 142/2021 'On the Calculation of Regulatory Payments For the Year 2021' to collect regulatory fees from energy companies operating in the electricity and natural gas sector. The Annex to this Decision set licence fees for specific activities such as generation, trade, installation, transmission and construction. The Annex projects that 304 different activity fees shall contribute a final sum of ALL 207,280,362 to ERE's budget.

In May 2021, ERE approved Decision no. 126/2021 'On Approving the Regulation on Wholesale Energy Market Integrity and Transparency (REMIT)' to transpose EU REMIT Regulation no. 1227/2011 and prohibit abusive practices in wholesale energy markets. In applying this Decision, ERE is expected to coordinate its action with the Competition Authority of Albania and relevant national agencies. Recently, ERE also adopted Regulation no. 60 'On Standards for Handling the Electricity and Natural Gas Complaints from the Licensees in the Supply Activity' to ensure that complaints from electricity consumers are handled fairly and effectively.

The Government and ERE are progressively liberalising the power market per EU standards. In 2021, ERE approved Decision no. 89/2021 'On the Albanian Electricity Balancing Market Rules from April 2021', allowing for a competitive balancing market in the electricity sector. The Decision aims to strengthen the security of supply, promote market competition and ensure affordable energy prices for consumers. Moreover, the MIE's Order no. 28 dated 18 January 2021 'On the Approval of the Roadmap for Market Opening and Deregulation of Electricity Prices' has delivered positive results towards opening the electricity market. According to the Order, during the first phase of deregulation, from January 2021 onwards, ERE ensured that electricity supply at the 35 kV level and partly at the 20 kV level was through an unregulated market. In the second phase of deregulation, starting in January 2022, it is foreseen that supply at all voltages except 0.4 kV will be at unregulated prices. In January 2022, the State-owned OSHEE sh.a instructed end consumers to fulfil all the technical conditions for installing meters and entry into the liberalised market. Every end consumer has the opportunity and obligation to be supplied by the Supplier of Last Resort.

Albania remains open and welcoming to domestic and foreign investors. In July 2021, the Council of Ministers adopted Decision no. 466/2021 'On the Approval of the Strategy on Business Development and Investments for 2021-2027, and its Action Plan' (SBDI). The SBDI aims

to create a competitive economy driven by innovation and knowledge. It seeks, among other things, to attract investments in the renewable sector by easing investment procedures and supporting innovative start-ups. Additionally, to offer State-supported assurance to investors, in 2021, the Parliament approved Law no. 130/2021, amending Law no. 55/2015 'On Strategic Investments', which applies to potential domestic and foreign energy investors. The amendments extend the application timeline for investment entities interested in obtaining 'strategic investor' status from 31 December 2021 to 31 December 2023.

Albania is promoting investment in renewable power generation through several regulatory mechanisms. It has legislation offering Contract for Difference (CfD) contracts, Power Purchase Agreements (PPAs), feed-in tariffs for wind and solar power plants up to 3 MW and 2 MW, and auctions for scale producers above 10 MW. In June 2021, the MIE launched a two-stage tender to select onshore wind projects with a capacity between 10 MW and 75 MW that will benefit from support measures. The bid winners will be supported by a PPA, enabling them to sell the whole amount of electricity at a fixed price, equal to the price declared in their offer, for 15 years. In 2021, the MIE approved Order no. 27 dated 23 July 2021, the 'Strategy for Transforming the Feed-in Tariff Support Scheme into a Contract for Difference' that requires the PPA agreements from this bid to be converted into CfDs later, based on pre-defined conditions.

AREAS FOR IMPROVEMENT

The Government should take appropriate steps to lower restrictions on the employment of non-Albanian unskilled personnel. It may also reconsider its policy of granting work permits only if the number of foreign employees in an enterprise did not exceed 10% of the staff on the payroll in the last 12 months, excluding personnel in managerial positions.

The Government must finalise the functional unbundling of OSHEE sh.a by ensuring management separation, independent decision-making, and distinct branding. Additionally, prices for consumers supplied at 0.4 kV should be deregulated within the set timeframe, and they should be given the right to choose their preferred supplier.

The Albanian Power Exchange should increase its operational pace to ensure an efficient and real opening of the wholesale market. Moreover, day-ahead and intraday markets should be established so suppliers can better schedule the necessary units to meet forecast demand and increase system reliability.

INDICATOR 1

Improvements proposed in 2022

Develop short- and long-term targets and an action plan to deploy large-scale renewable electricity storage; prepare a least-cost development plan for the transmission and distribution infrastructure.

Improvement suggested in 2022. Status will be updated in 2023.

Develop a national strategy on circular economy activities, with a focus on the mining sector.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2018

Set measurable and long-term policy targets to facilitate the clean energy transition.

Fully implemented. In December 2021, Albania adopted its National Energy Climate Plan (NECP).

Strengthen the policy monitoring and evaluation mechanisms.

Pending

Improvements proposed in 2020

Adopt a new energy efficiency action plan as the Second and Third National Energy Efficiency Action Plan 2017-2020 have expired.

Fully implemented. The energy efficiency targets and measures are now included in Albania's first NECP.

Operationalise and fully staff the Energy Efficiency Agency set up in 2016.

Fully implemented. The Energy Efficiency Agency is fully functional and staffed as of 2020.

Establish the Energy Efficiency Fund to finance projects per the Energy Efficiency Law.

Pending

Improvements proposed in 2022

Establish an ETS scheme to put a price on carbon and a firm limit on emissions.

Improvement suggested in 2022. Status will be updated in 2023.

Communicate to the UNFCCC Secretariat Albania's mid-century, long-term low GHG emission development strategy with absolute targets for emission reduction.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 3

Improvements proposed in 2018

Enhance the accessibility and interface of the online Official Gazette to facilitate the use of legal information.

Fully implemented. In 2021, the Official Gazette's online version provided updates on legislative amendments and repeals. It features an advanced search tool that is accessible in English.

Publish statutes in one of the UN languages.

Pending

Improvements proposed in 2020

Create stronger coordination mechanisms among ministries, public bodies, and institutions to guarantee policy consistency.

Pending

Improvements proposed in 2021

Establish a specialised agency to develop renewable energy sources as envisaged in Law no. 7/2017 'On Renewable Sources'.

Pending

Draft subsidiary legislation and regulations to implement Law no. 155/2020 'On Climate Change'; develop a national climate change adaptation and mitigation plan in line with the EU requirements.

Work ongoing. Secondary legislation and regulation is still pending. The National Adaptation Plan was developed in October 2021.

Improvements proposed in 2022

Establish an online platform to make budget allocation and utilisation reports of ministries and State agencies available to citizens.

Improvement suggested in 2022. Status will be updated in 2023.

Decouple the MIE's policy-making functions from its technical day-to-day business.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2018

Adopt the draft law on arbitration which is pending since 2013.

Pending

Establish a foreign investment ombudsperson to resolve conflicts between foreign investors and State agencies.

Pending

Improvements proposed in 2020

Set a legally binding cap on the timeframe for paying compensation in the case of compulsory property acquisition or expropriation.

Pending

INDICATOR 5

Improvements proposed in 2018

Lower restrictions on the acquisition of property by foreigners, and on the employment of non-Albanian unskilled personnel.

Work ongoing. Albania is working on the first registration of property titles across the country.

Improvements proposed in 2020

Unbundle the electricity distribution and supply activities, which was postponed until December 2020.

Fully implemented. In January 2020, the sole distributor and supplier OSHEE sh.a was legally divided into three entities: the electricity distributor, the universal supplier, and the free market supplier.

Remove legal and contractual obstacles that may impede regional market integration.

Pending

Improvements proposed in 2021

Finalise the functional unbundling of OSHEE sh.a; abolish the legal obstacles preventing end consumers from choosing their electricity supplier.

Work ongoing. In 2021, OSHEE sh.a was legally unbundled and restructured into a holding company with three subsidiaries. The work towards its functional unbundling is ongoing.

Improvements proposed in 2022

Establish the day-ahead and intraday markets so suppliers can schedule the necessary units to meet forecast demand and increase system reliability.

Improvement suggested in 2022. Status will be updated in 2023.



Bosnia and Herzegovina

Population ¹	3,323,929
Area (km ²) ¹	51,210
GDP per capita (USD) ¹	6,072.18
TES/GDP (GJ/thousand 2015) ²	16.62
Net Energy Imports (TJ) ²	82.48
RE share in Final Energy Consumption (%) ²	37.0
Total CO ₂ emissions (MtCO ₂) ²	22.35

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	3 new projects	Austria: 1 RE project of 15.2 mEUR United Kingdom: 1 FF project of 15.2 mEUR China: 1 RE project of 4 mEUR

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022.

For more information see Annex III of this report.

RE: Renewable energy based electricity production

FF: Fossil fuel based electricity production

Bosnia and Herzegovina’s (BiH) overall risk level against the assessed areas is **moderate**.

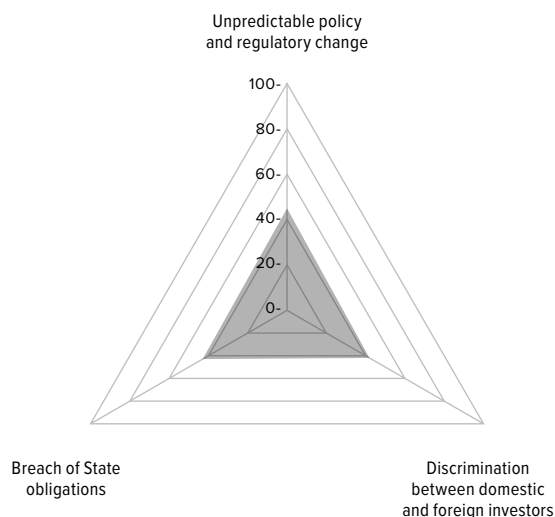
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *breach of State obligations* and *unpredictable policy and regulatory change*.

BiH has a good performance on one EIRA indicator and a moderate performance on four indicators. *Regulatory environment and investment conditions* is the highest-scoring indicator at 65. Its score is 59 on the indicator *rule of law*, 53 on *foresight of policy and regulatory change*, and 51 on *management of decision-making processes*. *Framework for a sustainable energy system* is the lowest-scoring indicator at 48.

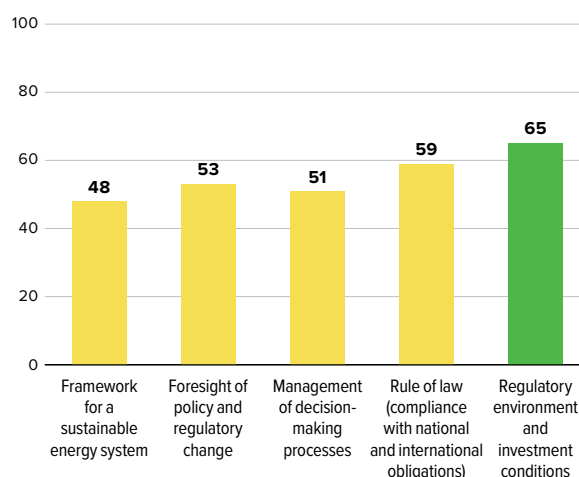
On a more detailed level, BiH’s overall sub-indicator performance is moderate. The highest-scoring sub-indicator is *regulatory independence* at 89. Its score is good on four sub-indicators, namely *restrictions on FDI* (76), *management and settlement of investor-State disputes* (69), *robustness of policy goals and commitments* (67), and *policy planning on clean energy transition* (64). It has received moderate scores on *transparency and anti-corruption measures* (53), *institutional governance* (50), *respect for property rights* (48), *environmental protection, human rights and gender* (44), *energy resilience* (43), and *enabling measures to support clean energy transition* (42). The lowest-scoring sub-indicators are *communication of vision and policies* at 40 and *electricity industry market structure and competition* at 30.

BiH must reduce legal and regulatory risks to energy investments by effectively communicating its policies to investors and making the electricity market competitive.

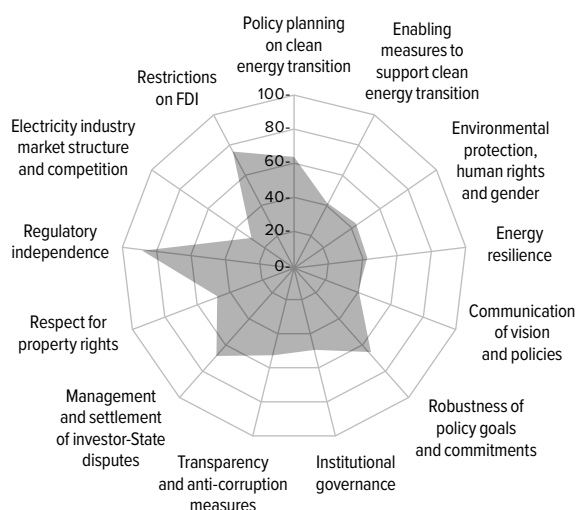
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

BiH submitted its revised NDC to the UNFCCC Secretariat in March 2021.

In November 2020, BiH signed the Sofia Declaration on the Green Agenda (Sofia Declaration), under which it is obliged to become climate neutral by 2050.

STRENGTHS

BiH is intensifying its efforts to implement climate change mitigation and adaptation measures across economic sectors. According to its revised NDC, in the primary scenario, the GHG emissions reduction target for 2030 is 12.8% compared to the 2014 baseline. In the additional measures scenario, the target for 2030 is 17.5% compared to 2014. The 2050 goal is a 55% GHG emissions reduction compared to 2014. In the forestry sector, measures are planned to increase the sinks by 93 GgCO₂e until 2030 from the baseline of 19,664.51 GgCO₂e in 2014. The projected emissions for 2050 are more ambitious and expected to reach 5,330 GgCO₂e, which is 80% less than the 34,043.49 GgCO₂e net emissions in 1990.

BiH is already implementing activities to meet its commitments under the Sofia Declaration. Although it has not set a carbon pricing mechanism, the State-owned electricity producer and supplier, Elektroprivreda BiH (EPBiH), has established an internal carbon pricing mechanism to collect taxes on CO₂ per ton of emissions from operational coal plants. The levied taxes are included in the financial reports and transferred to the environmental section of the company.

According to the National Emission Reduction Plan for BiH 2015, thermal power plants (TPPs), such as the one in Kakanj, are increasing operational efficiency by installing combined electrostatic precipitators and bag filters. The Government is continuing the phase-out process of the TPPs, Tuzla 3, Tuzla 4 and Termoelektrana Kolubara A3. All three plants can operate for a maximum of 20,000 hours from 1 January 2018 to 31 December 2023. Notably, the State Electricity Regulatory Commission (SERC) has reported that in 2021, power generation from TPPs decreased by 622 GWh, or 6%, compared to 2020. At entity level, the Energy Strategy of Republika Srpska 2030 presents two options for reducing TPPs' sulfur dioxide and nitrogen dioxide emissions. Under option A, the TPPs Gacko 1 and Ugljevik 1 will be retired by 2025. Gacko 1 will be replaced by Gacko 2, with modern combustion technologies characterised by high-efficiency production and eco-friendly mechanisms that control pollutant gas emissions. However, option A is a relatively high-financed investment of EUR 840 million. Option B postpones the deadline for the retirement of Gacko 1 and Ugljevik 1 to 2035. During this time, the TPPs will operate with a minimal increase in power generation and a limited efficiency rate and emit high aggregate CO₂ emissions from 2018 to 2027. Option B's expected investment is low, but the operating and maintenance costs remain high.

The Strategy and Action Plan for the Protection of Biological Diversity of BiH 2015 sets a national roadmap to preserving biological diversity. At entity level, in 2022, Republika Srpska released its Environmental

Protection Strategy 2022-2032, which requires strategic environmental impact assessments for public and private energy projects. The assessment will ensure environmentally friendly project planning and mitigate the risk of hazardous substances and construction materials. Moreover, in June 2021, the Federation of Bosnia and Herzegovina's (FBiH) entity-level Law on Environmental Protection entered into force. To complement this Law, in the same month, the Government of the FBiH approved the 'Decree on Projects for which an Environmental Impact Assessment is Mandatory and Projects for which a Decision is made on the Need for an Environmental Impact Assessment'. This Decree identifies projects for which an environmental impact assessment is mandatory. It transposes the provisions of Directive 2011/92/EU of the European Parliament and the Council on assessing the effects of certain public and private projects on the environment.

In February 2022, the Agency for Statistics of BiH published 'Women and Men in BiH'. The publication includes gender-disaggregated data from various statistical data fields, including energy. In April 2022, it also published the 'Persons in paid employment by activity' report, which includes disaggregated sex and gender data on energy jobs. According to both reports, as of 2022, 17,103 men are employed in the electricity, gas, steam, and air conditioning supply sectors, while the total number of women in the same sectors is 3,967.

AREAS FOR IMPROVEMENT

BiH should develop an action plan to implement its Strategy for the Development of Science 2017-2022. Initiatives should be directed towards financially supporting small and medium enterprises to innovate in scaling up energy storage solutions and deploying renewable energy technologies.

BiH must prepare a national-level policy framework to track the implementation of its NDC. It must also approve national legislation for the Measurement, Reporting and Verification (MRV) of GHG emissions, start collecting and processing disaggregated data on emissions for different sectors and establish a national body to lead this process.

At State and entity level, BiH should introduce initiatives to increase the number of women employed in the renewable energy sector and promote gender equality in energy and climate change. The initiatives should be supported through dedicated budget allocations and institutional capacity-building programmes in cooperation with international organisations and civil society.

Foresight of policy and regulatory change

QUICK FACTS

- I The Council of Ministers (CoM) of BiH adopted the BiH Framework Energy Strategy until 2035 (FES 2035) in 2018.
- I The FBiH Framework Energy Strategy until 2035 and the Energy Strategy of Republika Srpska 2030 are aligned with FES 2035.

STRENGTHS

FES 2035 defines the national-level priorities for the energy sector, such as ensuring energy security, power reliability, access to energy, and the development of renewable energy and energy efficiency technologies. According to FES 2035, the contribution of renewable energy sources to the power generation mix is expected to increase in the future. Hydropower will have the highest contribution (84%), but its relative share will decrease as the share of other renewable energy sources increases. The relative share of wind power will remain roughly at 2020 levels (approximately 9%), while biomass will contribute about 4%. An increase of 2% is expected in solar energy by 2035.

FES 2035 also sets targets for renewable energy sources in transport. In the baseline scenario, the share of biofuels (95%) and renewable electricity (5%) will be the same as in 2020. In the other scenario, which promotes a higher use of electric vehicles, by 2035, electricity will have a 15% share in transport and biofuels 85%.

FES 2035 aims to ensure that by 2035, the share of biomass in the heating and cooling sector under the moderate renewable scenario will be 95%, while 5% will be from solar and geothermal sources. This scenario takes into consideration the development of distributed generation. Conversely, the cogeneration scenario foresees 98% contribution from biomass and 2% from solar and geothermal sources by 2035.

Efforts are being made to strengthen policy planning for energy efficiency. On 4 February 2021, the FBiH Government extended the Action Plan for Energy Efficiency (2019-2021) until 31 December 2021. It also adopted the Operational Plan for Improving Energy Efficiency in the Institutions of the FBiH on 1 April 2021. This Plan aims to reduce energy consumption by 3.33% and final energy consumption by 5.16% in 2021, compared to reductions of 1.7% in energy consumption and 4.28% in final energy consumption by the end of 2020.

The State and entity-level governments have initiated projects to meet the targets mentioned above. According to SERC, the contribution of electricity generated by solar panels increased from 45.62 GWh in 2020 to 73.89 GWh in 2021. In April 2021, EPBiH announced an investment of 110 million convertible mark of BiH (BAM) to build the 'Janjići' hydropower plant with an installed capacity of 15.75 MW and an estimated annual production of 77.26 GWh. In May 2021, in collaboration with the E3 International energy company and the Government of Zenica-Doboj Canton, EPBiH implemented a pilot project to establish biomass plantations. In 2021, the Podvelezje wind power plant, with a total installed capacity of 48 MW and annual production of 130 GWh, became operational.

FES 2035 foresees an allocation of BAM 206.12 million to constructing new transmission facilities and BAM 89.99 million to building new interconnection lines. Moreover, the new Long Term Development Transmission Network Plan 2021-2030 sets investment targets for the entities to strengthen the power grid. Based on this Plan's estimates, the FBiH has been allocated BAM 91.58 million and Republika Srpska BAM 86.99 million to construct new interconnection facilities.

The continuous investments in the electricity network have allowed BiH to progress with its priority of access to reliable energy. SERC statistics indicate that the electricity consumption in 2021 amounted to 12,170 GWh or 7.4% more than in 2020. In 2021, the energy consumption of customers connected to the transmission system grid increased by 31.4% compared to 2020. The energy consumption of those connected to the distribution grid increased by 4.7% compared to 2020.

In June 2021, BiH submitted its Fourth Report on the Promotion and Use of Energy From Renewable Sources and the Fifth Annual Report under the Energy Efficiency Directive 2021 to the Energy Community Secretariat. Moreover, in 2021, SERC submitted its annual report to the Parliament Assembly of BiH and published it online. The report summarises SERC's activities and provides data on the energy sector, including key statistics and prices, approved regulations, and technical aspects of the transmission and distribution operators. Moreover, the Regulatory Commission for Electricity of Republika Srpska (RERS) published its annual report for 2021, providing information on power system indicators, characteristics, and prices in Republika Srpska.

AREAS FOR IMPROVEMENT

Considering the FBiH's recent entity-level ban on hydropower plants under 10 MW and the national decarbonisation ambition, the country must develop a step-by-step roadmap to mobilise financing for wind and solar power projects. It should define a long-term strategy for large-scale green energy storage and introduce fiscal schemes, such as cash rebates and tax incentives, to promote eco-friendly technologies like flywheels, batteries, compressed air and pumped hydro storage.

BiH must intensify its efforts to reach the targets for renewable energy in transportation. For this purpose, it should incentivise the purchase of electric vehicles and introduce public-private partnership models to develop the electric vehicle infrastructure. At the same time, it should set binding targets for biofuels and electric-powered vehicles in public transport.

Management of decision-making processes

QUICK FACTS

- | The Ministry of Foreign Trade and Economic Relations (MoFTER) leads policy-making on energy and environmental protection at national level.
- | The Ministry of Energy and Mining (MEM) plans and manages the power sector strategy in Republika Srpska.
- | The Federal Ministry of Energy, Mining and Industry (FMERI) sets energy policies for the FBiH.

STRENGTHS

The Government of BiH coordinates policy-making in the energy, economic and trade sectors. MoFTER is leading the development of BiH's NECP in cooperation with the MEM of Republika Srpska and the FMERI of the FBiH. Moreover, MoFTER is engaging with entity-level ministries, the Brčko District, and the German Agency for International Cooperation (GIZ) in preparing the Action Plan for Renewable Energy Sources of Bosnia and Herzegovina for 2021-2030, which will be a part of the country's NECP.

In 2021 and 2022, efforts were made at entity level to strengthen institutional cooperation among the energy policy-making institutions, the energy regulators, and the legislative branches. To this end, the MEM, RERS, and the Parliamentary Commissions responsible for energy in Republika Srpska worked closely to improve the legislation on renewable sources. This cooperation culminated in the adoption of the Law on Renewable Energy Sources by the Legislative Assembly of Republika Srpska in February 2022. Moreover, in September 2021, the Government of the FBiH approved the draft Law on Mining and submitted it to the entity's Parliament for review. In June 2022, the Brčko District's Legislative Assembly adopted the Law on Renewable Energy Sources and Efficient Cogeneration and the Law on Energy Efficiency.

The Directorate of Economic Planning has developed the Economic Reform Programme 2021-2023 (ERP), which describes the country's economic, trade, and investment strategy and its mid-term objectives of fiscal stabilisation. The ERP's tax policy aims to prevent and limit tax erosion and profit shifting. At entity level, efforts are being made to reduce financial pressure on the private sector operating within the formal economy. For this purpose, in 2021, the Framework Budget Document of Republika Srpska for 2021-2023 was adopted to define the planned budget frameworks, financing, and debt for all government administration levels in Republika Srpska. One of the main goals of Republika Srpska remains to keep its public debt below 60% of GDP.

Laws and regulations enacted by the State are published in the Official Gazette of BiH. In 2021, the CoM of BiH published 163 reasoned decisions on its website. State-controlled utilities made their financial statements publicly available in 2021. The three State-owned electricity generation utilities EPBiH, Elektroprivreda Republike Srpske (ERS), and Elektroprivreda Hrvatske Zajednice Herceg Bosne (EPHZHB) published their financial statements for the year. Moreover, the Independent System Operator in BiH (NOSBiH) and the electricity distribution company, ERS, published their financial statements for 2021.

Consultation between the State and entity-level governments and stakeholders is guaranteed in legislation. At State level, in July 2021, MoFTER invited the public to comment on its draft Mid-Term Work Plan for 2022-2024. In April 2021, NOSBiH organised a public hearing on the draft Indicative Generation Development Plan for 2022-2031 via an online platform. During this consultation, it adopted a conclusion calling upon all institutions and entities operating in the electricity sector of BiH to increase electricity generation from renewable energy sources in line with their respective competencies. At entity level, in January 2022, FMERI invited interested parties to discuss the Draft Law on Electricity in the FBiH. Moreover, in February 2022, the MEM of Republika Srpska conducted public consultations on the Draft Law Amendments to the Law on Energy and invited interested parties to submit comments and suggestions. It also organised a public consultation on the Draft Law on Geological Research during the same month.

SERC made its decision on tariffs and tariff methodology available to the public. In December 2021, it published the decision 'On the Tariff for the Independent System Operator' and 'On Tariffs for Electricity Distribution Services in the Brčko District of BiH', presenting the electricity tariffs for customers connected to the 35 kV, 10 kV and 0.4 kV networks. Moreover, in March 2021, it organised a public hearing to consult with interested parties on the Long-Term Transmission Network Development Plan for 2021-2030. At entity level, in 2021, the Federal Commission for Electricity Regulation (FERK) published the tariff decisions for the universal supplier and electricity distributors JP Elektroprivreda HZ HB d.d. Mostar and EPBiH.

AREAS FOR IMPROVEMENT

In the FBiH, one-stop shops should be established at cantonal level to provide investors with local assistance and improve the ease of operating businesses. The State government should also set up a single window for enquiries concerning investment policies and applications in the energy sector.

BiH should consider establishing a beneficial ownership register that provides the public access to high-quality information on the owners, shareholders, and benefactors of companies operating in the country and their respective profits. Disclosure of information on beneficial ownership will help tackle corruption and money laundering, reduce investment risks, and encourage a safe investment climate for potential investors.

Rule of law

QUICK FACTS

- | BiH ratified the ECT on 10 January 2001.
- | BiH ratified the Convention on the Recognition and Enforcement of Foreign Arbitral Awards in 1993.
- | BiH ratified the Convention on the Settlement of Investment Disputes Between States and Nationals of Other States in 1997.

STRENGTHS

The Constitutional Court of BiH is intensifying its efforts to harmonise case law management and improve the judiciary's performance. To this end, it has signed a Memorandum of Understanding (MoU) until March 2022 with the Advice on Individual Rights in Europe Centre. The MoU will support the Judicial Capacity Building project, which aims to develop the judicial capacity of the country and harmonise the domestic legal system at the State level.

In May 2021, the High Judicial and Prosecutorial Council of BiH (HJPC) adopted its Mid-Term Work Plan, which presents measures to enhance the quality and efficiency of the domestic courts. In particular, the work plan aims to optimise the HJPC's procedures. It introduces mechanisms to improve judicial education by evaluating the skills and qualifications educators of the Center for Judicial and Prosecutorial Training (CEST) must possess to conduct professional training of judicial officials.

In 2021, the Ministry of Justice of BiH (MoJ BiH) approved its Annual Work Programme Report detailing its activities and results. The Programme tackles topics such as ensuring court decisions are delivered within a defined timeframe and reducing the number of unresolved cases. Following EU recommendations, the MoJ BiH has proposed amendments to the Law on Enforcement Proceedings 2016 of the FBiH, Republika Srpska, and the Brčko District to reduce the backlog of cases and release courts from the burden of enforcing undisputed claims. These measures aim to significantly reduce the congestion of court cases in all BiH-level courts.

In 2021, the Constitutional Court of BiH updated its website with the status of pending cases, full judgments when available, the names of the appellants, and dates of the decisions delivered. It also published the Yearly no. 32 Bulletin 2021, containing a selection of decisions of the Court during the year.

In 2021, the District Commercial Court in East Sarajevo became one of the first judicial institutions to successfully adopt the Security Policy of the Judicial Information System (Security Policy) and start its implementation. The objective of the Security Policy is to minimise cybersecurity threats that may harm the integrity and security of the judicial information system. It also intends to eliminate manual paperwork and increase efficiency by allowing for the automated processing of court case data. In May 2021, the District Commercial Court in East Sarajevo began drafting and adopting subsidiary rules to implement the Security Policy, such as determining the catalogue of services, the categorisation, storage and use

of data, authorisation to access resources, and obligatory data backup.

BiH has signed 39 BITs, of which 36 are in force. Some of these BITs make particular reference to the energy sector. For instance, its BITs with Lithuania, India and Albania define business concessions awarded for extracting and exploiting natural resources in the energy sector as an investment. Moreover, in 2021, the UK and BiH signed the Partnership, Trade and Cooperation Agreement guaranteeing free movement and protection of natural elements used in the energy and fuel sector.

Most of the BITs signed by BiH include intellectual property rights in the definition of 'investment'. BITs, such as those with Denmark, San Marino, Slovakia, Lithuania, and India, extend protection against expropriation to all forms of investment. Its BITs with the Belgo-Luxembourg Economic Union and with Portugal specify that compensation in the case of expropriation shall be paid to a foreign investor in the national currency or any other currency requested by the investor. The provisions specify that the payments shall bear no delay and be freely transferable. Moreover, the compensation should include interest at the normal commercial rate calculated from the date the amount is determined until its payment.

IAs signed by BiH grant investments protection against expropriation through the application of the Most-Favoured-Nation and National Treatment obligation. Both elements are included in the BITs between BiH and Hungary and BiH and the Swiss Federation.

AREAS FOR IMPROVEMENT

The Government should appoint a central authority that maintains a database of investment treaties, contracts, and special undertakings with foreign investors. The database should be established at national level, comprising information of all State entities and the Brčko District. Moreover, it should provide real-time information on the foreign investors operating in the country and historical data on investor grievances. The database could help identify the sectors most prone to investor conflicts, recurrent issues arising between investors and public agencies, and patterns of investor non-compliance. The information could be shared with the relevant public agencies to recognise similar problems and address them early on.

The State may establish an investment ombudsperson to address the grievances of foreign investors. The general investment climate will also benefit from an update of the Alternative Dispute Resolution Strategy drafted in 2008.

Regulatory environment and investment conditions

QUICK FACTS

- | SERC regulates the transmission of electricity, the transmission system operation, and the international electricity trade.
- | FERK is the regulatory authority in the FBiH, while RERS regulates Republika Srpska's electricity market.

STRENGTHS

SERC remains committed to fulfilling its regulatory mission. In November 2021, it adopted the decision 'On the Approval of the Rules on Allocation of Cross-Border Transmission Capacities' outlining the procedure to allocate transmission capacities between EMS AD Belgrade (EMS) trading zones and NOSBiH through daily, monthly, and annual auctions. Moreover, in December 2021, SERC adopted the decision 'On the Approval and Application of the Grid Code' to establish, enforce and monitor quality standards for NOSBiH's electricity transmission and ancillary services.

BiH is taking steps to ensure a reliable energy supply for its domestic consumption. Electricity generated in 2021 amounted to 17,055.44 GWh, with a surplus of 1,645 GWh or 10.8% more than the electricity generated in 2020. The electricity export in 2021 increased by 11.4% compared to 2020, while imports in 2021 decreased by 7.1% compared to 2020. Moreover, in the first quarter of 2021, EPBiH produced 2,019,081 MWh of electricity, which is 262,327 MWh or 14.93% more than the planned production set in the Electricity Balance for 2021 and 10% more than the same period in 2020.

SERC has adopted regulatory measures to improve the resilience of the country's energy system. In June 2021, it adopted the decision 'On Approving Indicative Generation Development Plan for 2022-2031', analysing the electrical energy balance in the transmission network following an increase in power generation from renewables. In the same month, it adopted the decision 'On Approving Long-Term Transmission Network Development Plan for Period 2021-2030', which outlines the transmission network reinforcement plans and envisages the construction of new lines to increase system stability. The Plan offers the same conditions to existing grid users and those that will be connected to it in the future. It applies uniform conditions to the lifespan and refurbishment of equipment, construction of new facilities, and operational readiness of facilities used for electricity transmission.

SERC is working to gradually eliminate cross-subsidies among some categories of electricity customers to avoid 'tariff shocks'. At the same time, there has been a notable reduction in the ratio of average prices between small commercial customers and households over the past years. The newly adopted Law on Electricity of 2022 in Republika Srpska also provides for the gradual deregulation of electricity generation prices between 2022 and 2024.

The Central Bank of BiH reported that FDI earnings between 2020 and 2021 increased by 22.1% (from BAM 712,700,000 to BAM 869,900,000). With adequate and timely implementation, new investments and donor funding in infrastructure and energy projects could result in an annual increase in investment of around 10%

between 2021 and 2023. To facilitate investment in the country, in September 2021, the Parliament of FBiH adopted the Law on Amendments to the Company Law of FBiH that allows companies to register a business electronically and establishes a one-stop shop to facilitate the process.

Legislative initiatives are underway to attract investment in renewable electricity. The current Law on Amendments to the Law on the Use of Renewable Energy Sources and Efficient Cogeneration 2014 of FBiH set incentives for renewable energy producers by prioritising their connection to the grid, offering feed-in-tariffs, and ensuring the right to a compulsory energy purchase from the distributor system operator. In 2022, the FBiH Government adopted the draft Law on the Use of Renewable Energy Sources and Efficient Cogeneration and submitted it to the Parliament for approval. The proposals include feed-in tariffs for wind (below 250 kW installed capacity), solar (below 150 kW), and biomass and biogas (500 kW) power plants. Feed-in premium auctions will support all other renewable energy plants with greater installed capacities than the above. The proposals also introduce the prosumer category for self-consumption and net metering supply schemes.

In February 2022, Republika Srpska adopted its new Law on Renewable Energy Sources to increase the share of solar and wind power in final energy production. According to the Law, plants with an installed capacity of more than 150 kW will be granted feed-in premium-based support through public bidding. Plants with an installed capacity of 150 kW or less will continue to avail of the already established feed-in tariffs. Those with a capacity of 50 MW or less will benefit from 12 to 15 years of feed-in-premiums through auctions. The Law also introduces a new prosumer category giving end consumers the right to install a renewable energy power plant for self-consumption and sell the surplus electricity to the grid.

AREAS FOR IMPROVEMENT

It is recommended that the FBiH take measures to ensure the legal unbundling of the electricity distribution companies EPHZHB and EPBiH.

BiH should establish a national-level legal framework to regulate the natural gas sector. The entities currently have different regimes for unbundling, market liberalisation, and third-party access to gas networks. State and entity-level governments must work together to harmonise the diverging rules and consolidate these under one framework. This approach will support investment in gas infrastructure development, expansion and refurbishment, diversify gas routes, make the wholesale gas market competitive, and help eventually phase out coal consumption.

INDICATOR 1

Improvements proposed in 2018

Develop an action plan to implement the Strategy for the Development of Science 2017-2022; set financial initiatives to support small and medium enterprises to innovate in energy storage and renewable energy technologies.

Improvement suggested in 2022. Status will be updated in 2023.

Develop a policy framework to track the implementation of the NDCs.

Improvement suggested in 2022. Status will be updated in 2023.

Enact legislation establishing the MRV system for national GHG emission.

Improvement suggested in 2022. Status will be updated in 2023.

Organise capacity-building programmes/projects to increase the number of women employed in the renewable energy sector.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2018

Adopt the Framework Energy Strategy of BiH until 2035 at State level.

Fully implemented. The Framework Energy Strategy of BiH until 2035 was adopted in late 2018.

Finalise and adopt the draft legislation for the electricity and gas sub-sectors at State-level.

Work ongoing. The Draft Law on the Regulation of Electricity and Natural Gas, Transmission and Electricity Market in BiH is ready. In November 2021, the Brčko District approved its new Law on Electricity. In May 2022, the FBiH approved amendments to its Law on Electricity. In 2020, Republika Srpska approved its Electricity Act.

Improvements proposed in 2019

Adopt an updated action plan for energy efficiency since the last one expired in 2018.

Work ongoing. A new National Energy Efficiency Action Plan is under preparation at State-level. The FBiH has extended its Action Plan for Energy Efficiency (2019-2021) until 31 December 2021.

Improvements proposed in 2020

Adopt State- and entity-level legislation on renewable energy and energy efficiency transposing the EU acquis.

Fully implemented. In 2021, the FBiH adopted the revised Action Plan for Energy Efficiency 2019-2021. In February 2022, Republika Srpska adopted a new Law on Renewable Energy Sources.

Draft and adopt an updated action plan for renewable energy since the existing one is for the period covering 2016-2020.

Work ongoing. The National Action Plan for Renewable Energy Sources in BiH was extended until the end of 2021. MoF TER, in cooperation with the relevant entity-level ministries and GIZ, is preparing the Action Plan on Renewable Energy Sources 2021-2030.

Harmonise policy monitoring and evaluation mechanisms at State and entity levels.

Pending

Improvements proposed in 2022

Develop a step-by-step roadmap to mobilise financing for wind and solar power projects and define a long-term strategy to promote large-scale green energy storage.

Improvement suggested in 2022. Status will be updated in 2023.

Intensify efforts to increase the share of renewable energy fuels in the transport sector.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 3

Improvements proposed in 2018

Publish the enacted and draft laws, regulations, and policies in foreign languages and make the translations available free of cost.

Pending

Set up one-stop investment shops in the entities and the FBiH cantons.

Pending

Improvements proposed in 2021

Ensure NOSBiH publishes data about congestion management and electricity month-ahead forecasted capacities on the European Network Transmission System Operators (ENTSO-E) transparency platform.

Fully implemented. The independent electricity transmission system operator, NOSBiH, made this data available on the ENTSO-E transparency platform.

Improvements proposed in 2022

Establish a beneficial ownership register to provide citizens access to information on owners, shareholders and benefactors of companies operating in BiH and their respective profits.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2018

Consider establishing a foreign investment ombudsperson to settle conflicts arising in the course of energy projects.

Pending

Update the expropriation laws of the entities and the Brčko District to define 'public purpose or in the public interest'.

Pending

Improvements proposed in 2020

Update the Alternative Dispute Resolution Strategy that was drafted in 2008.

Pending

INDICATOR 5

Improvements proposed in 2018

Harmonise licencing procedures for energy projects across entities and in the Brčko District.

Pending

Improvements proposed in 2021

Regularly publish the decisions of RERS on gas and electricity tariffs and list the electricity supply and distribution prices on its website.

Pending

Improvements proposed in 2022

Finalise the legal unbundling of EPHZHB and EPBiH.

Improvement suggested in 2022. Status will be updated in 2023.

Establish a national-level legal framework that applies the same regimes in the entities for unbundling, market liberalisation and third-party access in the natural gas sector.

Improvement suggested in 2022. Status will be updated in 2023.



Colombia

Population ¹	51,265,841
Area (km ²) ¹	1,140,619
GDP per capita (USD) ¹	6,131.23
TES/GDP (GJ/thousand 2015) ²	5.34
Net Energy Imports (TJ) ²	-2,239.05
RE share in Final Energy Consumption (%) ²	30.7
Total CO ₂ emissions (MtCO ₂) ²	70.35

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	4 new projects 1 acquisition deal	Spain: 2 RE projects of 197.28 mEUR Italy: 1 RE project of 62.4 mEUR United States of America: 1 RE project of 4 mEUR Value of 1 deal (Peru) is N/A
Manufacture of refined petroleum products	1 new project	Venezuela: 1 project of 4 mEUR
Extraction of crude petroleum	1 acquisition deal	Value of 1 deal (Spain) is N/A
Transport by pipeline	1 minority stake deal	Value of 1 deal (Cayman Islands) is N/A
Mining support service activities	1 acquisition deal	Value of 1 deal (Argentina) is N/A
Mining of hard coal and lignite	2 acquisition deals	United States of America: 1 deal of 2,689 mEUR United Kingdom: 1 deal of 89.17 mEUR
Support activities for other mining and quarrying	2 acquisition deals	Canada: 2 deals of 0.6 mEUR
Mining support service activities	Institutional buy-out deal (100%)	Value of 1 deal (Argentina) is N/A

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
 2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
 3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.
- RE: Renewable energy based electricity production

Colombia’s overall risk level against the assessed areas is **very low**.

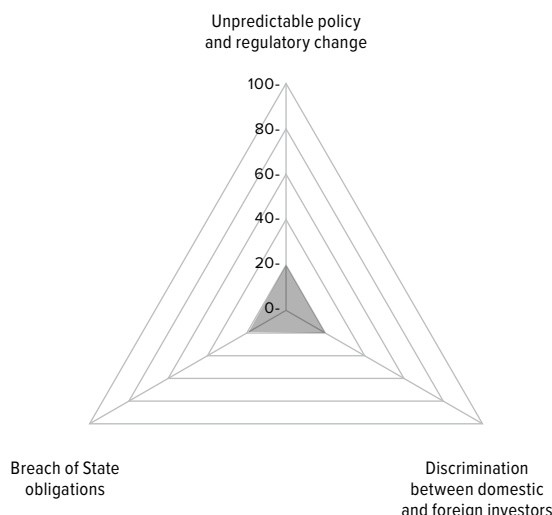
Among the three risk areas, the risk of *breach of State obligations* is lower than the risks of *unpredictable policy and regulatory change* and *discrimination between foreign and domestic investors*.

Colombia has a very good performance on two EIRA indicators and a good performance on three indicators. The highest-scoring indicator is *rule of law* at 89, followed by *foresight of policy and regulatory change* at 83. Its score on *framework for a sustainable energy system* is 78, while *regulatory environment and investment conditions* is at 77. *Management of decision-making processes* is the lowest-scoring indicator at 73.

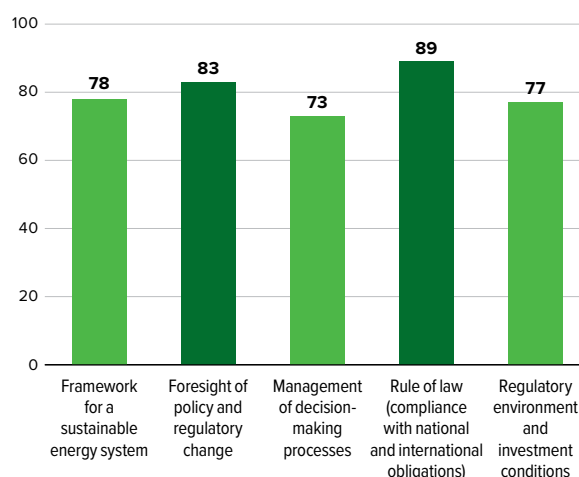
On a more detailed level, Colombia’s overall sub-indicator performance is very good. The highest-scoring sub-indicators are *respect for property rights* at 93 and *policy planning on clean energy transition* at 92. Following these are the sub-indicators *robustness of policy goals and commitments* at 89, *management and settlement of investor-State disputes* at 86, *electricity industry market structure and competition* at 81, and *energy resilience* at 80. It has scored 78 on three sub-indicators, namely *enabling measures to support clean energy transition*, *communication of vision and policies*, and *restrictions on FDI*. Its score is good on the sub-indicators *institutional governance* (75), *transparency and anti-corruption measures* (72), and *regulatory independence* (72). The lowest-scoring sub-indicator is *environmental protection, human rights and gender* at 64.

Colombia is consistently reducing legal and regulatory risks associated with energy investments. At the same time, it should undertake initiatives to promote environmental protection, human rights and gender mainstreaming in climate and energy issues.

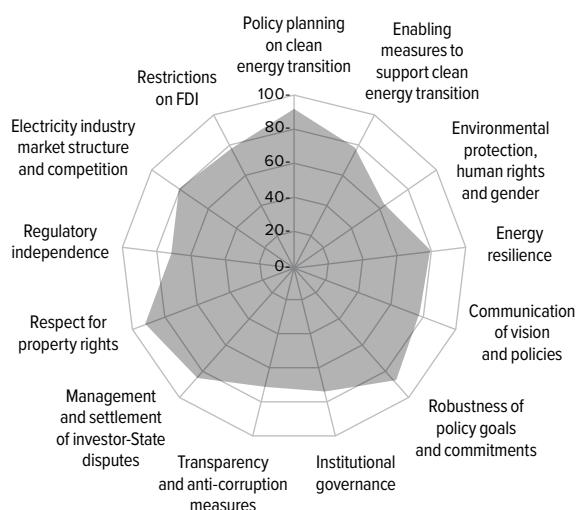
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

On 12 November 2021, Colombia communicated its long-term low GHG emission development strategy, 'E2050 Colombia: Estrategia climática de largo plazo de Colombia E2050 para cumplir con el Acuerdo de París', to the UNFCCC Secretariat.

In 2021, the Congress of Colombia adopted the Energy Transition Law (Law 2099).

STRENGTHS

In 2021 and 2022, the Colombian Government adopted laws, regulations, and strategies to accelerate the country's clean energy transition. Law 2099 amends the Renewable Energy Law of 2014 (Law 1715) and aligns it with the Government's decarbonisation strategy. The objectives of Law 1715 now include developing storage systems for Non-Conventional Energy Sources (FNCE), the efficient use of FNCE in residential and public services and public lighting, efficient energy management and smart metering systems, and reduction in GHG emissions.

Resource diversification and energy security are among the Government's key priorities. To this end, in 2021, it published the Hydrogen Roadmap until 2050 for the development, generation, and use of hydrogen as an energy source. It is also anticipated that the 20 MW Guajira 1 wind farm, inaugurated in January 2022, will be commissioned within the year. To complement these efforts and attract FDI of over USD 27 million by 2050, in May 2022, the Government launched the Offshore Wind Energy Roadmap. The Roadmap allows Colombia to exploit its estimated wind potential of 50 GW, three times the current installed capacity.

There is a substantial legal and regulatory thrust to decarbonise the transport sector. Through Law 1964 of 2019, territorial entities can set incentives to encourage electric mobility, such as discounts on vehicle registration or tax, differentiated parking rates, or tax exemptions. Law 2128 of 2021 requires the national Government to ensure that mass public transportation systems have at least 30% of vehicles operating with natural gas. It must also set incentive programmes to promote power self-generation and cogeneration from natural gas and ensure that cargo transportation relies 30% on natural gas. New vehicles operating on gas will be exempt from the vehicle tax (not exceeding 1% of the vehicle's commercial value) for ten years from their registration date.

The national policies and legal and regulatory frameworks closely link the country's environmental protection efforts with the need to ensure a low-carbon and sustainable energy future. Law 2169 of 2021 sets a national target to reduce net deforestation of natural forest to 0 hectares per year by 2030. Moreover, on 11 February 2022, the Ministry of Mines and Energy (MME) adopted Resolution 40066 to control and reduce fugitive methane emissions released during hydrocarbon exploration and exploitation. It sets out, among other things, the technical requirements for detecting and fixing leaks and for the burning and venting of natural gas. Additionally, Law 1819 of 2016 establishes a carbon tax regime for all fossil fuels, including petroleum derivatives and all categories of fossil gas used for energy purposes, except for combustion. The tax is not applied to operations certified by the Ministry of Environment and

Sustainable Development (MESD) as carbon neutral. Of the total carbon tax, 25% is allocated for coastal erosion management, monitoring and reducing deforestation, conserving water sources and strategic ecosystems, paying for environmental services, and monitoring, reporting, and verifying climate action. At the same time, 5% is used to strengthen the National System of Protected Areas and other conservation strategies by creating and expanding protected areas and ensuring their effective management and governance.

A just transition of the workforce towards a low-carbon economy is imperative for the Government. The Ministry of Labor is expected to develop a national strategy in this respect by 2023. Moreover, the MME issued Decree 539 of 2022 requiring mining licensees to employ at least one certified occupational health and safety professional with a minimum of one year of relevant experience. Licensees must also implement protocols for executing mining tasks, including rules on the entry of visitors, equipment storage, fuels and oils, work at height, and vehicle operation.

Efforts are being made to secure a continuous supply of critical raw materials. In 2019, Colombia published its National Circular Economy Strategy, which prioritises the natural resources and energy sectors. The amended Law 1715 states that the energy content of solid waste that is not susceptible to reuse and recycling will be considered Non-Conventional Sources of Renewable Energy (FNCE). Moreover, the energy content of the biodegradable fraction and fuel fraction of biomass residues will be regarded as FNCE. The MME is empowered to regulate technical standards defining quality parameters to be met by the solid fuels recovered from different residues. Additionally, the MESD, with the Ministry of Agriculture and Rural Development and the Ministry of Housing, City and Territory, will develop joint strategies to ensure that the solid fuels are used for energy recovery.

AREAS FOR IMPROVEMENT

The Government recognises that the clean energy transition must be progressive. Therefore, a plan must be structured to achieve this transition while acknowledging the country's dependence on fossil fuels. To match its ambitious climate targets, the Government must gradually reduce the financial support granted to the production and consumption of fossil fuels. New investment in hydrocarbon infrastructure should be reconsidered to avoid the future risk of 'stranded' assets and reduced competitiveness of other sectors. At the same time, the Government is commended for the upcoming just transition strategy, which will allow regions that are socio-economically dependent on fossil fuels to explore alternative means of employment and livelihood.

Foresight of policy and regulatory change

QUICK FACTS

- | On 30 December 2020, Colombia submitted its updated NDC to the UNFCCC Secretariat.
- | Colombia adopted the National Development Plan 2018-2022, 'Pact for Colombia, pact for equity' through Law 1955 of 2019.

STRENGTHS

Colombia's updated NDC communicates ambitious targets to reduce emissions across sectors. While the first NDC proposed a 20% unconditional emissions reduction below business-as-usual by 2030 (30% conditional upon international financial support), the updated NDC sets a higher target of a 51% reduction by 2030. A robust legal and regulatory framework defines the pathway to meeting these targets economy-wide. Law 2169 backs the Government's vision of carbon neutrality by 2050. It requires the creation, by 2023, of carbon budgets until 2030 and reducing black carbon emissions by 40% compared to 2014, representing a maximum of 9,195 tonnes of black carbon emissions in 2030, excluding forest fires. It also defines the minimum actions to achieve these targets. According to the Law, by 2025, Colombia will introduce sector planning instruments for hydrocarbons, coal mining, electricity, and climate change. Each planning instrument will set the conditions for the relevant sector under new operational and environmental demand scenarios. The Government also intends to implement, by 2025, an ecosystem adaptation project for the electricity sector to support energy companies in complying with their strategic objectives.

The Government has set long-term targets to attract private investment in electric and zero-emission vehicles. Law 1964 of 2019 requires cities with the Mass Transportation Systems to guarantee that any increase in the public transport capacity or replacement of destroyed vehicles is through electric or zero-emission vehicles. Starting in 2025, at least 10% of the vehicles purchased must meet these criteria. The figure should rise to 20% in 2027, 40% in 2029, 60% in 2031, 80% in 2033, and 100% by 2035. The Comptroller General of the Republic is in charge of monitoring and controlling compliance with these targets. The Law also requires municipalities, excluding Buenaventura and Tumaco, to have at least five operational fast-charging stations three years from its entry into force. Bogotá DC must have at least 20 operational fast-charging stations. Municipalities should carry out the infrastructure construction on a public-private partnership basis. A low supply of electric vehicles cannot exempt municipalities from complying with the requirement.

Action plans and legal frameworks have been set to implement the energy sector objectives and targets. Mining is the country's first sector to have a Comprehensive Climate Change Management Plan, which seeks to reduce 11.2 MtCO_{2e} by 2030 (17% of the national goal of 66.5 MtCO_{2e} by 2030). The Mining and Energy Planning Unit (UPME) has prepared the third version of the Indicative Action Plan of the Program for the Rational Use of Energy (PAI-PROURE) for 2022-2030. It identifies energy efficiency as essential to achieving reliable energy supply, competitive prices, and climate change mitigation. The amended Law 1715 supports the Government in implementing programmes to reduce diesel generation.

The promotion of hybrid energy solutions in Law 1715 no longer includes a reference to diesel and instead gives priority to FNCE. To encourage low-carbon development, the Government plans to deploy at least 1.5 to 4 GW of FNCER in regions with high renewable potential and locations where renewable electricity can be consumed with minimum transportation costs. It will also develop a fleet of 1,500 to 2,000 light-duty fuel cell vehicles for passenger and cargo transportation, hydrogen filling stations in areas with large populations, and promote hydrogen vehicles for taxis or delivery vans. By 2030, the Government expects to increase the consumption of low-carbon hydrogen in the industrial sector by 40%.

State agencies and ministries periodically conduct performance evaluation assessments and make information on their activities publicly available. For instance, the UPME published its 2021 Action Plan detailing its activities, sub-activities, the deliverables under each sub-activity, and the related monitoring indicators. Law 1955 of 2019 states that budget programming must be results-oriented, promote the efficient and transparent use of public resources, and establish a direct relationship between income, spending, and the goods and services provided to citizens. Resolution 1447 of 2018 of the MME establishes the national measurement, reporting and verification (MRV) methodology and inventory for GHG mitigation actions. The Government is currently implementing the 'Strategic Vision MRV 2030 of Colombia' project under a capacity-building initiative for transparency. The project, which runs until 2025, aims to optimise Colombia's transparency mechanisms under the UNFCCC and the Paris Agreement, improve the National GHG Inventory System, and improve GHG emission calculation methodologies for the energy, and the agriculture, forestry, and other land-use sectors.

AREAS FOR IMPROVEMENT

Colombia must adopt a legal and regulatory framework for leasing, permitting, granting grid connections, and incentivising offshore wind projects. A legislative regime will inform potential investors on how the Government plans to implement the targets and objectives of the recently adopted Offshore Wind Energy Roadmap and the modalities, risks and opportunities of investing in this sector. At the same time, the MME should identify appropriate support schemes so that developers, lenders and investors have certainty about expected revenues, can manage operational and revenue risks, and limit electricity production costs. Support schemes should be devised bearing in mind the market's potential, price discovery needs, progressive revisions to schemes as the market matures, nature and size of market participants, and development needs of the local industry and communities.

Management of decision-making processes

QUICK FACTS

Decree 230 of 2021 created the National System of Accountability (SNRdC) to coordinate State and private activities on accountability.

Decree 298 of 2016 established the National Climate Change System (SISCLIMA) as a set of State, private and non-profit entities, policies, standards, processes, resources, plans, strategies, instruments, mechanisms, and information related to climate change.

STRENGTHS

The SNRdC synchronises interactions between public entities on activities carried out within its framework and facilitates monitoring and evaluation by citizens of different public agencies. It harmonises institutional and inter-institutional commitments on social, political, disciplinary and fiscal control matters. The National Committee, comprising representatives from ministries, the Congress, and the Colombian Association of Universities, is the highest level of the SNRdC. Under this are the Territorial Committees, composed of regional and departmental entities. Measures are already underway to operationalise the SNRdC. On 11 June 2021, the National Committee approved its Operating Manual that guides coordination and interaction mechanisms between the various agencies involved in the SNRdC. Following this, between 23 and 25 June 2021, it also approved the Strategic Plan 2021-2023 of the SNRdC. The document defines the objectives and priorities of the SNRdC for the next two years. The Strategic Plan will be updated bi-annually based on the monitoring process results established in the Operating Manual. The National Committee also made its Management Report for 2021 available to citizens, civil society and public entities.

As required under Law 1712 of 2014 and Resolution 1519 of 2020, ministries and State agencies report on their financial and operational performance. The MME has published the regulatory agenda for the hydrocarbon, electricity, mining, and environmental and social affairs directorates for 2021 and 2022, along with the matrix of comments received from public consultations. It has also published the regulatory projects for 2021 and 2022 for citizen consultations. The MME and the MESD have released reports on their internal and external audits, annual expenditure framework, and annual budget programming and implementation. In line with Presidential Circular 1 of 2018 and Law 2013 of 2019, MME officials have disclosed information on their income and assets, tax returns, and conflicts of interest.

In 2021, the Constitutional Court of Colombia reinforced the right of stakeholders to participatory decision-making. Its Judgment T-413 of 19 January 2022 nullifies Resolution 001 of 2020 of the Directorate of the National Prior Consultation Authority under the Ministry of the Interior. The Constitutional Court ruled that during the Environmental Management Plan (PMA) modification process, the Resolution disregarded the fundamental right to prior consultation of certain affected ethnic groups. It also nullified previous measures the National Environmental Licensing Authority (ANLA) issued under Resolution 694 of 2021 on holding informative meetings and environmental public hearings, considering that the right to participation was ignored.

The Central Bank of the Republic of Colombia has made comprehensive data available on FDI inflows for 2021 and 2022. Following the COVID-19 pandemic, the economy recovered slightly in the first quarter of 2022. Colombia received USD 5,186 million in FDI, equivalent to 6.2% of the quarterly GDP in the first quarter of 2022. FDI flows in the mining and oil sector accounted for 23% (USD 1,207 million) of the total FDI in the first quarter of 2022, while the electricity, gas and water sector accounted for 6% (USD 327 million). Compared to the first quarter of 2021, FDI flows increased by 120% (USD 2,833 million) due to higher investments in the financial and business services, mining and oil, and manufacturing sectors. The FDI inflow was primarily from seven countries, namely the United States of America (USD 1,013 million), Panama (USD 891 million), Spain (USD 753 million), Chile (USD 469 million), Switzerland (USD 302 million), Anguilla (USD 299 million), and Mexico (USD 288 million).

Law 2195 of 2022 aims to prevent corruption by establishing a detection and alert system to identify any unjustified increase in assets of public servants. The system will fall under the Office of the Attorney General of the Nation, which will adopt measures to control and monitor information on the management of public servants, and analyse taxation information of public servants, their spouses, permanent companions, and children. Additionally, on 27 December 2021, the Directorate of National Taxes and Customs of Colombia issued Resolution 000164 to define the terms and conditions applicable to the Single Registry of Final Beneficiaries and the System for the Identification of Structures without Legal Status. Following this, the Congress of Colombia enacted Law 2195 of 2022, which obliges State entities, natural and legal persons, and structures without legal status to implement mechanisms to prevent money laundering, the financing of terrorism, and the proliferation of weapons. Such entities must conduct due diligence to identify the final beneficiaries and update this information in the Single Registry of Final Beneficiaries.

AREAS FOR IMPROVEMENT

The Government has substantially reduced the time and cost for companies to procure licences and permits. It may consider establishing a one-stop shop that can grant approvals exclusively for energy projects. Currently, a general participation mechanism allows citizens to submit queries and applications to the National Planning Department on investment policies by presenting a personal request. A unified and automated system will further facilitate the ease of operating businesses in the country.

Rule of law

QUICK FACTS

- | Colombia signed the International Energy Charter political declaration on 20 May 2015.
- | Through Law 2080 of 2021, the National Congress approved amendments to the Code of Administrative Procedure and Contentious-Administrative Matters (CPACA amendment).
- | Colombia has been a member of the WTO since 30 April 1995.
- | Colombia is a member of MIGA.

STRENGTHS

Colombia has established a robust institutional framework for the prevention of investor-State disputes. The Ministry of Commerce, Industry and Tourism (MCIT) is the lead State agency dealing with potential investor-State disputes. Different offices within the MCIT have functions in this respect. The Office of International Legal Affairs is responsible, among others, for monitoring the dispute settlement schemes agreed between foreign investors and public entities. The Foreign Investment and Services Directorate eliminates obstacles identified by foreign investors and designs policies to promote foreign investment. It also represents Colombia's position in investment, intellectual property, and services negotiations, and identifies adjustments to the legal framework for improving the investment climate.

According to Decree 4085 of 2011, the National Agency for Legal Defense of the State (NLDA) sets the strategies, plans and actions to comply with the legal defence policies of the State as defined by the Government. The NLDA coordinates the functions related to the defence of the Colombian State in international investment disputes, with the support of the MCIT, and develops the rules for handling such disputes. Following the guidelines of its Board of Directors, it engages with the public body involved in the conflict to facilitate the resolution of international investment disputes, acting as the State's sole spokesperson before the affected investor. It also supports the MCIT in negotiating and updating international investment regulations.

Foreign investors are granted several options to de-escalate disputes with the State and concurrently have access to alternative dispute resolution mechanisms. Most BITs signed by Colombia include a cooling-off period for investors to submit their claims to the Foreign Investment and Services Directorate of the MCIT before initiating an arbitration proceeding. Generally, a foreign investor is not required to exhaust a local remedy before initiating an international dispute resolution procedure. At the same time, Law 640 of 2001 regulates pre-procedural mediation. The General Procedure Code and Law 1437 of 2011 regulate certain mediation hearings foreseen in civil and administrative proceedings. Moreover, Law 1563 of 2012 provides 'amiabile compositeur' as a voluntary alternative dispute resolution method.

Colombia has a comprehensive legal framework for protecting foreign investors' assets and property. Expropriation of private property may be carried out only for public utility or social interest defined in law,

subject to a judicial decision and prior compensation. The compensation is determined by considering the interests of the community and the individual concerned. Law 142 and Law 143 of 1994 define matters of public and social interest where expropriation of private property is permissible, including for electricity generation, interconnection, transmission, distribution and commercialisation.

BITs signed by Colombia, such as with Japan, Switzerland, China and the United Arab Emirates, grant protection against direct and indirect measures that have the same nature or effect against investments as expropriation or nationalisation of private property. Generally, the BITs stipulate that compensation should be equivalent to the fair market value of the investments when the expropriation was announced to the public or when it occurred, whichever is earlier. The compensation must include interest calculated at a commercial rate on a market basis, accrued from the date of expropriation to the payment date. It should be paid without delay and be effectively realisable, freely convertible and freely transferable.

BITs signed by Colombia define 'investment' to include different forms of intellectual property rights, including copyrights and industrial property rights such as patents, manufacturers' brands and trademarks, trade names, industrial designs, and intangible assets such as know-how and goodwill. Most-Favoured-Nation and National Treatment obligations extend to real and intellectual property rights. There are no requirements for mandatory technology transfer in domestic laws or IIAs. However, hydrocarbon exploration and production contracts require contractors to endorse scientific and technology-related activities. This obligation can be satisfied with the payment of a fee calculated using a formula that considers the area of the field of exploration or production.

AREAS FOR IMPROVEMENT

The Constitution of Colombia has provisions that protect investors' property and assets from expropriation. However, to adequately balance and protect the interests of businesses and local landowners, the Government should implement robust transparency and accountability measures. This could include establishing a monitoring system that can record the results of land restitution proceedings between business owners and landowners, follow up on the implementation of the decisions, and publish all the documents and data in this respect on a dedicated online portal.

Regulatory environment and investment conditions

QUICK FACTS

- | The National Hydrocarbons Agency (ANH) is a special administrative unit for administering hydrocarbons.
- | The Energy and Gas Regulation Commission (CREG) regulates electric energy, natural gas, LPG and liquid fuels.

STRENGTHS

In 2021 and 2022, the Government strengthened the CREG's independence and enforced regulations to protect market competition. Law 143 of 1994 was amended by Law 2099 of 2021 to include provisions limiting the term of experts appointed to the CREG to only one re-election. Experts may not be elected to management positions in public or private entities in the energy sector during the year following their tenure in the CREG. Moreover, on 18 January 2022, the National Congress of Colombia enacted Law 2195 of 2022 to change the criteria for calculating the fines imposed by the Superintendence of Industry and Commerce (SIC) on companies that commit antitrust violations.

According to the Generation-Transmission 2016-2030 Reference Expansion Plan, the Government aims to integrate an additional 5,362 MW of electrical power into the system, 2,025 MW of which will be produced by renewable energies. To meet this target, the MME has entered into a long-term power purchase agreement through auction, resulting in 2 GW of renewable energy under construction. The 12 MW Solar Project Helios I developed by Northland Power, and Grenergy Renovables' 12 MW Tucanes solar project are expected to commence in 2022. It is foreseen that the Grenergy project will be scaled up to 72 MW and, with an estimated production of 140 GWh/year, will help provide 40,000 homes with electricity.

The Government has introduced incentives to promote private investment in renewable energy. Law 1715, as amended, incentivises electricity generation from FNCE and efficient energy management (including smart metering) by granting a tax deduction of up to 50% of the total investment for 15 years, VAT exemptions, and accelerated depreciation to a maximum of 20%. Projects under PROURE are exempt from customs duties on machinery, equipment, materials and supplies imports dedicated to reinvestment and works for such projects. Decree 829 of 2020 supports project developers to access tax benefits granted by Law 1715 within 45 days instead of 3 months by delegating the UPME as the exclusive entity to evaluate and certify FNCE projects.

Law 1955 requires marketing agents of the wholesale energy market to purchase between 8% and 10% from FNCER generation projects (directly or through other marketing agents) under long-term contracts. The MME, or the entity delegated by it, will ensure compliance with this obligation. The Government has also created the FENOGE (Fondo de Energías Renovables y Gestión Eficiente de la Energía), a fund providing different financing mechanisms to encourage investment in FNCER plans, programmes and projects.

In April 2022, Colombia created Latin America's first green taxonomy, which will help investors understand the contribution of economic activities to the country's

environmental targets. The Government plans to focus the classification's scope on the energy, construction, waste management, emissions capture, water supply and treatment, transport, information and communication technologies, and manufacturing sectors. Moreover, Law 2118 of 2021 modified Law 488 of 1998 to state that the resources of the Gasoline Surcharge Subsidy Fund will be used to finance multimodal transport infrastructure projects and smart mobility systems in road, sea, and river modes, as well as school transport service in remote areas.

The Government is trying to attract between USD 2.5 billion and USD 5.5 billion in investment from 2020 to 2030 for hydrogen projects, with the lower range corresponding to the 1 GW goal for 2030 and the higher range to the 3 GW goal. Most of this financing is expected to come from the private sector, although the Government will give assistance where needed. The amended Law 1715 grants tax benefits and incentives for green and blue hydrogen projects and offers investors certainty on the support the Colombian Government will provide for developing low-carbon hydrogen. The investment is expected to create between 7,000 and 15,000 direct and indirect jobs throughout the hydrogen value chain. In June 2022, the MME introduced tax incentives for zero- and low-hydrogen projects, including tax deductions of up to 50% of the investment cost for up to 15 years, accelerated depreciation, and VAT exemptions on equipment and services.

In early 2022, the Government operationalised two pilots for the production and use of hydrogen in Colombia. The first is Ecopetrol's Cartagena Refinery project, through which grey hydrogen will be replaced with green hydrogen in the refining processes. The second project, under the company Promigas, is the first of its kind in South America to mix green hydrogen with natural gas in a distribution network. Moreover, the MME is now developing regulations defining the mechanisms and conditions to encourage innovation and research in green hydrogen production, storage, transportation, distribution, use for public electricity service, energy storage, and the decarbonisation of the transport and industrial sectors.

AREAS FOR IMPROVEMENT

Since Colombia's hydrogen industry is at a nascent stage, to support the Hydrogen Roadmap until 2050 and attract private investments, the Government should create a dedicated green hydrogen law instead of using the existing legislative regime for natural gas, FNCE and FNCER. Such a legal and regulatory framework for hydrogen development should address key implementation challenges such as the high cost of production, investment in transport infrastructure to match production, and the need for safety standards and regulations.

INDICATOR 1

Improvements proposed in 2022

Progressively reduce the financial support granted to the production and consumption of fossil fuels and reconsider new investment in hydrocarbon infrastructure.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2020

Identify alternative economic activities and mobilise the financial resources to transition from coal to cleaner resources; equip the communities reliant on the coal industry with skills necessary for migrating to alternative activities.

Work ongoing. The Ministry of Labor is expected to develop a national strategy in this respect by 2023.

Conduct a regular impact assessment and cost-benefit analysis of its energy and investment policies; periodically evaluate the implementation of the policy measures.

Work ongoing. The UPME published its 2021 Action Plan with details on each activity, sub-activity, the deliverables under each sub-activity and the related monitoring indicators. The UPME has developed the third version of the Indicative Action Plan of the Program for the Rational Use of Energy for 2022-2030. This document contains a cost-benefit analysis to identify the measures that would be susceptible to tax incentives.

Improvements proposed in 2022

Adopt a legal and regulatory framework for leasing, permitting, granting grid connections and incentivising offshore wind projects.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 3

Improvements proposed in 2020

Set up a one-stop shop for all business-related services linked to the energy sector.

Pending

INDICATOR 4

Improvements proposed in 2020

Define the procedure to determine whether a compulsory acquisition of private property by the State has been undertaken for 'public utility or social interest'; specify the timeframe, legal effects, and bodies responsible for making this decision, as well as outline measures to ensure the procedure is well coordinated at the national and sub-national level.

Work ongoing. Expropriation of private property may be carried out only for public utility or social interest as defined in law, subject to a judicial decision and prior compensation. The compensation is determined by considering the interests of the community and the individual concerned. Law 142 and Law 143 of 1994 define matters of public and social interest where expropriation of private property is permissible, including for electricity generation, interconnection, transmission, distribution and commercialisation.

Improvements proposed in 2021

Implement robust transparency and accountability measures, such as a monitoring system in the land restitution process, to balance and protect the interests of businesses and local landowners.

Pending

INDICATOR 5

Improvements proposed in 2020

Subject the CREG's budget for approval only to the Congress of Colombia and not the MME.

Pending

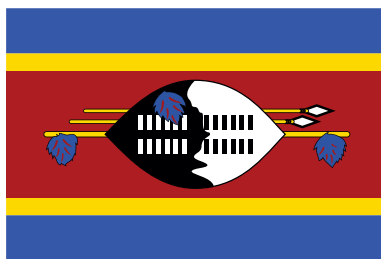
Restructure the CREG's composition to limit the role of ministers and public office holders; fix the re-appointment of the CREG's experts to only one additional term.

Fully implemented. Law 143 of 1994 was amended by Law 2099 of 2021 to include provisions limiting the term of experts appointed to the CREG to only one re-election. Experts may not be appointed to management positions in public or private entities in the energy sector during the year following their tenure in the CREG.

Improvements proposed in 2022

Adopt a dedicated green hydrogen law to address key challenges in implementing the Hydrogen Roadmap until 2050 such as the high cost of production, investment in transport infrastructure to match production, and the need for safety standards and regulations.

Improvement suggested in 2022. Status will be updated in 2023.



Eswatini

Population ¹	1,136,191
Area (km ²) ¹	17,360
GDP per capita (USD) ¹	4,107.19
TES/GDP (GJ/thousand 2015) ²	N/A
Net Energy Imports (TJ) ²	N/A
RE share in Final Energy Consumption (%) ²	N/A
Total CO ₂ emissions (MtCO ₂) ²	N/A

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
N/A	N/A	N/A

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.

Eswatini’s overall risk level against the assessed areas is **moderate**.

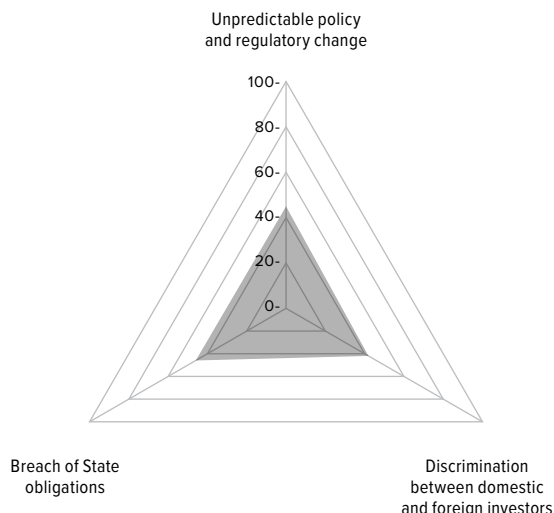
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *unpredictable policy and regulatory change* and *breach of State obligations*.

Eswatini has a good performance on two EIRA indicators and a moderate performance on three indicators. *Regulatory environment and investment conditions* is the highest-scoring indicator at 64, followed by *management of decision-making processes* at 61. Its score on *foresight of policy and regulatory change* is 56, while *rule of law* is at 49. Its score on the indicator *framework for a sustainable energy system* is 48.

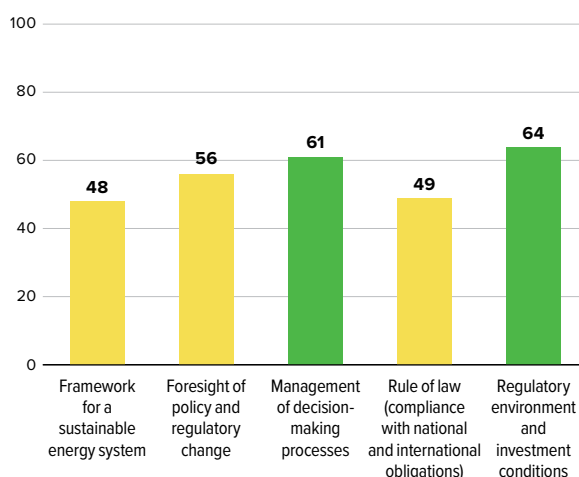
Eswatini’s overall sub-indicator performance is moderate. The highest-scoring sub-indicators are *institutional governance* at 75, *communication of vision and policies* at 67, *regulatory independence* at 67, and *restrictions on FDI* at 65. Eswatini’s score is moderate on seven sub-indicators, namely *electricity industry market structure and competition* at 60, *policy planning on clean energy transition* at 59, *respect for property rights* at 59, *energy resilience* at 53, *transparency and anti-corruption measures* at 46, *environmental protection, human rights and gender* at 44, and *robustness of policy goals and commitments* at 44. The lowest-scoring sub-indicators are *management and settlement of investor-State disputes* at 39 and *enabling measures to support clean energy transition* at 36.

Eswatini must reduce legal and regulatory risks to energy investments by implementing measures to enable the clean energy transition and manage investor-State conflicts.

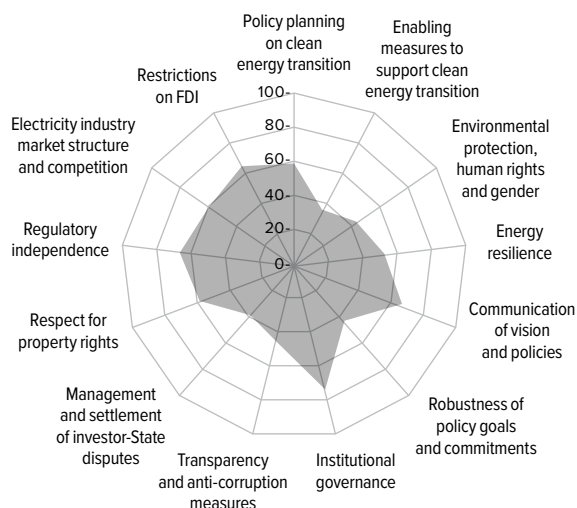
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

Eswatini submitted its updated NDC to the UNFCCC Secretariat in October 2021.

The Energy Master Plan 2034 (EMP) of Eswatini and the National Climate Change Policy 2016 (NCCP) define measures to decarbonise different economic sectors.

STRENGTHS

Eswatini's updated NDC presents a more ambitious plan to reduce GHG emissions and contribute to a low-carbon socio-economic environment compared to its NDC from 2015. Although the country's contribution to GHG emissions is one of the least in the world (0.002% of global emissions), it has pledged a reduction of 5% (1.04 million tonnes) by 2030 compared to the baseline scenario of historical GHG emissions between 2010 and 2017.

The updated NDC is compatible with the Government's long-term objective of achieving carbon neutrality in 2050. It introduces new and enhanced mitigation contributions for all sectors, including energy, transport, residential buildings, industry, agriculture, and waste. Currently, solar power contributes 46 MW to the country's installed generation capacity, while the share of hydropower is 134 MW, and that of bagasse is 130 MW. By 2030, the Government plans to increase solar power by 55.85 MW, hydropower by 80 MW, and bagasse by 95 MW. It is also conducting feasibility and assessment studies to scale up wind power capacities. The target for the industrial sector is to reduce energy intensity by 5% by 2030 relative to the baseline scenario of 2010.

The Government has developed action plans to implement the targets for scaling up renewable electricity. The National Energy Policy Implementation Strategy 2018 outlines measures in this respect, such as allowing for phased-in net metering depending upon the distribution system's technical capabilities, designing incentives to generate more power from bagasse and biomass, and designing new bankable projects implemented through periodic public auctions.

In cooperation with the United Nations Development Program, the Government has developed the Programme Framework for Affordable Renewable Energy in Swaziland 2018 (PARES). It describes measures to extend the power grid and ensure the share of renewables in the energy mix is 50% by 2030. The actions foreseen to expand off-grid power generation include deploying residential rooftop solar panels and water heaters, establishing net metering regulations and transparent power purchase agreements, and reviewing the Electricity Act of 2007 to support the liberalisation of the electricity market. Strategies to promote investments in on-grid renewable electricity include setting up a smart grid pilot project and identifying potential sites for wind power projects.

The Government is also prioritising other resources besides solar, hydro, and wind. It has adopted the National Biofuels Development Strategy and Action Plan 2009 (NBDSAP), which guides the Government and stakeholders in developing a biofuel industry that will contribute to strengthening energy security, GHG

reduction, and job creation. The NBDSAP aims to integrate biofuels into the transportation sector through several measures, such as blending up to 10% of domestically produced ethanol from molasses in petrol. The ethanol blending is expected to reduce carbon emissions in the transport sector, which is responsible for more than 70% of Eswatini's total emissions.

The NCCP requires gender considerations to be accounted for while designing adaptation and mitigation strategies. It obliges Government institutions to share information and develop methodologies to facilitate the integration of gender into all sectoral climate change policies and plans. While corporate social responsibility is not a legal requirement, State institutions implement policies and actions in this respect. According to its Annual Report 2020-2021, the National Central Bank of Eswatini is actively providing financial assistance to support national growth through its Corporate Responsibility Programme. The Eswatini Revenue Service (ERS) is also applying corporate social responsibility principles to support good public relations, education, and community-building opportunities.

AREAS FOR IMPROVEMENT

79% of Eswatini's population is rural and relies on wood, charcoal, dung and paraffin for cooking. These resources are characterised by low energy efficiency and high carbon content. Since women are primarily responsible for cooking food, these inefficient resources lead to serious health issues for them. The Government should introduce demand-side management measures to change fuel consumption patterns in rural households, including incentives to use modern cooking stoves and boilers. It should organise awareness campaigns for end-users on energy-efficient appliances that reduce energy consumption. Shifting away from wood as fuel will also help prevent deforestation and natural resource depletion.

The Government should set a date to achieve net-zero emissions and develop a roadmap with step-by-step economy-wide measures. Complementary to this, it should frame a long-term policy and action plan to reduce methane emissions, which need to be suppressed to a net-zero value in the future.

The transportation sector primarily depends on blending biofuels and fossil fuels. It is therefore recommended that the Government introduce policies and strategies to expand the use of electric power in the transport sector. An initial approach could be to introduce a new fleet of electric buses for public transportation in cooperation with the municipalities as a pilot project.

Foresight of policy and regulatory change

QUICK FACTS

The updated National Energy Policy 2018 (NEP) and the National Energy Policy Implementation Strategy 2018 reflect the vision for the energy sector until 2030.

The Department of Energy under the Ministry of Natural Resources and Energy (MNRE) monitors and evaluates the NEP's implementation in consultation with various State agencies, the private sector, and civil society.

STRENGTHS

Eswatini's ultimate energy sector target is to eradicate energy poverty by 2030 and achieve universal access to electricity by 2022 under the high-growth scenario and by 2030 under the critical scenario. To this end, in September 2021, the MNRE announced that it would implement a Rural Electrification Programme that aligns with the NEP and the UN's SDG 7. To support this Programme financially, the Government has established a fund under the Rural Electrification Access Fund Regulations 2021. Its primary objectives are facilitating rural electricity group schemes and deploying solar photovoltaic off-grid systems in rural households. It will also finance the installation of electric-ready boards for customers unable to wire their houses and solar water pumping systems for rural community water boreholes. The fund is financed through a fee charged to general domestic customers and small commercial entities by the MNRE that will be raised progressively. On 1 October 2021, the MNRE set the fee at 1.6% of the energy charge per kWh and increased it to 2.5% per kWh on 1 April 2022.

The national renewable energy target defined in the NEP is to increase the share of renewables in the country's energy mix to 50% by 2030. The EMP envisages that by 2034, 165 MW of wind and 250 MW of solar power will contribute to the total centralised generation capacity of 681 MW in the Eswatini electricity grid system. On the other hand, 59 MW of power generation from biomass and 2 MW from coal will contribute to the total decentralised generation capacity of 61 MW. The Government has developed the Swaziland Independent Power Producer Policy 2016, whose ultimate goal is to create the necessary conditions for promoting sustainable and clean energy deployment.

To improve power reliability, the Government is modernising the grid infrastructure with solid material pole structures and adding 150 MW capacity by 2022. Considering that more than 80% of electricity is imported from neighbouring countries, it is implementing supply- and demand-side management to reduce energy consumption and mitigate risks associated with the security of the supply. It is raising public awareness of energy saving through educational radio shows, billboards and roadshows, conducting energy audits, applying a time-of-use tariff for industrial customers to manage power demand during peak times, and establishing a technical group specialising in reducing commercial and residential technical losses. Moreover, the Eswatini Electricity Company (EEC) is running the Supervisory Control and Data Acquisition System (SCADA) to secure information and ensure the flow and consumption of electricity from substations of 11 kV to 400 kV.

The short- and mid-term goal for energy efficiency in the EMP is to attain 180 GWh of energy savings per year by

2025. To achieve this, the Government intends to install solar water heaters in government buildings, conduct energy audits of public institutions and corporate customers, roll out prepaid electricity metering, and distribute CFL and LED bulbs to the public. Moreover, the updated NDC commits to ensuring a 50% uptake of energy-efficient biomass stoves for cooking by 2030 and reducing energy intensity in the agriculture sector by 3% relative to 2010 levels.

The Government has made some information available on its operational and financial performance in the energy sector. In 2021, the Office of the Auditor General of Eswatini (OAG) published the Compliance Audit Report 2022, which includes an audit of the MNRE. Moreover, the OAG published the Financial Audit Report 2021, which audits the Consolidated Government Accounts of the MNRE and outlines the outstanding commitments, expenditure on vehicle charges, personnel costs, transportation, and communication. The EEC published its Annual Report 2020-2021, which gives information on key statistics, technical performance, governance, strategy, research and development, financial statements, and support services. The Eswatini Energy Regulatory Authority (ESERA) has released its Annual Compliance report for 2021, reflecting measures to ensure the quality of service by providing quotations and supplies to customers, the management of customer complaints, and restoring electricity supply after a forced interruption.

AREAS FOR IMPROVEMENT

The Government should make it a legal obligation to conduct an ex-ante and ex-post analysis of energy policies and programmes to assess whether these are economically viable. Another element that can be assessed is the financial viability of energy investments contributing to the modernisation of the existing energy system in line with the clean energy transition.

The Government should update the short-term targets set in the EMP for deploying hydropower capacities, integrating solar and wind on the grid, and increasing cogeneration from bagasse, as these are now outdated. Additionally, it must incorporate step-by-step approaches within the EMP and the NEP to ensure the long-term diversification of energy supply, reduction of coal imports, least-cost power sector development, and expansion of hydrologic storage capacities. Strategies must also be developed to improve the electricity grid in the Shiselweni region, where the transmission system needs to be upgraded above the existing 11 kV lines to increase the amount of delivered electricity and match the local demand.

Management of decision-making processes

QUICK FACTS

The Constitution of Eswatini establishes a democratic tinkhundla system of governance based on the devolution of power from the central Government. A tinkhundla is an administrative subdivision smaller than a district but larger than a chiefdom. Currently, Eswatini has 55 tinkhundla.

The Ministry of Commerce, Industry and Trade (MCIT) is in charge of formulating the national investment policy.

STRENGTHS

The Government of Eswatini is committed to furthering the decentralisation of governance and promoting participatory decision-making. To this end, it is currently implementing the tinkhundla-based governance system through the Ministry of Tinkhundla Administration and Development. The intended outcome of the process is to reduce bureaucracy and congestion in communication and give people the right to govern themselves.

At the same time, the central Government is leading the country's overarching national development and framing policies in this respect. It has developed the Strategic Road-Map 2019-2022 (SRM), which addresses challenges to the country's economic growth and fiscal stability. The SRM sets strategic goals such as facilitating the business environment and drafting investment-friendly legislation to attract investors, restore macro-economic stability, and ensure inclusive growth. Implementing the SRM's objectives and strategies requires the engagement of multiple institutions such as the MCIT, Ministry of Finance, Ministry of Justice and Constitutional Affairs (MJCA), Ministry of Public Service, and Ministry of Health and Education. Moreover, the Ministry of Economic Planning and Development has developed the National Development plan 2019/2020-2021/2022 with a focus on good governance, economic recovery, and fiscal stability. This Plan aims to end the country's fiscal crisis and stabilise finances, improve expenditure management, increase domestic revenue generation, and reduce reliance on the Southern African Customs Union. The Government of Eswatini, through the Prime Minister's Office, is also trying to synchronise inter-ministerial actions by implementing the Ministries Action Plan 2018-2022.

To improve the ease of doing business for investors, the Government has introduced the Electronic Documents and Records Management System (EDRMS), which serves as an integrated electronic document depository for State entities and agencies. Moreover, in 2021, the UN Economic Commission for Africa, in cooperation with the MCIT, released the report entitled Financing Model for Micro, Small and Medium-Sized Enterprises in the Kingdom of Eswatini. This report examines the existing policy and regulatory frameworks to improve the business environment for micro, small and medium-sized enterprises. It offers them technical assistance in developing an inclusive financing model for sustainable growth.

All branches of the Government engage with the public during the policy- and law-making process and disseminate the relevant information to ensure transparency and inclusion. In 2022, the Parliament of Eswatini organised public hearings to receive comments on several draft laws, including amendments to the Mines

and Minerals Act of 2011. The proposed changes aim to distinguish petroleum, its operations, administration and management from minerals and provide for incidental matters. In 2020, it enacted the Petroleum Act No. 18, which, promotes transparency on decisions regarding the issuance, modification and revocation of licences for upstream and downstream activities.

Public entities engaged in the energy sector have released operational and financial data to guarantee public accountability. The EEC's Annual Report for 2020-2021 reflects its financial statements, an external auditor's report and statements of comprehensive income, its financial position, changes in equity, and cash flows. In 2021, the OAG published its report on the Consolidated Government Accounts, which includes an audit of the EEC's financial statements. The Government has also established an online platform where it makes budget allocation and utilisation reports of State entities available to the public. The E-Government Portal of the Kingdom of Eswatini provides online access to the Budget Report for 2021, the budget estimates for 2019-2022, and the budget estimate report for 2020-2023.

The Anti-Corruption Commission (ACC), established in 2006, examines the practices and procedures of public and private bodies, investigates corrupt practices, and advises public and private entities on how to prevent these. The ACC has established a Report Centre Office to review complaints or indications of corruption from entities or individuals. In 2021, it registered 75 complaints, of which 31 were processed and closed for lack of evidence, while two progressed to the investigation stage.

AREAS FOR IMPROVEMENT

The Government has successfully established the Tender Portal to advertise public procurement tenders online and the Supplier Database as a common registry for Government suppliers. It should, therefore, ensure the timely implementation of all electronic measures in the public procurement process within 2022, including the e-purchasing, e-tendering, e-payment and e-auctioning processes. At the same time, it should establish an online platform that makes public procurement contracts in the energy sector available to citizens.

It is commendable that the Government has integrated transparency requirements into the Petroleum Act 2020. That said, it needs to enact an overarching law on access to information as soon as possible with a clear scope of application, a procedure to obtain information from State agencies, and a definitive list of exceptions to information access. Moreover, it must set timelines for consulting with stakeholders and receiving their feedback.

Rule of law

QUICK FACTS

- | Eswatini signed the International Energy Charter political declaration on 15 December 2015.
- | Eswatini has been a member of the WTO since 1995.
- | Eswatini has been a signatory to the Convention on the Settlement of Investment Disputes between States and Nationals of Other States since 1971.
- | Eswatini is a member of MIGA.

STRENGTHS

The MJCA has developed a Justice Sector Strategy and Action Plan 2019-2023 to ensure effective coordination and implementation of its mandate. It also plans to increase the human capacities in various domestic courts by appointing 14 more magistrates to deal with the backlog of cases.

The judiciary is making efforts to improve its case management processes. In October 2021, the Chief Justice of the Kingdom of Eswatini issued Practice Directive 1/2021, establishing the Commercial Court as a division of the High Court. The new Commercial Court will hear cases related to import and export of goods, exploitation of oil and gas reserves or other natural resources, intellectual property including trademarks and copyright, arbitration, and carriage of goods by land, sea, air or pipeline.

The national courts provide detailed information on pending cases to improve transparency and access to information. In 2021, the High Court and the Supreme Court of Eswatini published data on the status of pending cases, the hearing schedules, briefs and motions filed, and the judgments delivered.

Eswatini has signed six BITs, of which three are in force (with Kuwait, the United Kingdom, and Germany). These treaties grant protection to foreign investments. The BITs between Eswatini and the United Kingdom and Eswatini and Germany include exploiting natural resources in the energy sector within the definition of investments. Additionally, Eswatini has signed 12 regional trade agreements, of which eight are in force. Eswatini is a party to the Southern African Development Community regional agreement, which aims, among other things, to bring equity, balance and mutual benefit to countries in the region and ensure the peaceful settlement of disputes between them in different areas of cooperation, including energy.

The BITs signed by Eswatini consider intellectual property, goodwill, technical processes, and know-how as 'investment' and grant Most-Favoured-Nation (MFN) and National Treatment (NT) obligations to every kind of tangible and intangible asset that falls under this definition. Through the unqualified operation of MFN and

NT obligations, protection is granted to all investments against direct expropriation and measures having an effect equivalent to nationalisation or expropriation. The compensation granted to foreign investors under the BITs in force should be equivalent to the value of the expropriated investment immediately before the date on which the actual or impending expropriation, nationalisation or comparable measure became publicly known. The compensation must be paid without delay and carry the prevailing bank interest until payment. The Eswatini-Germany BIT requires that the parties make appropriate provisions at or before expropriation, nationalisation or comparable measure to determine the amount of such compensation. A similar clause also exists in the Eswatini-United Kingdom BIT. Moreover, both the BITs grant foreign investors affected by an expropriation action the right to make the legality of any such measure and the amount of compensation subject to review by due process of law.

AREAS FOR IMPROVEMENT

The Government should consider introducing investor-State conflict management and prevention policies, such as an early warning mechanism, and create a dedicated institution to monitor conflicts arising during projects. The establishment of such an institution should go hand-in-hand with capacity building and training of public servants on dispute prevention know-how. It may draw inspiration from the Energy Charter Model Instrument on Management of Investment Disputes, which aims to assist States in handling investment disputes while keeping in mind their own particular needs and circumstances. The Government should also consider developing an electronic case management system that allows investors to submit electronic case filings and track the status of hearings, adjournments, and detailed documentation for each case.

Eswatini may consider becoming a party to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards. Ratification of this Convention by Eswatini will give international investors security that foreign arbitral awards will be respected, complied with, and applied non-discriminately.

Regulatory environment and investment conditions

QUICK FACTS

- | ESERA was established under the Energy Regulatory Act 2007 to regulate the electricity sector.
- | The EEC is engaged in electricity generation, transmission, and distribution in Eswatini.
- | The Eswatini Investment Promotion Act 1998 provides equal treatment to domestic and foreign investors.

STRENGTHS

ESERA is taking measures to improve its governance and organisational structure. In October 2021, it elected a new Board of Directors that exercises powers and functions through the Energy Regulatory Act of 2007. No member of the Board other than the Chief Executive Officer can hold office for a period exceeding three years. In 2021, SNG Grant Thornton Chartered Accountants conducted an external audit of ESERA's financial statements. The audit's findings, incorporated into the ESERA Annual Report 2021, evaluated its financial position, income, and equity and cash flow changes for 2021.

The MNRE has started removing cross-subsidies for electricity consumers. To this end, ESERA has released its latest Decision on Price Determination for 2021-2022 to 2022-2023. At the same time, it has developed a subsidy framework to shield vulnerable customers against electricity spikes necessary to achieve cost reflectivity. The framework introduces a new inclining block tariff (IBT) under which consumers must pay based on their consumption level. This lifeline tariff supports households with (1) an income lower than 3,500 Swazi emalangeni (SZL) and (2) an average monthly consumption level of a maximum of 75 kWh or 75 units.

In 2021, the Ministry of Economic Planning and Development launched the Company Survey Report 2021, which informs all stakeholders on the key performance indicators of the economy. It includes a chapter analysing recent trends in the electricity sector. On the supply side, electricity generation from hydropower plants increased by 12.8% to 256.5 GWh in the 2020-2021 financial year from 227.3 GWh in 2019-2020. Total domestic power generation rose by 15.2% to 337.14 GWh in the 2020-2021 financial year from 292.7 GWh in 2019-2020. The total number of EEC customer connections rose by 4.7% to 246,108 at the end of the 2020-2021 financial year.

Regulatory developments were also observed in the gas sector. In 2021, ESERA developed a package of regulatory instruments for the LPG and petroleum sectors, such as permit licences for private operations in the LPG and petroleum wholesale and retail markets. The new permit formats provide a detailed description of the application process. Moreover, they indicate the fee amount and provide clear requests for relevant documents to be submitted to obtain the licence.

Eswatini made some progress in attracting much-needed FDI in various economic activities, including energy. According to the Central Bank of Eswatini's Annual Integrated Report of 2020-2021, the foreign investment flow in the country for 2021 reached SZL 5,497,453 compared to SZL 3,411,276 in 2020, amounting to an increase of 61%.

In December 2021, the EEC awarded contracts for constructing a 132 kV transmission line from Edwaleni II substation to Stonehenge, Mbabane. The bid was won by the South African and Swazi investment company Opti Power SLS Consortium. The project will provide reliable electricity supply to the southern and northern areas of the country and ensure the security of electricity supply to the western grid. The interconnecting line is extended to 55 km long and will use the existing 66 kV and 11 kV voltage bands for approximately 30 km of the total line length.

The country also attracted some investment in renewable power generation. In May 2021, ESERA issued an award for three solar projects to a foreign investment consortium composed of Globeleq, Sturdee Energy Southern Africa, and African Clean Energy Developments Ltd. Each project has a 15 MW installed capacity, and the total investment amounts to SZL 255 million. The generated electrical power is about 13.75 MW and is expected to deliver a guaranteed capacity of 10 MW at the connection point. The total annual production is projected to reach 22 GWh.

Eswatini has special tax incentives for investors in the mining sector. According to the Investment Promotion Authority, the Government offers a reduced corporate tax of 10% for ten years to local and foreign investors. In addition, a mining company awarded a concession may be exempt from withholding taxes on dividends during the same ten-year tax period. As a member of the Common Market for Eastern and Southern Africa, Eswatini has created Special Economic Zones, where it offers exemption from corporate tax for 20 years and reductions on customs duties, VAT, and taxes on raw materials.

AREAS FOR IMPROVEMENT

The Government should conduct feasibility studies as the first step to introducing feed-in tariffs and metering schemes for small photovoltaic and public auctions for large solar and wind power projects. Feed-in tariffs can help to attract new market players, drive technological developments and allows governments to promote specific technologies. On the other hand, competitive auctions for large-scale renewable energy projects can help increase cost efficiency and facilitate price discovery for different technologies.

ESERA has initiated a migration plan toward achieving cost-reflective tariffs for all customers. The Government should pursue this plan consistently and progressively to make the sector financially viable. Urgent measures should be taken to phase out expensive cross-subsidies imposed on industrial consumers while gradually increasing electricity prices for urban customers.

INDICATOR 1

Improvements proposed in 2022

Set a date to achieve net-zero emissions and develop an action plan to achieve this ambition.

Improvement suggested in 2022. Status will be updated in 2023.

Frame a long-term policy and action plan to reduce methane emissions.

Improvement suggested in 2022. Status will be updated in 2023.

Introduce demand-side management measures to change fuel consumption patterns in rural households.

Improvement suggested in 2022. Status will be updated in 2023.

Introduce policies to expand the use of electric power in the transport sector.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2018

Adopt an independent power production policy and revise the rural electrification plan to focus on off-grid solutions.

Work ongoing. In 2019, the Government launched the Network Reinforcement and Access Project to strengthen the grid infrastructure in the least developed region in the country. The Government has established the Rural Electrification Access Fund to install off-grid systems like solar home systems for households in remote locations.

Create robust monitoring and evaluation mechanisms to track the progress made on the national energy objectives.

Work ongoing. The Network Reinforcement and Access Project contains a monitoring and evaluation mechanism that is being replicated in other strategic documents.

Improvements proposed in 2022

Establish legally binding obligations to conduct ex-ante and ex-post cost-benefit analysis of energy policies and programmes.

Improvement suggested in 2022. Status will be updated in 2023.

Update the short-term targets set in the EMP for deploying hydropower capacities, integrating solar and wind on the grid, and increasing co-generation from bagasse.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 3

Improvements proposed in 2018

Adopt a legislative framework on the freedom of information, create an online version of the Official Gazette, and solicit feedback from stakeholders on legal and regulatory decisions.

Work ongoing. The Government has fully updated its official portal with electronic copies of national legislation. Moreover, ESERA made a public request for consultancy proposals to develop its three-year (2023-2026) strategic plan.

Improvements proposed in 2022

Digitalise the public procurement process and establish an online platform that makes public procurement contracts in the energy sector available to citizens.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2018

Modernise the legal framework for intellectual property rights and investment arbitration.

Work ongoing. The Government has enacted laws to reinforce protection of intellectual property rights, such as the Copyright and Neighboring Rights Act 2014, the Intellectual Property Tribunal Act 2015, and the Trademarks (Amendment) Act 2015.

Update the national law to define the term 'public purpose' in the context of expropriation.

Pending

Improvements proposed in 2022

Introduce investor-State conflict management and prevention policies and develop an electronic case management system.

Improvement suggested in 2022. Status will be updated in 2023.

Ratify the Convention on the Recognition and Enforcement of Foreign Arbitral Awards.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 5

Improvements proposed in 2018

Reinforce the functional and financial independence of ESERA.

Work ongoing. ESERA is now responsible for the licencing of downstream petroleum activities and is funded by the National Petroleum Fund. During each financial year, it submits a business plan and budget to the MNRE for approval.

Relax restrictions on land tenure.

Pending

Improvements proposed in 2021

Reduce the role of the State in regulating the mining and petroleum sectors.

Pending

Local content requirements in the Public Procurement Act 2011 and the Petroleum Act 2020 should be accompanied by collaborative partnerships among State authorities and the industry to strengthen the competitiveness of local companies.

Pending

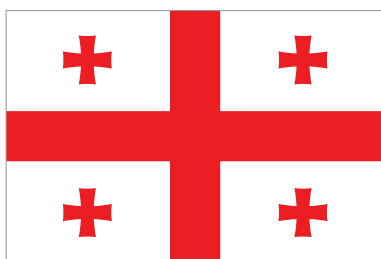
Improvements proposed in 2022

Undertake feasibility studies on feed-in tariffs and metering schemes for small photovoltaic and public auctions for larger solar and wind power projects.

Improvement suggested in 2022. Status will be updated in 2023.

Pursue the cost-reflective migration plan and take measures to phase out cross-subsidies while gradually increasing electricity prices for urban customers.

Improvement suggested in 2022. Status will be updated in 2023.



Georgia

Population ¹	3,726,549
Area (km ²) ¹	69,700
GDP per capita (USD) ¹	4,722.04
TES/GDP (GJ/thousand 2015) ²	12.01
Net Energy Imports (TJ) ²	172.50
RE share in Final Energy Consumption (%) ²	25.2
Total CO ₂ emissions (MtCO ₂) ²	8.77

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	2 acquisition deals	Czech Republic: 1 deal of 7.52 mEUR Value of 1 deal (Japan) is N/A

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.

Georgia’s overall risk level against the assessed areas is **low**.

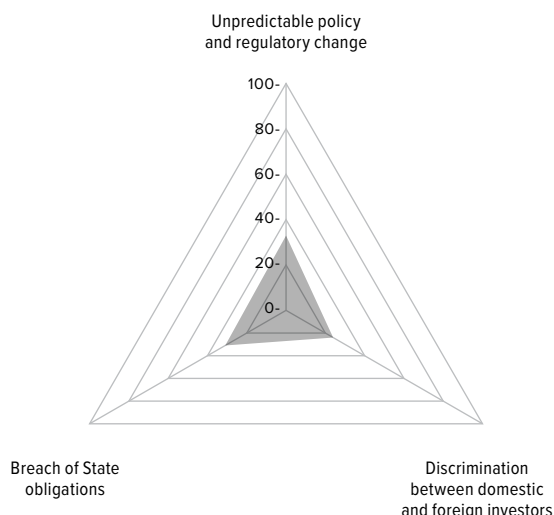
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *breach of State obligations* and *unpredictable policy and regulatory change*.

Georgia has a good performance on three EIRA indicators and a moderate performance on two indicators. *Regulatory environment and investment conditions* is the highest-scoring indicator at 78, followed by *rule of law* at 76 and *management of decision-making processes* at 72. On the indicators *foresight of policy and regulatory change* and *framework for a sustainable energy system*, it has scored 54.

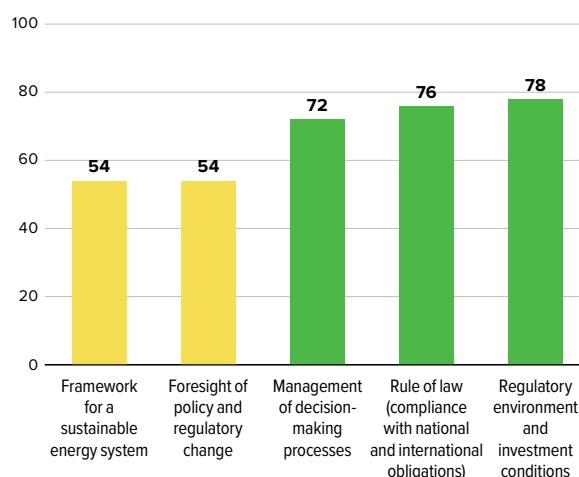
Georgia’s overall sub-indicator performance is good. The highest-scoring sub-indicators are *regulatory independence* at 89 and *restrictions on FDI* at 85. Georgia’s score is good on six sub-indicators, namely *management and settlement of investor-State disputes* at 79, *institutional governance* at 75, *respect for property rights* and *policy planning on clean energy transition* at 74, *transparency and anti-corruption measures* at 69, and *electricity industry market structure and competition* at 61. It has a moderate score on the sub-indicators *environmental protection, human rights and gender* at 58, *robustness of policy goals and commitments* at 58, *communication of vision and policies* at 50, and *energy resilience* at 43. The lowest-scoring sub-indicator is *enabling measures to support clean energy transition* at 40.

While Georgia is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to create an enabling environment for achieving a clean energy transition.

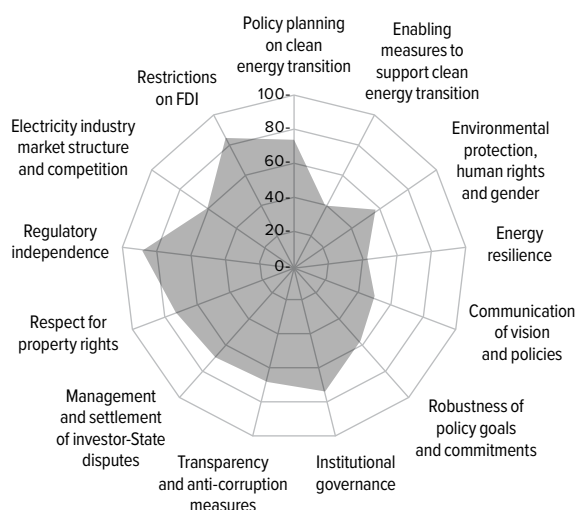
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

- | Georgia submitted its updated NDC to the UNFCCC Secretariat in May 2021.
- | The Government adopted the National Climate Change Strategy and 2021-2023 Action Plan (CSAP) in April 2021.

STRENGTHS

Georgia's updated NDC reflects its commitment to GHG reduction and decarbonisation. The unconditional target in the updated NDC exceeds those set in the previous one by 7% (reduction of 35% of total GHG emissions by 2030 compared to 1990), and the conditional target exceeds by 10-17% (reduction of 50-57% of total GHG emissions by 2030 compared to 1990).

The recently adopted CSAP sets the pathway to achieving Georgia's NDC commitments. To decarbonise transport, the country's largest energy-consuming sector, the CSAP encourages the use of low- and zero-emission vehicles. It aims to ensure that by 2030, 5% of the total vehicles registered in Georgia are electric, and 20% are hybrid. The Government has introduced incentives to meet the transport sector targets and reduce reliance on imported oil products. Imported electric cars are exempt from excise and import taxes, while the excise tax for hybrid vehicles up to the age of six years has been cut by 60%. A considerable portion of public transport has been converted to gas to reduce operating costs and promote sustainability.

The Government is trying to integrate clean and efficient technologies across other sectors besides transport. In 2022, the Ministry of Economy and Sustainable Development (MoESD) issued Order no. 1/225, which includes rules to analyse the cost-effectiveness of heating and cooling systems and the volume of supplied thermal energy. Through the Order, the MoESD can collect data from central heating and cooling networks as well as heat generation and industrial companies to evaluate the cost-effectiveness of individual installations. The CSAP aims to develop a national plan to increase the number of nearly zero-energy buildings by 30 June 2023. Among other things, it anticipates that by 30 September 2024, technical regulations will be adopted for energy labelling of a wide range of home appliances, including dishwashers, refrigerators and freezers, washing machines, televisions, air conditioners, and cold storage rooms.

In November 2021, the MoESD signed a declaration of intent with the German development bank KfW to implement the country's first green hydrogen project. The declaration entails an assessment of green hydrogen's potential and benefits for Georgia, reduction in imported gas, and increased deployment of renewable technologies. Moreover, in December 2021, the EU, KfW, and the MoESD launched the EUR 8.44 million Georgian Energy Sector Reform Program (GESRP) to support energy sector reforms, strengthen the country's energy security, and boost energy efficiency in public, industrial, and residential buildings. The GESRP will assist the Government in developing secondary legislation on energy efficiency in line with EU standards. It will also

help to implement the energy audit mechanism, establish a system to certify and verify energy auditors, create an energy-efficient procurement system and an inventory of public buildings, and develop a long-term renovation strategy. The Government is also contemplating measures to secure a reliable supply of critical raw materials. To this end, in June 2022, the MoESD participated in the GLOBSEC 2022 Bratislava Forum, which addressed challenges and opportunities for the continuous supply of critical raw materials needed to achieve a green and digital transition.

Sustainable land use and protecting forest cover are key priorities that the Government aims to address while safeguarding the country's energy security. The Law of Georgia on Determination of the Designated Purpose of Land and Sustainable Management of Agricultural Land of 2019 provides for the protection of land. It sets legal grounds to draw up a balance sheet for land registration, intended use, and State monitoring of agricultural land resources. Similarly, the Law of the Forest Code of Georgia of 2020 regulates forest management, biodiversity conservation, and the rational use of forest resources. In October 2021, the MoESD launched the Green Climate Fund's Enabling the Implementation of Georgia's Forest Sector Reform project (ECO.Georgia). The project, financed through a EUR 33 million grant, aims to increase forest carbon reserves and develop a market for energy-efficient fuels between 2021 and 2027.

In 2021, the Parliament adopted the Law on Environmental Liability to regulate environmental damage issues based on the 'polluter pays' principle. It outlines measures to prevent and mitigate environmental damages, identifies remedial measures, and sets fines for environmental damage. Per the Environmental Assessment Code of 2017, projects having a significant impact on the environment are subject to a mandatory Environment Impact Assessment (EIA), including the construction and operation of (1) thermal power stations and other combustions installations with a heat output of 300 MW or more, and (2) a hydropower plant with a capacity of 5 MW or more. A screening procedure is in place to determine if an EIA is required for hydropower and solar power plants of 2 MW to 5 MW. A Strategic Environmental Assessment is mandatory for Government projects concerning specific sectors, including energy, industry, waste/water management, and spatial planning.

AREAS FOR IMPROVEMENT

The Government should submit its LT-LEDS to the UNFCCC Secretariat and utilise it to set a long-term energy policy aligned with Georgia's NDC commitments and its economic, social, and environmental strategies.

Foresight of policy and regulatory change

QUICK FACTS

- I The Main Directions of the State Policy in Energy Sector of Georgia (2015) sets the national energy sector objectives.
- I The Government Program 2021-2024: Toward Building a European State was adopted in December 2020.

STRENGTHS

Georgia has communicated to investors the energy sector's short- and medium-term priorities. The Law of Georgia on Promoting the Generation and Consumption of Energy from Renewable Sources (RE Law) of 2019 targets 35% renewable resources in the energy mix by 2030. According to the CSAP, the share of renewables in Georgia's electricity generation should increase from 78% in 2018 to 87% by 2030. This should be accompanied by a 15% reduction of GHG emissions in the energy generation and transmission sector below the reference scenario projection by 2030. The proportion of the population using clean energy sources and technologies is expected to rise from 93% in 2022 to 98% by 2030. The CSAP also sets targets to ensure that new combined-cycle thermal plants are equipped with energy-efficient technologies and aims to complete the construction of the Gardabani 3 combined-cycle gas thermal power plant by 2023.

In 2022, the MoESD adopted the Ten-Year Network Development Plan of Georgia for 2022-2032, under which the power system's total installed capacity will increase from 4564 MW to 10086 MW by 2032. Of this, 4326 MW will be contributed by regulated hydropower plants and 3139 MW by seasonal ones. About 760 MW will come from wind power plants, 171 MW from solar, 110 MW from gas turbines, and 1579 MW from high-efficiency combined-cycle and coal thermal power plants. Moreover, the CSAP requires that by 2024, electrical substations of approximately 1659 MW be constructed and/or renovated. Approximately 490 km of transmission lines will be constructed and/or renovated.

The Government is trying to attract donor funding and investment to meet the abovementioned targets. In 2021, the Energy Development Fund of Georgia signed an agreement with the Abu Dhabi-based Masdar to jointly develop a solar photovoltaic project in Georgia with a capacity of up to 100 MW. In February 2022, the MoESD discussed the development of a wind farm with an installed capacity is 50 MW in Gori Municipality with the Turkish company, Çalık Energy. In March 2022, the MoESD, the State Military Scientific-Technical Center Delta, and the Georgian Wind Energy Association signed a Memorandum of Understanding (MoU) to introduce industrial wind power generation in Georgia.

The Government is prioritising the natural gas sector while developing renewable electricity. On 23 July 2021, the recently inaugurated gasification project in Manglisi, developed under the 2019-2021 Gasification Action Plan of the Government of Georgia, was inspected by the MoESD. Within the project's framework, the Georgian Gas Transportation Company LLC has connected 744 settlements (192,306 subscribers) to the gas supply network between 2012 and now. The total length of the gas pipeline built during this period is 10,333,749 metres.

In the transport sector, the RE Law of 2019 targets the share of renewable sources (including biofuels) used for all types of transport to be at least 10% of the total energy (from all sources) by 2030. This target is supported by the CSAP, which envisages the development of the Sustainable Urban Mobility Plan of Tbilisi by 2024. It also requires the Tbilisi bus reform to introduce an upgraded public transport fleet, introduce a new route network, and launch a smart transport system.

The National Sustainable Energy Action Plan 2018-2030 (NSEAP) foresees savings of 9,253 GWh in the final energy consumption by 2030, compared to 2.568 GWh in 2021. The Law of Georgia on Energy Efficiency and the Law of Georgia on Energy Efficiency of Buildings were adopted on 21 May 2021 to support the NSEAP's implementation. Following the adoption of these laws, the Georgian National Energy and Water Supply Regulatory Commission (GNERC) announced that all new multi-apartment buildings operational from 1 October 2021 must be equipped with smart meters to comply with the Rules of the Electricity Distribution Network. In the next phase, electricity service companies will have to install smart meters in buildings operational before 1 October 2021.

The implementation of national policies is guided by the Policy Planning Monitoring and Evaluation Handbook of 2019. In line with its requirements, the Government published the implementation status report of the Government Programme from June 2021 to May 2022. The MoESD released information on its budget for each quarter of 2021 and 2022. It also published its quarterly State Procurement Plan for 2021 and 2022 and reported on the procurements carried out during these years. In 2021, Georgia prepared the Statement on Security of Electricity Supply Report, offering insights on the legal framework for security of electricity supply, the energy balance, and measures to expand the power infrastructure.

AREAS FOR IMPROVEMENT

The Government should update the National Energy Efficiency Action Plan of Georgia 2019-2020 and set new targets with an outlook beyond 2030. The new targets should be aligned with the country's upcoming NECP and existing policies for the energy sector.

Since Georgia is contemplating the production and use of hydrogen as an energy resource, it should begin researching and mapping the country's potential in this area. Based on the findings, it should develop a long-term green hydrogen roadmap to attract private investments in this industry. Such a roadmap would allow potential market entrants to understand key implementation issues such as production cost, transport infrastructure investment, and the need for safety standards and regulations.

Management of decision-making processes

QUICK FACTS

- | The MoESD sets the national strategy for the energy sector.
- | The General Administrative Code 1999 provides for access to information held by public authorities.

STRENGTHS

In 2021 and 2022, the Government released strategies to promote inclusive policy-making on critical issues. On 6 July 2021, the MoESD launched the long-term economic development vision of Georgia, 'Economy - 2030', which aims for inclusive growth and intensive citizen engagement in the economic processes and sustainable development efforts. Moreover, in 2022, the Government adopted Resolution no. 324 'On the Approval of the 2022-2023 Action Plan for the Implementation of the 2020-2025 Strategy of Decentralisation' to increase the role of local governments in the political decision-making process.

The Government is promoting inclusive policy planning on energy and climate change. The Climate Change Council has been established through Government Resolution no. 54 of 2020 to coordinate and facilitate the implementation of the Paris Agreement commitments. Similarly, Resolution no. 110 of 2020 has created an Intergovernmental Coordinating Council to promote and coordinate the country's open government policy.

Efforts are also being made to cooperate across different governance levels and stakeholders to transpose the EU energy acquis and progress with energy reforms, including in the electricity and natural gas markets, oil, security of supply, renewables, energy efficiency, statistics, and environment and climate. In May 2022, the MoESD discussed the electricity sector reforms with the Parliamentary Committee on Sectoral Economics and Economic Policy. The main issues presented during the meeting were structural changes to the power market for liberalisation and introducing competitive electricity prices to attract investors in power generation while protecting consumers. On 23 April 2021, the GNERC organised a meeting with the Georgian Business Association to discuss the ongoing power sector reforms, including the market model, the rules of the wholesale and retail markets, and the crucial role of market monitoring in this respect. In May 2022, the Private Sector Development Advisory Council organised its most recent meeting in cooperation with the MoESD. The main topics discussed during this meeting were enforcing the newly adopted Law of Georgia on Consumer Protection of 2022 and enhancing the quality of national infrastructure.

The Government, through the MoESD, is deepening bilateral and multilateral relations on trade, regional cooperation, investment, and energy. In 2021 and 2022, the MoESD engaged with several countries through events such as the Georgian-Czech Business Forum, the Turkish-Georgian Business Forum, the America-Georgia Business Council and the EU-Georgia Business Council.

Over the last year, the GNERC conducted public hearings with stakeholders and made the results publicly available on its website. On 28 June 2021, it held a public session

on adjustments to natural gas supply and consumption tariffs for small natural gas distribution companies, LLC Gasco +, LLC Varketilair, and JSC EnergoUnion. In October 2021, it organised a meeting with direct consumers participating in the wholesale electricity market to inform them of the status of the electricity reforms, relations between electricity suppliers and consumers in the retail market, and the revised structure of the wholesale electricity market and trading rules. It held a similar meeting on 4 March 2022 with all independent energy suppliers. In February 2022, it signed an agreement with the Communications Commission of Georgia to improve and increase the accessibility and quality of services in regulated sectors, including energy.

The GNERC has published the 2021-2023 tariff rates for electricity supply and distribution and the fees for electricity transmission and universal supply. Moreover, it has published the tariff methodology for the universal service delivery rates, electricity supply tariffs as a public service, alternative delivery rates, and electricity production tariffs. JSC Georgian State Electrosystem (GSE), the electricity transmission system operator, has released its consolidated financial statements for 2021. The statements included its operating revenues, operating profit, financing costs, profit before tax, net profit for annual periods and total assets, return on capital employed before tax, return on equity after tax, equity share, and asset turnover.

In 2019, the Parliament enacted the Law of Georgia on Facilitating the Prevention of Money Laundering and the Financing of Terrorism. Following this, in 2022, the Government adopted Resolution no. 273, establishing a permanent inter-agency commission to address these issues. The commission must submit to the Government by 15 June 2022 a national strategy and action plan for 2022-2025. The national strategy and action plan should be updated every three years. The commission must also develop the national risk assessment report and submit it to the Government by 10 November 2022.

AREAS FOR IMPROVEMENT

The Government may consider setting up a one-stop shop that assists foreign investors in undertaking businesses locally. The mandate can be vested in the existing investment promotion agency or a separate public entity.

The Government should establish a beneficial ownership register to determine the ownership structure of companies operating in Georgia. The register will help minimise the risk of money laundering and terrorist financing and improve tax administration.

Rule of law

QUICK FACTS

Georgia ratified the ECT on 22 February 1995.

Georgia is a party to the Convention on the Settlement of Investment Disputes between States and Nationals of Other States since 1992.

Provisions against unlawful expropriation are included in the Law on the Procedure for Expropriation of Property upon the Urgent Necessity of Ensuring Public Needs of 1997 and the Law on the Procedure for the Expropriation of Property for Pressing Social Needs of 1999.

STRENGTHS

The Government of Georgia is taking steps to popularise and encourage alternative dispute resolution mechanisms in commercial and investment disputes, including in the energy sector. The Law of Georgia 'On Mediation' came into effect on 1 January 2020 to facilitate access to justice, ensure the speedy disposal of disputes, and relieve the courts from resolving disputes where mutual agreement is possible. Moreover, on 20 July 2021, the first international forum, 'Mediation for Business', was held online. In cooperation with the United States Agency for International Development, the Association of Mediators of Georgia and the Office of the Business Ombudsman of Georgia organised the forum 'Supporting the Rule of Law in Georgia'.

On 14 April 2021, the GNERC signed an MoU with the Association of Mediators of Georgia to promote mediation. The parties agreed to exchange relevant information and to plan and develop joint projects, events, round tables, conferences and other activities. In August 2021, the GNERC also signed an MoU with the Energy Ombudsman Service (EOS) and the Legal Assistance Service (LSA) to guarantee the rights of consumers in the electricity, natural gas, and water supply sectors. Per the MoU, the LSA will offer its services to energy and water consumers. It will also provide meeting space in legal bureaus and consulting centres to the EOS and the GNERC so they can hold discussions with consumers. In turn, the GNERC and the EOS will keep the LSA abreast of the regulations and practices in the energy and water supply sectors to provide accurate advice to consumers.

The Constitution of Georgia protects property rights, including property possession, acquisition, disposal, and inheritance. According to the Constitution, a property may be expropriated for pressing social need as provided for by law, based on a court decision or in the case of urgent necessity established by law, provided that preliminary, full and fair compensation is paid. The Law on the Procedure for the Expropriation of Property for Pressing Social Needs of 1997 establishes the rules for expropriation in Georgia. It allows for expropriation for certain listed public needs, establishes a mechanism for valuation and compensation, and provides for judicial review of the valuation at the

request of either party. The Law on Promotion and Guarantees of Investment Activities of 1996 allows the expropriation of foreign investments only with appropriate compensation. Article 8 provides that compensation for deprived investments shall be the equivalent of 'real market value' immediately before being taken and shall be freely transferable abroad.

Georgia has signed 38 BITs, of which 32 are in force. The BIT signed between Georgia and Turkey grants protection to the energy sector through Articles 1 and 5. Most BITs establish a process for determining compensation in the event of expropriation. For instance, the BIT with Switzerland stipulates that compensation shall amount to the market value of the investment expropriated immediately before the act of expropriation took place or became public knowledge, whichever is earlier. The amount of compensation, interest at a normal commercial rate included, shall be settled in a freely convertible currency and paid without delay to the affected party without regard to their residence or domicile.

BITs signed by Georgia consider intellectual property as an 'investment'. Protection is granted to investments against expropriation and through the unqualified operation of Most-Favoured-Nation and National Treatment obligations. An example of this is the BIT signed between Georgia and Kuwait. On the domestic level, intellectual property rights are protected under constitutional principles to the same extent as any other property.

AREAS FOR IMPROVEMENT

While the legal framework protecting foreign investors against expropriation is robust, more attention could be given to protecting intellectual property against expropriation. While there is no exclusion of intellectual property listed in the relevant legislation, the definitions of 'pressing public needs' and 'urgent public necessities' relate only to immovable property. In light of this, it may be considered to extend the scope of protection to cover intangible property of foreign investors in the national laws.

Regulatory environment and investment conditions

QUICK FACTS

The GNERC regulates the electricity and gas sub-sectors. The State Agency of Oil and Gas regulates oil and gas operations following the main directions of State policy set by the MoESD.

In 2020, the Government adopted the Concept Design for the Georgian Electricity Market.

The Law on Promotion and Guarantees of Investment Activity of 1996 governs the establishment and promotion of investments and guarantees their protection.

STRENGTHS

In 2021 and 2022, the GNERC made efforts to improve the efficiency of its staff and operations. In February 2022, the Elizbar Eristavi Energy Training Center (EEETC) was established to raise awareness about the energy and water supply sectors among professionals. Following this, in June 2022, the GNERC signed an MoU with the Public Audit Institute and the EEETC for the professional development of its employees through joint training and educational projects, events, seminars and workshops. It also launched, in May 2022, the EU-funded Fifth Twinning Programme, which aims to digitalise data processing within the GNERC.

The GNERC has taken several decisions to enforce regulations and preserve the rights of electricity customers. Since January 2021, it has granted an additional grace period to pensioners and persons registered in the unified national database of socially vulnerable families to pay electricity bills. Moreover, in February 2022, the GNERC finalised the inspection of two energy supply companies and identified anomalies in the electricity bills paid by subscribers in December 2021 and January 2022. Following this, JSC Telasi was fined 75,000 Georgian lari (GEL) and affected consumers were returned a total of GEL 569,605 as part of the ongoing correction process. In March 2022, it fined a gas distribution company GEL 75,000 for terminating and re-starting natural gas supply to consumers in violation of the 'Rules of natural gas supply and consumption' and 'Rules of service quality'. In July 2022, it imposed a GEL 50,000 fine on another energy supply company for failing to comply with the Energy Market Monitoring and Reporting Rules and for not providing information on its activities to the GNERC within the time limits set in the rules.

The GNERC is progressing with the electricity sector reforms. On 30 March 2021, it approved energy market monitoring and reporting rules to transpose EU REMIT Regulation no. 1227/2011. In June 2021, it approved the distribution network rules, followed by the Connection Network Codes that entered into force on 1 July 2021. In September 2021, the GNERC amended its Decision No. 39/2 of 2020 on issuing licences for conducting operations on JSC Georgian Energy Exchange. As per the amendments, by 1 February 2022, the Georgian Energy Exchange must present to the GNERC a detailed plan for implementing, testing, and launching an intraday market platform in simulation mode. It was also required to post the daily market platform usage instructions on its website by 1 April 2022. In July 2022, the GNERC approved bilateral agreement market rules to streamline regulation of the wholesale electricity market and apply to agreements brokered through direct negotiations or intermediaries,

including a bilateral contract platform. In 2022, the GNERC adopted Resolution no. 23 to approve the rules and procedure for calculating normative losses of natural gas in the natural gas transmission network.

The Government approved the Natural Gas Market Concept Design of Georgia on 2 September 2021. The Natural Gas Market Rules are currently being developed based on the main principles of the natural gas market concept design. With the involvement of the Georgian side, the Energy Community Secretariat has drafted Natural Gas Security of Supply Rules within the framework of the EU4Energy program per the requirements of the national laws. The draft rules also envisage the transposition of requirements of EU Regulation 1938/2017 concerning measures to safeguard the security of gas supply, which will be approved by the end of 2022.

The Government has introduced attractive conditions to promote the development and deployment of renewable energy. On 2 July 2020, it adopted Resolution no. 403, approving premium tariffs to encourage private investment in the construction and operation of hydropower plants with an installed capacity above 5 MW. Moreover, renewable energy investors are free to negotiate the selling price of electricity and choose the buyer in the open market. There is no need for a licence to export electricity. As of 1 May 2022, all hydropower plants built before 1 August 2008 with no more than 65 MW capacity have been deregulated. Recently, the GNERC approved rules to issue the Certificate of Origin of Electricity for energy produced from renewable sources. The said rules relate to issuing, transferring and cancelling certificates of origin of electricity received from renewable sources and encourage investment in the renewable energy market. Moreover, the grid rules approved by the GNERC oblige the transmission system operator to quantify the benefits of integrating higher renewable energy shares in the energy mix. By 2024, the Government plans to commission nine wind power plants, five solar photovoltaic plants and 13 hydropower plants.

AREAS FOR IMPROVEMENT

The Government is encouraged to continue the ongoing electricity and gas market reforms. To give its efforts an impetus, it should gradually start phasing out implicit cross-subsidies in these sectors and create greater awareness among consumers about demand-side management measures to ensure higher energy savings. It should also explore options to increase the grid's flexibility through dispatchable electricity generation and investment in energy storage solutions.

INDICATOR 1

Improvements proposed in 2022

Adopt a climate change action plan that sets long-term emission reduction targets and strategies to achieve these targets.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2018

Finalise and adopt the Energy Strategy 2020.

Fully implemented. In 2019, the Energy Strategy of Georgia 2020-2030 was launched.

Finalise and adopt the draft Energy Law in line with the Third Energy Package.

Fully implemented. On 20 December 2019, the Law on Energy and Water Supply was adopted.

Adopt the country's National Energy Efficiency Action Plan.

Fully implemented. The National Energy Efficiency Action Plan (2019-2020) was adopted in 2020.

Create a defined framework to monitor and evaluate policy implementation.

Fully implemented. In 2019, the Government of Georgia adopted Resolution no. 2629 to approve the rules for developing, monitoring and evaluating policy documents.

Improvements proposed in 2020

Finalise and adopt the Energy Performance of Buildings Law and the Energy Efficiency Law.

Fully implemented. The Energy Efficiency Law and the Energy Performance of Buildings Law were adopted on 21 May 2021.

Adopt a climate change action plan that sets long-term emission reduction targets and strategies for achieving these targets.

Fully implemented. The Government adopted the CSAP and its Action Plan 2021-2023 in April 2021.

Improvements proposed in 2022

Update the National Energy Efficiency Action Plan and set new targets with an outlook beyond 2030.

Improvement suggested in 2022. Status will be updated in 2023.

Develop a long-term green hydrogen roadmap to attract private investments in this industry.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 3

Improvements proposed in 2018

Set up a one-stop shop dedicated to the energy sector.

Work ongoing. The Investment Division of Enterprise Georgia acts as the moderator between foreign investors and public agencies, ensures access to updated information, provides a means of communication with government bodies, and serves as a 'one-stop shop' to support investors throughout the investment process.

Make official translations of policies, laws, and regulatory decisions available in foreign languages relevant to investors.

Work ongoing and partially implemented. Some policies and laws have been consolidated and officially translated into English.

Improvements proposed in 2019

Create a legal requirement for public consultation of draft laws and policies.

Fully implemented. Provisions requiring public consultations have been embedded in the RE Law of 2019, Government Resolution no. 2629 of 2019 and Resolution no. 35 of 2020.

Improvements proposed in 2022

Establish a beneficial ownership register for companies operating in Georgia.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2020

Extend the scope of protection to intangible rights of foreign investors in the national law.

Pending

INDICATOR 5

Improvements proposed in 2018

Publicly announce the selection of the GNERC's board members and those of the State Audit Office of Georgia; restrict the tenure of the GNERC board members to a one-time renewal through the applicable law.

Work ongoing and partially implemented. Information on the board members of the GNERC is available on its website. The Law on Energy and Water Supply of Georgia of 2019 grants the GNERC board members only one renewal.

Adopt a law clarifying foreign ownership over agricultural land.

Fully implemented. The Law on the Ownership of Agricultural Land was adopted on 25 June 2019.

Improvements proposed in 2020

Consider reinstating the six-year tenure of the GNERC's Chairman from the current rule of three years.

Improvement suggested in 2020. Status will be provided in 2021.

Improvements proposed in 2022

Gradually phase out implicit cross-subsidies in the electricity and gas sectors.

Improvement suggested in 2022. Status will be updated in 2023.

Accelerate the deployment of smart meters and create greater awareness of consumer demand-side management measures to ensure higher energy savings.

Improvement suggested in 2022. Status will be updated in 2023.

Explore options to increase the grid's flexibility through dispatchable electricity generation and investment in energy storage solutions.

Improvement suggested in 2022. Status will be updated in 2023.



Guyana

Population ¹	790,329
Area (km ²) ¹	214,970
GDP per capita (USD) ¹	9,374.80
TES/GDP (GJ/thousand 2015) ²	N/A
Net Energy Imports (TJ) ²	N/A
RE share in Final Energy Consumption (%) ²	N/A
Total CO ₂ emissions (MtCO ₂) ²	N/A

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Extraction of crude petroleum & natural gas	1 new project	United States of America: 1 project of 4 mEUR
Support activities for other mining and quarrying	1 acquisition deal	Value of 1 deal (United States of America) is n.a

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.

Guyana’s overall risk level against the assessed areas is **low**.

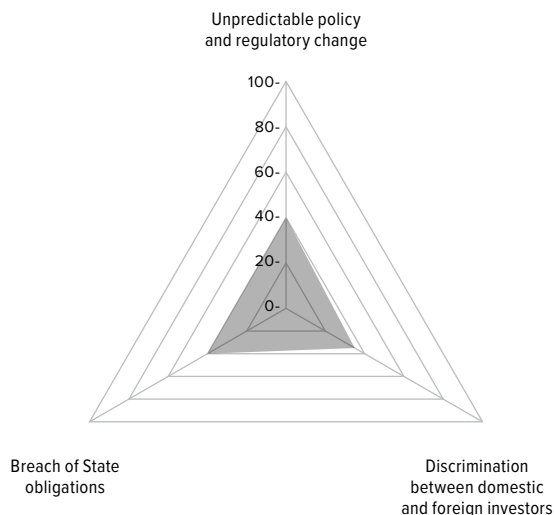
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *unpredictable policy and regulatory change* and *breach of State obligations*.

Guyana has a good performance on two EIRA indicators and a moderate performance on three indicators. *Management of decision-making processes* and *rule of law* are the highest-scoring indicators at 69. On the indicator *foresight of policy and regulatory change*, it has a score of 54. The lowest-scoring indicators are *framework for a sustainable energy system* and *regulatory environment and investment conditions*, both at 52.

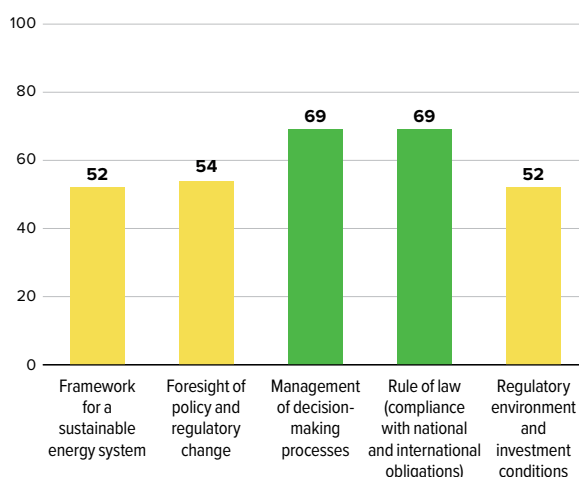
On a more detailed level, Guyana’s overall sub-indicator performance is moderate. *Institutional governance* is the highest-scoring sub-indicator at 83, followed by *respect for property rights* at 81. It has received good scores on the sub-indicators *communication of vision and policies* (67), *restrictions on FDI* (67), and *regulatory independence* (63). It has scored 58 on the sub-indicators *policy planning on clean energy transition*, *enabling measures to support clean energy transition* and *environmental protection, human rights and gender*. It has received moderate scores on the sub-indicators *management and settlement of investor-State disputes* (56), *transparency and anti-corruption measures* (54), and *robustness of policy goals and commitments* (42). The lowest-scoring sub-indicators are *energy resilience* at 33 and *electricity industry market structure and competition* at 27.

While Guyana is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to improve the resilience of its energy system and increase competition in the electricity market.

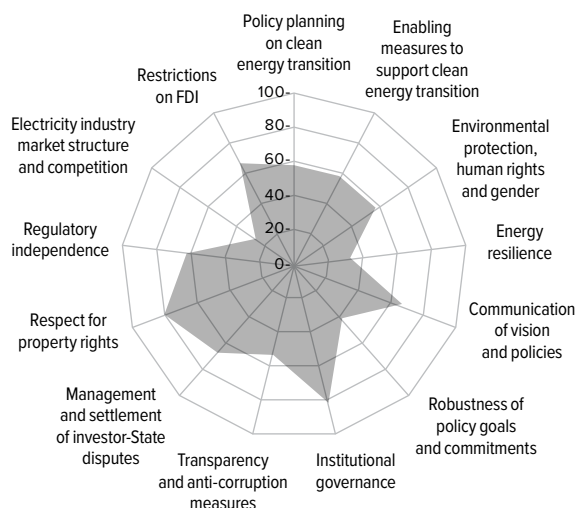
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

- | Guyana ratified the Paris Agreement and submitted its first NDC in 2016.
- | The Office of Climate Change (OCC), under the supervision of the Ministry of the Presidency, is updating Guyana's NDC.
- | On 8 August 2022, Guyana updated its Low Carbon Development Strategy (LCDS) 2030.

STRENGTHS

Over the last years, Guyana has updated its policy framework to boost the national economy while strengthening its resilience to climate change. At the 2021 United Nations Climate Change Conference, the Guyanese Government declared that by 2030 it plans to reduce the country's CO₂ emissions by 70% from the current levels. In February 2022, it reaffirmed its commitment to decarbonise the energy sector through various measures, including an increase of 500 MW of solar and hydropower by 2024.

The Green State Development Strategy: Vision 2040 (GSDS), launched in 2019, outlines measures to diversify the energy mix, reduce fossil fuel utilisation and introduce high-efficiency technologies. It foresees the transition to a nearly 100% renewable-based power generation system using the country's natural capital and adopting green and safe operational standards. To meet the objectives of the GSDS and the LCDS 2030, in February 2022, the Government announced a three-phase (2022-2028, 2028-2032, 2032 and beyond) energy transition process. During the first phase, the country will increase its reliance on natural gas-fired power plants, solar photovoltaic stations, and hydropower to meet its domestic energy demand. The second phase foresees the phasing out of heavy fuel oil, the development and deployment of wind farms, and the commissioning of the country's second large hydropower plant, which will provide 370 MW and 520 MW of capacity by 2035 and 2040, respectively. In the third phase, the Government will prioritise novel technologies, such as battery storage and hydrogen fuel.

The Government has initiated projects to coordinate the achievement of the clean energy transition with ensuring the country's energy security. It plans to utilise 20.8 billion Guyana dollars (GYD) from public funds to commission an ambitious gas-to-energy project that involves the construction of a 225 km pipeline from vessels in the Stabroek Block to La Jalousie/Nouvelle Flanders by 2024. On 15 June 2022, the Inter-American Development Bank approved the allocation of USD 83 million for the Guyana Utility-Scale Solar Photovoltaic Program (GUYSOL). This funding is toward installing a 10 MW peak facility in the Mahaica-Berbice region, an 8 MWp plant linked to a 12 MWh battery storage system in the Essequibo Islands-West Demerara region, and a 15 MWp station coupled with a 22 MWh battery storage system in the city of Linden. Another project that the Guyanese authorities expect to commission by 2025 is the 165 MW Amaila Fall Hydropower Plant, with an estimated cost of USD 1 billion. According to Guyana Power & Light Inc. (GPL) these projects will contribute to lowering the average electricity production costs and reducing the electricity tariffs from USD 0.22 per kWh in 2021 to USD 0.18 per kWh in 2026.

The Government plans to invest in low-carbon infrastructure to reduce dependency on fossil fuels and meet the increasing demand for cars. While recognising that the affordability of electric vehicles is a pre-condition for their uptake, the LCDS 2030 envisions that electric vehicles will become competitive by 2028 or shortly after that. As a result, in February 2022, during the draft National Budget 2022 discussions, the Government presented its plan to allocate GYD 31.6 million for running a public campaign to promote electric vehicles and install fast-charging stations in three regions.

Guyana has dense forest coverage and a low deforestation rate. It benefits from various financing schemes to mitigate climate change impacts on its forest resources, such as the Reduced Emissions from Deforestation and Degradation (REDD+) Programme. In October 2021, the Guyana Forestry Commission submitted to the Secretariat of the Architecture for The REDD+ Environmental Excellence Standard (ART-TREES) its Monitoring Report for 2016-2020 and the TREES Registration document for 2021-2026. This Report assesses the consistency of Guyana's REDD+ implementation with Cancun Safeguards, including its environmental, social, and governance principles.

In 2019, the Government, with assistance from the United Nations Development Programme (UNDP) for Barbados and the Eastern Caribbeans, launched the Enabling Gender-Responsive Disaster Recovery, Climate and Environmental Resilience (EnGenDER) project spanning five years. As part of the project activities, in November 2021, it published the Gender Inequality of Climate Change and Disaster Risk in Guyana Policy Brief, which analyses the challenges faced by various gender, age and social groups due to Guyana's climate and disaster risks. It recommends measures to improve the preparedness level and reduce the impact of climate change on women and other vulnerable groups.

AREAS FOR IMPROVEMENT

The Government should prepare a long-term clean energy transition roadmap to achieve net-zero emissions by mid-century and form the basis for Guyana's LT-LEDS. The roadmap should be aligned with the three-phase energy transition process, the LCDS 2030, and the Development and Expansion Programme 2022-2026 of GPL. It must be based on an accurate assessment of the country's future energy demand, resource availability and financial inflow. It should set performance indicators and time-bound targets for scaling up domestic renewable electricity, supply and demand-side energy efficiency measures, and a least-cost power infrastructure development plan.

Foresight of policy and regulatory change

QUICK FACTS

- | Guyana adopted its Energy Policy in 1994.
- | In November 2021, GPL released its Development and Expansion Programme 2022-2026.

STRENGTHS

Guyana has developed policies and action plans to meet its energy priorities and communicate these to prospective and existing investors. By 2025, the GSDS aims to achieve 100% electricity access for households in the hinterland through microgrids, solar photovoltaic systems, hydropower, and hybrid renewable energy systems. It also targets a near 100% transition to renewable and clean energy sources for electricity production by 2040 and to double the rate of energy efficiency in existing and new buildings by 2030.

The LCDS 2030 complements the electrification targets set in the GSDS. It expects that 15% of revenues from forest climate services will be allocated to improving the lives of indigenous people and non-coastal communities. On renewable power generation, the LCDS 2030 expands on the vision set by the GSDS. It foresees that solar photovoltaic plants with battery storage will be the primary energy resource across the regional grids and targets that at least 70% of installed power generation capacities should come from renewables by 2040. At the same time, renewable electricity from isolated grids is expected to reach 50% and 70% by 2027 and 2030, respectively. An average of 30% of electricity supplied to local grids in eight sites will be through solar photovoltaic plants. The LCDS 2030 also indicates plans to install 33 new hydropower plants with a cumulative generation capacity of 8.5 GW. According to it, by 2030, the country should have new hydropower facilities with a capacity of 350 MW and an additional 250 MW by 2035.

The Government is implementing programmes and projects to meet its clean energy and electricity access targets. In 2019, it initiated the Hinterland Electrification Programme to electrify 200 unserved and underserved communities by 2026. Under this Programme, 13 industrial solar photovoltaic farms and 30,000 solar home systems (4.5 MW in total), over 180 solar photovoltaic autonomous systems, and more than 20 solar powered mini-grids are expected to be installed. Moreover, in 2019, the International Renewable Energy Agency provided the Government of Guyana with USD 9 million to install 5.2 MW solar photovoltaic systems for nearly 35,000 people in the hinterland regions.

As one of the Islamic Development Bank's newest members, in October 2021, Guyana received a financial package to build the 1.5 MW Kumu hydropower plant and rehabilitate the currently non-operational 700 kW Moco Moco hydropower plant located in the hinterland regions. In addition to these programmes, GPL, with support from the Guyana REDD+ Investment Fund, plans to install a total of 33 MW peak of utility-scale solar facilities with battery energy storage systems. It intends to deepen international cooperation via the Arco Norte Interconnection Project, which will establish electricity export routes to the Brazilian states of Roraima and Amapa. In addition, GPL will partially

upgrade the metering system and launch the conversion process from conventional to smart grids.

Guyana is making efforts to integrate energy-efficient technologies and practices across different sectors. To this end, the Hinterland Electrification Strategy expects households using energy-efficient wood-fuel stoves to reach 50% by 2023. The LCDS 2030 recognises the need to introduce low-carbon building codes that are optional for the residential sector but mandatory for commercial buildings. It also promotes energy efficiency and climate-friendly cooling equipment for residential, commercial and industrial sectors.

The Government conducts monitoring and evaluation of its policies and programmes in collaboration with international partners. Since 2020, the Global Green Growth Institute has provided technical support to the Government through a two-year project entitled 'Development of Guyana's National Climate Finance Strategy, MRV System and Project Pipeline to Support NDC Implementation'. The project intends to institutionalise the measurement, reporting and verification system by developing technical requirements for the national GHG emissions, removals, mitigation actions and emission factors database.

Ministries and State agencies inform citizens and businesses of the Government's financial performance. On 31 March 2022, the Bank of Guyana published its 2021 annual report, which examines the country's economic development and assesses its financial stability. On 27 August 2021, the Ministry of Finance (MoF) published the 2021 Mid-Year Report and submitted it to the National Assembly of Guyana for consideration. The report describes the achievements in different economic sectors, including energy, provides information on inflation, interest and exchange rates, gives a detailed overview of the financial sector and debt management, and analyses economic and budgetary risks. An analysis of the extractive sector performance shows a 23.1% growth, mainly due to higher-than-expected outputs of the petroleum and mining industries. The MoF has also published other key financial documents, such as the State Budget estimations for 2022 and the Public Debt Policy 2021-2024.

AREAS FOR IMPROVEMENT

The Government should approve a new, multi-directional energy policy considering its long-term priorities and short and medium-term policies, such as the LCDS 2030. The updated national policy should envisage revenue flows from the forest carbon finance mechanisms and hydrocarbon production to the sovereign wealth fund and its further allocation for public infrastructure projects.

Management of decision-making processes

QUICK FACTS

- | The Office of the Prime Minister defines the national energy policy while the Guyana Energy Agency (GEA) implements it.
- | The Guyana Office for Investment (GO-Invest) is responsible for attracting foreign investors and informing them of opportunities in different sectors.
- | Guyana has enacted the Access to Information Act no. 21/2011.

STRENGTHS

To improve the country's institutional governance, on 8 August 2022, the Government submitted the Constitution Reform Commission Bill to the National Assembly. The proposed Constitutional reforms aim to safeguard citizens' fundamental rights and freedom, eliminate all forms of discrimination, promote ethnic security and equal opportunities, improve ethnic relations, and implement electoral reforms. The Bill seeks to establish the Constitution Reform Commission (CRC), which will collect, consider and evaluate suggestions on Constitutional amendments, prepare recommendations and submit these to the National Assembly. The CRC will comprise 20 members representing the parliamentarian majority and opposition, the Guyana Bar Association, the Labour Movement, the National Tshao's Council, the private sector, women, youth, religious organisations, and farmers.

The Government has established a multi-layered institutional setup to facilitate policy-making and implementation of climate change and environmental protection measures. The OCC is the national focal point for climate change and the UNFCCC. The National Climate Change Committee is a consultative body of the OCC that comprises several State and non-State actors. It advises the OCC on climate change issues, including scientific and technical advice for developing and implementing relevant strategies and action plans. It also identifies funding priorities and reviews project proposals and concepts.

The Government is continually promoting Guyana as an investment destination. To this end, in May 2021, GO-Invest published its prospectus, 'The Invest 55 Initiative', which catalogues 55 prospective areas for investment, including agriculture, energy, forestry, and mining. The companies investing in the listed areas will benefit from fast-tracked approvals and generous tax holidays. Additionally, the prospectus highlights the Government's efforts to reduce electricity costs by diversifying the power generation mix and extending critical road and transport infrastructure to attract investments from neighbouring countries.

The Government is taking legislative and policy initiatives to combat corruption and strengthen public accountability. Since joining the EITI in 2017, Guyana has stepped up its efforts to implement beneficial ownership disclosures. On 18 July 2018, the Guyana EITI (GYEITI) Multi-Stakeholder Group approved the Roadmap of Beneficial Ownership of Guyana, which is subsequently subject to a monthly review. In June 2021, the Government announced its intention to develop a register of beneficial ownership in compliance with the EITI Standards. Furthermore, in May 2022, Guyana published its third EITI report for 2019, containing disaggregated and detailed data of 89 mining entities. The report, which presents the status of the EITI

recommendations, mentions that Guyana is currently implementing five of its nine recommendations.

The Natural Resource Fund (NRF) Act no. 19/2021, which entered into force on 1 January 2022, marked a significant step forward in securing the transparent allocation of revenues generated from petroleum sales. It defines the composition of the NRF Board of Directors, one of which must be nominated by the National Assembly and another by the business community. According to the NRF Act, the Public Accountability and Oversight Committee will supervise the NRF, while the Board will report its operations to the MoF. To ensure budgetary and financial transparency, the MoF has released quarterly reports on financial inflow and outflow from the NRF since its inception. As of 30 June 2022, the NRF has accumulated over GYD 157 billion. In May and July 2022, the Government transferred a total of USD 400 million from the NRF to the Consolidated Fund of Guyana to finance national infrastructure projects, including gas-to-energy facilities, roads and bridges.

Guyana is making efforts to ensure the accountability of State authorities. On 20 September 2021, the Auditor General of Guyana submitted to the National Assembly its report on the public accounts of Guyana and accounts of ministries, departments and regions for the fiscal year ended 31 December 2020, including GEA, the Hinterland Electrification Company Incorporated, and eight regional power generation and distribution companies funded through the Office of the Prime Minister. In April 2022, the Ministry of Natural Resources (MNR) released copies of issued petroleum production licences, including those granted to Esso Exploration and Production Limited, CNOOC Petroleum Guyana Limited, and Hess Guyana Exploration Limited for the Yellowtail production area.

AREAS FOR IMPROVEMENT

The Government will benefit from a gradual transition to an open government system. Performance and financial evaluation reports of all the ministries and State agencies could be integrated within the National Data Management Authority (NDMA), which can serve as a centralised database for stakeholders, including citizens, private entities, academia, and civil society, to access these documents.

The Government should fully digitalise its public procurement system to lower administrative burdens, improve transparency, and promote competition. The digitalisation of public procurement processes will also help to minimise organisational and operational costs and increase the overall efficiency of the process in the long term.

Rule of law

QUICK FACTS

- | Guyana signed the International Energy Charter political declaration on 21 November 2018.
- | Guyana ratified the Convention on the Settlement of Investment Disputes between States and Nationals of Other States in 1969.
- | Guyana joined MIGA in 1989.

STRENGTHS

In August 2021, the President of Guyana appointed all seven members of the newly established Law Reform Commission, an advisory body to the Government responsible for prioritising judicial reforms and implementation programmes. The Commission will be responsible for reviewing existing legislation, recommending amendments, drafting new laws, and repealing outdated ones. The Commission is financed through the USD 8 million 'Support for the Justice System Programme' funded by the Inter-American Development Bank.

The State Budget for 2022 envisions the allocation of GYD 4.7 billion to enhance the justice sector's performance and boost public trust. Specifically, the amount will be utilised to increase the number of courts from 41 in 2019 to 46 in 2022 and improve public access to the justice system at a reduced cost. In addition to this, in 2021, GYD 325 million was allocated for the implementation of the Justice Sector Reform Programme (JSRP) under the capital expenses of the Ministry of Legal Affairs. The JSRP envisages the development and implementation of restorative justice programmes, the introduction of case management and court scheduling systems, and pretrial intervention mechanisms.

In April 2022, the Government launched a partnership with the Improved Access to Justice in the Caribbean Project (IMPACT Justice), a multi-country regional justice sector reform project funded by the Government of Canada and implemented by the University of the West Indies Cave Hill Campus, Barbados. One of the main components of this partnership is developing the national capacity of arbitration specialists. A successful outcome of this partnership was the 'Roadmap to Implementation of a New Arbitration Law' training held by IMPACT Justice in May 2022 for the judicial officers of Guyana, the State Counsel, the private sector, and civil society. The Ministry of Legal Affairs also plans to collaborate with the Caribbean Branch of the Chartered Institute of Arbitration on capacity building in arbitration theory and practice. The Institute intends to hold two training courses on arbitration for Guyanese professionals interested in becoming certified arbitrators in September and December 2022.

Guyana is a member of the Caribbean Community (CARICOM), which comprises 15 members and five observer countries. The Revised Treaty of Chaguaramas establishes CARICOM and creates among its Member States a fully integrated market with the free movement of goods, services, capital and skilled citizens. It defines various mechanisms for dispute resolution, including settlement by the Caribbean Court of Justice (CCJ), arbitration, conciliation, consultations, mediation, and good

offices. As a member of CARICOM, Guyana has access to the CCJ.

The implementation of CARICOM's harmonised legal framework among its Members is intended to deepen economic integration and facilitate cross-border investment on a non-discriminatory basis. To this end, in January 2022, the Government of Guyana announced its intention to adopt the country's Arbitration Bill along the lines of the model developed by CARICOM. Moreover, the draft CARICOM Investment Code (CIC) was circulated to the CARICOM Member States and is currently being discussed among them. The CIC intends to create a common regime for protecting, promoting and facilitating investment.

Guarantees against unlawful derivation and acquisition of property are embedded in the Constitution of Guyana, and property owners, in the event of exceptional expropriation, are guaranteed compensation. The Investment Act no. 1/2004 protects investors' property rights and allows the Government to take possession of an investor's asset only according to the national legislation, through a non-discriminatory process, and with adequate compensation.

Guyana has signed nine BITs, of which five are in force (with China, Germany, the Republic of Korea, Switzerland, and the United Kingdom). Several BITs, such as between Guyana and the Republic of Korea and between Guyana and Switzerland, include provisions protecting investors' property from expropriation. For example, the BIT between Guyana and the Republic of Korea protects investments against all forms of expropriation and nationalisation. It requires the provision of proper compensation if an investor's assets or investments are expropriated. In addition, this BIT recognises intellectual property as an 'investment'.

AREAS FOR IMPROVEMENT

The Government may consider amending local legislation to define 'public interest' in the case of expropriation and identify the type of interest applicable and the timeframe for providing compensation in such cases.

The Government should consider establishing a dedicated institution and policy framework to prevent, manage and monitor conflicts arising between investors and public authorities during projects. For this purpose, it may seek guidance from the Energy Charter Model Instrument on Management of Investment Disputes, which aims to assist States in handling investment disputes while keeping in mind their particular needs and circumstances. The Government should also expedite the implementation of the Justice Sector Reform Programme and consider digitalising local judicial processes.

Regulatory environment and investment conditions

QUICK FACTS

- | The Public Utilities Commission (PUC) exercises regulatory functions across various sectors, including energy.
- | The MNR is responsible for negotiating and enforcing petroleum agreements and issuing prospecting licenses.
- | GPL is a state-owned vertically integrated power company that is the country's largest electricity supplier with 210,732 customers.

STRENGTHS

The Government is taking measures to strengthen the regulatory framework of the oil and gas sector. In January 2022, it announced its intention to revise and re-submit the Petroleum Commission (PC) Bill, first tabled in 2017, to the National Assembly. The adoption of the Bill will create a legal basis for the PC to regulate the oil and gas sector, ensure the efficient, effective and responsible exploration, development and production of petroleum in the country, and monitor the enforcement of the relevant legislation. Moreover, in November 2021, the Government announced plans to move away from the current system of direct awards in the petroleum sector and auction five offshore oil production blocks in the third quarter of 2022 for the first time. This measure aims to diversify the sector's investor base and better monetise the petroleum sector.

In its most recent annual analysis, the Bank of Guyana reported a substantial FDI inflow, exceeding USD 4.4 billion in 2021. This increase is tied to the current incentives offered by the Government, such as tax holidays for new projects in priority sectors. Forty-eight new projects, including four in mining, three in forestry, and one in the energy sector, were approved in 2021. These projects have contributed to creating over 2,300 new jobs. In parallel, the Government is implementing tax reforms and introducing incentives to facilitate business activities. The State Budget for 2022 removes the 10% excise tax and 14% VAT applicable to imported motor trucks of less than four years, the 14% VAT on importing new haulers for pulling containers or similar vehicles, and the 14% VAT on cranes and safety equipment. With the Tax (Amendment) Act no. 8/2022 that came into force on 3 June 2022, VAT on electricity and water has been removed.

GPL has announced plans to mobilise investment in the electricity sector to increase generation from 988.9 MWh in 2021 to 3,299.7 MWh in 2026. Between 2022 and 2023, it will install several solar photovoltaic and hybrid systems, such as a 750 kW solar powered system with 1.151 MWh battery energy storage system (BESS) in Wakenaam, a 1.5 MW solar photovoltaic system with 0.75 MWh BESS in Bartica, a 0.6 MW solar farm and 0.8 MWh BESS in Leguan, and a 30 MW total hybrid power generation facility in Berbice. More projects are planned between 2024 and 2026, including a 10 MW solar photovoltaic system in West and East Berbice, an 8 MW solar powered system and 8 MWh BESS in Anna Regina, and a 15 MWp solar farm and 15 MWh BESS in Linden. GPL will allocate GYD 2.5 billion for various interventions, such as installing 1 MW solar mini-grid systems for Lethem and the 400 kV solar power generation system for the CARICOM Secretariat building. It also intends to rehabilitate 76.8 km and install an additional 7 km medium/low voltage

distribution network on the West Coast Demerara, East Bank Demerara and East Berbice. At the same time, the Government will support GPL's infrastructural upgrades to reduce technical losses of electricity, increase the transmission capacity, and improve power reliability.

Efforts are also being made to attract sustainable investment in the oil and gas sector. In 2022, five new oil discoveries were made in Guyana, bringing the total estimated oil reserves to nearly 11 billion barrels. By adding the production capacities of Liza Unity Floating, Production, Storage and Offloading, which started its operations in early 2022, Guyana reached the oil-producing level of 340,000 barrels per day.

The Government is coupling its efforts to attract investment with maximising benefits for the local communities. To this end, on 29 December 2021, the National Assembly passed the Local Content Act no. 18/2021. The new Act identifies 40 areas for Guyanese participation and minimum levels of involvement of local citizens and companies. All companies engaged in the petroleum sector must comply with the Act before the end of 2022. The Act also establishes the Local Content Secretariat, which will develop mechanisms to ensure that contractors, sub-contractors and licensees implement the local content requirements. Besides this, GO-Invest is actively promoting local products and services. For this purpose, in 2021, it signed a Memorandum of Understanding with the Private Sector Commission to make the local market more attractive to foreign investors in light of the potential opportunities in the petroleum sector.

AREAS FOR IMPROVEMENT

The Government should expedite the establishment of an independent authority to regulate upstream oil and gas operations and promote competition in the field. At the same time, it should set legally binding requirements for private investors to conduct oil and gas activities sustainably and oblige the Government to utilise oil and gas revenues to support innovation in renewable energy and energy-efficient technologies. The updated legal framework could also establish a carbon tax regime for all fossil fuel operations and allocate percentages of these taxes to areas of environmental and biodiversity management and development of local communities.

Guyana should consider enacting a law to promote public-private partnerships in energy infrastructure projects. Such a law should have a well-defined scope, clarify the type and nature of support the State will provide to such projects and describe the rights, responsibilities, and risks for each party.

INDICATOR 1

Improvements proposed in 2022

Prepare a long-term clean energy transition roadmap based on an accurate assessment of the country's future energy demands, resource availability and financial status.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2020

Prepare and approve a new, multi-directional energy policy considering the country's long-term priorities.

Pending

Improvements proposed in 2021

Update the country's Low Carbon Development Strategy.

Fully implemented. On 8 August 2022, the National Assembly of Guyana approved the LCDS 2030.

Consider developing a hydrocarbon production and trade strategy that defines measures to mitigate global oil price volatility risks, further diversify the economy through long-term strategic investments in various sectors of the economy and ensure proper allocation of revenues accumulated in the NRF.

Pending

Improve the policy monitoring process by conducting an independent analysis of their implementation and recommending actions to increase the public administration's efficiency.

Pending

INDICATOR 3

Improvements proposed in 2021

Consider establishing a one-stop shop for investors or assign this function to the Guyana Office for Investment.

Pending

Create a standing council comprising State institutions, international organisations, development partners, foreign investors, business associations and academia to facilitate dialogue between stakeholders.

Pending

Improvements proposed in 2022

Integrate the financial and performance evaluations of ministries and State agencies within the NDMA, which can serve as a centralised database for stakeholders.

Improvement suggested in 2022. Status will be updated in 2023.

Digitalise the public procurement system to lower administrative burdens, improve transparency and promote competition.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2020

Consider establishing an investment ombudsperson to resolve conflicts between investors and public authorities.

Pending

Accelerate reforms to improve the efficiency of the judiciary and reduce court delays.

Partially implemented. In 2021, GYD 325 million was allocated for the implementation of the JSRP under the capital expenses of the Ministry of Legal Affairs. The JSRP envisages the development and implementation of restorative justice programmes, the introduction of case management and court scheduling systems and pretrial intervention mechanisms. The State Budget for 2022 envisions the allocation of GYD 4.7 billion to increase the number of courts from 41 in 2019 to 46 in 2022 and grant the public access to the justice system at a reduced cost, among other things.

Improvements proposed in 2021

Define 'public interest' in the case of expropriation in the domestic laws and outline the type of interest applicable and the timeframe for providing compensation in such cases.

Pending

Establish new arbitration and mediation centres.

Work ongoing. As a member of the CARICOM, Guyana has access to the CCJ. In April 2022, the Government of Guyana launched a partnership with the Improved Access to Justice in the Caribbean Project to develop the national capacity of arbitration specialists. The Ministry of Legal Affairs also plans to collaborate with the Caribbean Branch of the Chartered Institute of Arbitration on capacity building in the arbitration theory and practice area.

Improvements proposed in 2022

Establish a policy framework to prevent, manage and monitor conflicts arising between investors and public authorities during projects.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 5

Improvements proposed in 2020

Establish, at the earliest, a legal and regulatory framework to support the implementation of the Local Content Policy 2020.

Fully implemented. On 29 December 2021, the National Assembly enacted the Local Content Act no. 18/2021. The new Act identifies 40 areas for Guyanese participation and minimum levels of involvement of local citizens and companies. All companies engaged in the petroleum sector must comply with the Act before the end of 2022. The Act also establishes the Local Content Secretariat, which will develop mechanisms to ensure that contractors, sub-contractors and licensees implement the local content requirements.

Improvements proposed in 2021

Consider adopting a law on public-private partnership to increase the interest of private players in large energy infrastructure projects.

Pending

Improvements proposed in 2022

Establish an independent authority to regulate upstream oil and gas operations and promote competition in the field.

Improvement suggested in 2022. Status will be updated in 2023.

Set up a carbon tax regime for all fossil fuel operations and allocate percentages of these taxes to areas of environmental and biodiversity management and development of local communities.

Improvement suggested in 2022. Status will be updated in 2023.



Indonesia

Population ¹	272,682,520
Area (km ²) ¹	1,916,906
GDP per capita (USD) ¹	4,352.19
TES/GDP (GJ/thousand 2015) ²	9.62
Net Energy Imports (TJ) ¹	-2,120.74
RE share in Final Energy Consumption (%) ²	19.09
Total CO ₂ emissions (MtCO ₂) ²	626.56

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	11 projects	France: 3 RE projects of 1154.88 mEUR; China: 1 FF project of 384.96 mEUR Japan: 2 FF projects of 2013.84 mEUR Republic of Korea: 1 FF project of 384.96 mEUR
	10 deals	Singapore: 1 RE project of 15.22 mEUR United Arab Emirates: 1 RE project of 90.86 mEUR United Kingdom: 1 RE project of 1.75 mEUR Malaysia: 1 FF project of 2554.21 mEUR Netherlands: 2 deals of 1438.43 mEUR Hong Kong, SAR: 8 deals of 331.7 mEUR
Extraction of natural gas and crude petroleum	1 new project	United States of America: 1 project of 1000 mEUR
	4 minority stake deals	Virgin Islands (British): 3 deals of 13.89 mEUR Indonesia: 1 deal of 26.91 mEUR
Mining of hard coal	8 acquisition deals	Singapore: 12 deals of 1530.02 mEUR
	9 minority stake deals 2 joint venture deals	Cayman Islands: 2 deals of 72.8 mEUR Indonesia: 3 deals of 49.68 mEUR Republic of Korea: 2 deals of 43.45 mEUR

Sources:

1. Handbook of Energy and Economic Statistics of Indonesia (2021), (<https://www.esdm.go.id/>).
2. ©IEA (2022). World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022.

For more information see Annex III of this report.

RE: Renewable energy based electricity production

FF: Fossil fuel based electricity production

Indonesia’s overall risk level against the assessed areas is **low**.

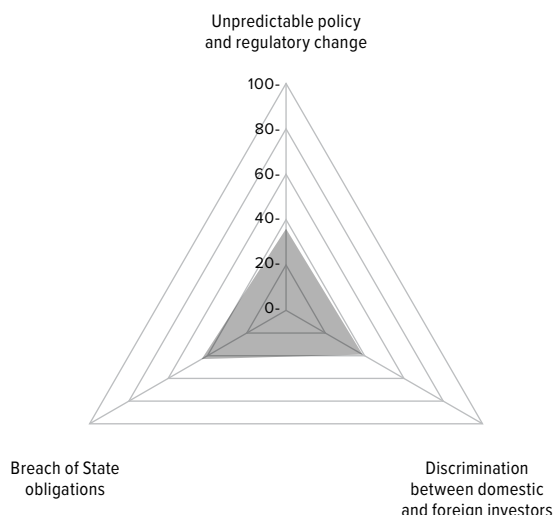
The risk of *unpredictable policy and regulatory change* is lower than the risks of *discrimination between foreign and domestic investors* and *breach of State obligations*.

Indonesia has a good performance on three of the EIRA indicators and a moderate performance on two indicators. The highest-scoring indicator is *management of decision-making processes* at 80, followed by *framework for a sustainable energy system* at 69 and *foresight of policy and regulatory change* indicator at 68. Its score on the indicator *rule of law* is 52. *Regulatory environment and investment conditions* is the lowest-scoring indicator at 49.

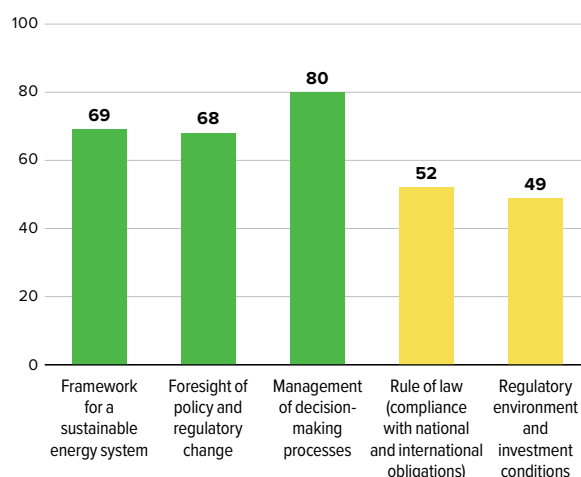
On a more detailed level, Indonesia’s overall sub-indicator performance is good. The highest-scoring sub-indicators are *institutional governance* at 92 and *policy planning on clean energy transition* at 86. Following these are the sub-indicators *communication of vision and policies* at 72, *energy resilience* at 70, *transparency and anti-corruption measures* at 69, *restrictions on FDI* at 67, *robustness of policy goals and commitments* at 64, *environment protection, human rights and gender* at 64, and *management and settlement of investor-State disputes* at 64. Its score is moderate on the sub-indicators *enabling measures to support clean energy transition* (57), *regulatory independence* (50), and *respect for property rights* (41). The lowest-scoring sub-indicator is *electricity industry market structure and competition* at 31.

While Indonesia is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to increase competition in the electricity sector.

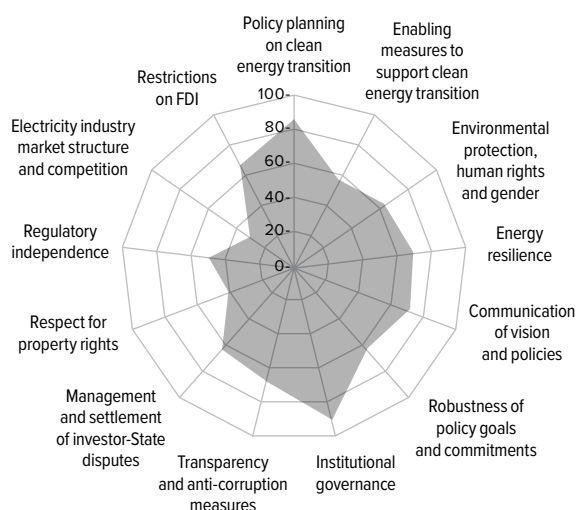
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

On 22 July 2021, Indonesia submitted to the UNFCCC Secretariat its updated NDC and its Long-Term Strategy for Low Carbon and Climate Resilience (LTS) 2050.

Indonesia has enacted Law No. 16 of 2016 to confirm its ratification of the Paris Agreement.

STRENGTHS

Indonesia's updated NDC sets ambitious targets for the energy, forest, and land use (FOLU) sectors, which account for about 97% of the total national commitment. By 2030, the country aims to unconditionally achieve 75% efficiency in final energy consumption. The implementation of clean coal technology in power plants is expected to be 75% unconditionally, while the integration of renewable energy in electricity production will reach 19.6% (committed 7.4 GW). Moreover, 90% of the transportation sector will rely on biofuels, and compressed natural gas consumption (CNG fuelling stations) will be 100% by 2030.

The country's LTS sets an unconditional GHG emission reduction target of 29% and a conditional target of up to 41% compared to business-as-usual in 2030. The target has been adopted at the national level through Presidential Regulation No. 98 of 2021, which also serves as the basis for implementing the GHG emission reduction target set in the updated NDC. According to the LTS, Indonesia aims to achieve peak-level national emissions by 2030 with a net sink for the forest and land-use sectors. It also plans to reach 540 MtCO₂ by 2050 and eventually net-zero emissions by 2060 or earlier. Priority will be given to expanding the net sink for the forest sector after 2030, increasing the share of renewable resources in the energy mix, promoting energy efficiency, and decreasing coal consumption while implementing Carbon Capture, Utilisation and Storage (CCUS) and Bioenergy with Carbon Capture and Storage (BECCS) solutions.

In July 2021, the State-owned power utility Perusahaan Listrik Negara (PLN) announced plans to phase out all its coal-fired power plants (CFPP) by 2056. The capacity of CFPPs has been reduced from 2021 onwards, and their retirement will start in 2030. PLN expects to develop nuclear power by 2040 to facilitate the complete phase-out of coal. Moreover, it foresees that the Kanaan (20 MW), Batakan (40 MW) and Supa (62 MW) diesel power plants, and the Jayapura (10 MW) gas engine power plant will soon transition to crude palm oil.

On 29 October 2021, the Government enacted Presidential Regulation No. 98 of 2021 to introduce a carbon pricing regime and Law No. 7 of 2021, harmonising tax regulations and facilitating the regime's gradual implementation. Regulation No. 98 identifies market-based instruments for domestic and cross-border trading and non-trading instruments, such as levies, customs, and excise duties, imposed by the central or district tax offices depending on the carbon content and carbon emissions potential. According to Law No. 7, between 2022 and 2024, the carbon trading mechanism will be implemented in the power sector, particularly for CFPPs. From 2025 onwards, it will be implemented across other sectors.

Presidential Regulation No. 55 of 2019 aims to accelerate the development of the domestic battery-based KBL industry through incentives and the construction of the corresponding electric charging infrastructure. To support Regulation No. 55, the Minister of Energy and Mineral Resources (MEMR) has issued Regulation No. 13 of 2020 on the Provision of Electric Charging Station Infrastructure for Battery Electric Vehicles.

To promote energy efficiency in end-uses, on 22 June 2021, the MEMR approved its Regulation No. 14 of 2021, establishing the minimum energy performance standards and energy efficiency labelling scheme for energy-consuming equipment. Domestic manufacturers and importers must get targeted products certified by LSPro, the product certification organisation, by submitting product samples and the required documents. Once certified, all products must display energy efficiency labels.

Law No. 32 of 2009 requires the national and local governments to prepare a strategic environmental analysis to ensure that the sustainable development criteria are applied to all policies, plans and programmes. Given that almost 63% of emissions are from land-use change and forestry, Indonesia has set ambitious mitigation targets for these sectors. In 2022, the Ministry of Environment and Forestry (KLHK) adopted the Operational Plan for Indonesia's FOLU Net Sink 2030. It presents mitigation actions to prevent deforestation and degradation, particularly in concession areas, and ensure plantation forest development, sustainable forest management, peatland management, and biodiversity conservation.

AREAS FOR IMPROVEMENT

Private and State-owned energy companies should set net-zero targets covering direct, indirect and value chain emissions. To this end, Indonesia may follow the example of other countries and make corporate social responsibility in climate change mitigation and adaptation a legal requirement. Energy companies should prepare a roadmap for achieving net-zero emissions and outline the mechanisms, such as carbon offset or removal, to achieve this target. Public and private sector banks should also set net-zero targets and develop individual long-term plans to limit and eventually end financing for CFPPs. They should be legally required to progressively increase funding for clean energy technologies and report annually on this to the Government.

The Government should incentivise State-owned and regional development banks to offer attractive financial schemes, such as low interest rates and soft loans, to businesses investing in renewable technologies and households installing solar home systems.

Foresight of policy and regulatory change

QUICK FACTS

The National Energy Policy (KEN) guides the energy sector's policy planning and development up to 2050. The National General Energy Plan (RUEN) outlines implementation strategies to achieve the KEN.

Based on the KEN and RUEN, the MEMR develops a National Electricity General Plan (RUKN) that projects electricity supply and demand scenarios over 20 years.

The RUKN lays the foundation for the PLN to prepare the Electricity Supply Business Plan (RUPTL) every ten years. In October 2021, PLN adopted the most recent RUPTL 2021-2030.

STRENGTHS

The KEN communicates Indonesia's long-term energy priorities. It targets the share of new and renewable resources in the primary energy mix to be at least 23% by 2025 and 31% by 2050. The share of oil is expected to be less than 25% by 2025 and 20% by 2050. While coal will contribute to the energy mix in the mid-term, its minimum share will decrease from 30% in 2025 to 25% in 2050. On the other hand, the minimum share of gas will increase from 22% in 2025 to 24% in 2050.

The RUPTL's power generation targets complement the KEN's anticipated primary energy mix. According to the RUPTL, the contribution of oil will be up to a maximum of 0.4% by 2025 and 0.1% by 2050. Reliance on coal will reduce from 55% in 2025 to 47% by 2050, while gas consumption will increase from 22% in 2025 to 25% in 2050. By 2030, PLN plans to add 40.6 GW of new power generation capacity, of which 20.9 GW (51.6%) will be from renewables – a 25% increase in the target compared to the previous RUPTL. Hydropower will have the maximum share of 9.27 GW (49.65%), followed by 4.68 GW of solar (22.36%) and 3.35 GW of geothermal (16.04%). The overall increase is projected to be 10.6 GW by 2025 and 18.8 GW by 2029. To implement these ambitious targets, PLN plans to convert 5,200 units of small-scale diesel power plants across 2,130 locations into renewable and gas-based plants. The programme will be implemented from 2021 to 2026.

The MEMR Regulation No. 12 of 2015 intends to increase bioethanol consumption by up to 20% of the total energy consumption in the transport and industry sectors by 2025. The RUPTL sets some targets to build charging infrastructure for electric vehicles (EVs). It requires that the number of EVs reach 12,000 units by 2022 and eventually 38,000 units by 2024. Regulation No. 74 of 2021 sets a luxury tax depending upon the emission level rather than the vehicle size. Battery-operated EVs have a 0% tax base, while plug-in hybrid and hybrid EVs have a 15% tax base depending on their emissions. Besides this, the Ministry of Home Affairs has issued Regulation No. 1 of 2021 to calculate and limit the tax and transfer fee for EVs. At the province level, the Regulation of the Governor of Jakarta No. 3 of 2020 stipulates a 0% ownership tax for battery-operated EVs.

On energy efficiency, the KEN targets to reduce energy intensity by 1% per year between 2015 and 2025. Government Regulation no. 70 of 2007 describes energy conservation measures to materialise this target. This Regulation is currently being revised to include elements of energy management in the industrial, transportation

and building sectors and in energy supply activities (power generation, petroleum refining and mining). In June 2021, the Directorate General of Renewable Energy and Energy Conservation of MEMR launched the Sistem Informasi Konservasi Energi (SINERGI) to ensure that energy conservation measures are implemented. In addition, PLN has released its smart grid roadmap for 2021-2025 to digitalise power plants and introduce the automation of transmission and distribution substations and the advanced metering infrastructure technology in phases.

State agencies periodically monitor and publish information on their performance and budget. The State Audit Board (BPK) is the independent authority responsible for auditing the State's finances. In 2021, BPK released comprehensive summary audit reports for each semester, the Performance Accountability Report, the Independent Auditor's Report, the Voluntary National Review (VNR) of the SDGs, and the Performance Audit Report of the Preparedness for Implementation of SDGs in Indonesia 2021. Additionally, the Secretariat General of the National Energy Council (DEN) published its performance report for 2021, which states that the DEN has achieved 125% of the 16 performance indicators, an increase of 2% compared to 2020. KLHK has provided comprehensive information on its website, including its performance reports, financial reports, work plan's implementation status, and budget performance for 2021 and 2022.

AREAS FOR IMPROVEMENT

The RUPTL foresees that new solar, wind and biomass capacities will decrease substantially between 2026 and 2030. At the same time, despite the decrease in coal, it will still account for 47% of the generation mix by 2050. The Government is recommended to set short- and mid-term targets for retiring all CFPPs bearing in mind the duration of existing contracts and the economic life of the plants. Private companies that purchase CFPPs from PLN must be required to close all operations by the 2056 deadline set in the RUPTL. This will deter new investments in the coal sector and allow energy companies to align their business plans and operations to reduce the risk of stranded assets.

The Government should introduce incentives, such as discounts on vehicle registration and differentiated parking rates, to encourage the uptake of electric four- and two-wheelers among citizens. At the same time, progressive short- and mid-term targets should be set in collaboration with local governments to replace fossil fuel-based public transport fleets in circulation with EVs.

Management of decision-making processes

QUICK FACTS

Based on Presidential Regulation No. 68 of 2015 and MEMR Regulation No. 15 of 2021, the MEMR formulates policies, controls, and supervises the oil and gas, electricity, minerals and coal, new energy, renewable energy, energy conservation, and geology sectors.

The Regional Medium-Term Development Plan (RPJMD) defines the basis for the regional governments to plan and implement five years of development. Besides the RPJMD, each region must prepare a Regional Energy General Plan (RUED) to guide its energy transition approaches.

The DEN comprises the seven Ministers responsible for the supply, transportation, distribution, and utilisation of energy and eight members representing other stakeholders in the sector. Among its other tasks, it designs the KEN, establishes measures to overcome energy crises and emergencies, and supervises cross-sectoral policies affecting the energy sector.

The Ministry of Administrative and Bureaucratic Reform of the Republic of Indonesia (PANRB) develops and coordinates policies for bureaucratic reform, public accountability, institutional management, and public services.

STRENGTHS

The Performance Accountability System for Government Agencies (SAKIP) obliges all ministries and State agencies, including local governments, to implement performance management systems and prepare performance accountability reports (LAKIP). These reports are evaluated by the PANRB annually. In August 2022, the PANRB published the LAKIP for 2021 on its website. Moreover, the DEN has made available on its website the Performance Report of the Secretariat General of DEN for 2021, the DEN Secretary General Performance Agreement 2022, the DEN Secretariat General's Bureau of Bureaucratic Reform Implementation Work Plan 2020-2024, the Key Performance Indicators of DEN's Secretariat General, and the 2021 National Energy Balance.

Over the last years, the Government has introduced reforms to make Indonesia conducive to investment. In November 2020, it enacted Law No. 11 of 2020 (Omnibus Law), establishing rules for investment promotion and job creation by streamlining regulations and simplifying the licencing process. The Omnibus Law, which contains 185 articles, repeals and condenses the provisions of 76 laws. The Government has already enacted implementing regulations, including risk-based business licencing, criteria for micro and small businesses, buildings and spatial planning, environmental protection and management, forestry, and companies' authorised capital, registration, and dissolution.

To support the ongoing reforms on an institutional level, in April 2021, BKPM was restructured to become the Ministry of Investment/BKPM through Presidential Regulation No. 31 of 2021. The Ministry of Investment/BKPM is the contact point for all investment sectors and the link between the Government and the private sector. In 2018, BKPM launched the One Stop Service Center (PTSP Pusat) to assist investors in procuring business licences. Currently, 30 licences are issued by PTSP Pusat. Besides this activity, it provides consultation services to foreign companies and offers them information needed to make investment decisions. Following the establishment of PTSP Pusat, BKPM no longer reviews compliance with foreign investment regulations and is only responsible for post-closing monitoring of foreign investment companies. The post-closing monitoring is based on investment reports that must be submitted periodically by foreign companies to BKPM.

For each quarter of 2021 and 2022, the BKPM has published comprehensive information on FDI inflows by location, sector, and country of origin. From January to December 2021, investment realisation amounted to 901.02 trillion Indonesian rupiah (IDR), reaching 104.8% of the target set in the National Medium-Term Development Plan (RPJMN) of IDR 858.5 trillion. FDI accounted for 50.6% (IDR 122.3 trillion) of the total investment realisation in the fourth quarter of 2022, increasing by 18.5% from the previous quarter.

During the fourth quarter of 2021, FDI realised in the electricity, gas, and water supply sector amounted to USD 2.9 billion, representing 9.4% of the total FDI and translating into 444 projects. During the same period, FDI realised in the mining sector was USD 3.8 billion from 486 projects, about 12.3% of the total FDI. The top five home countries of investors were Singapore, with investments worth USD 9.4 billion (30.2% of the total FDI), Hong Kong with USD 4.6 billion (14.8%), China with USD 3.2 billion (10.2%), United States with USD 2.5 billion (8.2%) and Japan with USD 2.3 billion (7.3%).

The Government is working proactively to improve transparency and accountability in the extractives sector. Following the enactment of Presidential Regulation No. 13 of 2018 and the implementation of Regulation of the Ministry of Law and Human Rights No. 15 of 2019, Indonesia created a centralised registry of beneficial owners for all categories of corporations. The registry functions under the Ministry of Law and Human Rights. Among other things, the Regulation empowers the Government to penalise companies that fail to update their beneficial ownership information annually.

AREAS FOR IMPROVEMENT

The Government should ensure that RUEDs, particularly for regions with the highest emissions, contain sufficiently robust targets for meeting the country's net-zero ambition. The carbon development goals set in the RPJMD may also be increased to align with the updated NDC and the LTS. More financial support for energy transition programmes and projects should be given to provinces with high coal production and consumption dependency.

Rule of law

QUICK FACTS

- I Indonesia signed the 1991 European Energy Charter on 18 June 2009.
- I Indonesia is a member of MIGA.
- I Indonesia acceded to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards on 7 October 1981.

STRENGTHS

The Government has established a legal and regulatory framework to promote alternative dispute prevention mechanisms. Law No. 30 of 1999 defines the framework to support arbitration in Indonesia. Its Article 66 sets out the criteria under which Indonesian courts can recognise and enforce foreign arbitration awards. Law No. 30 of 1999 also provides for mediation during different stages of the dispute resolution process. Once the parties to an agreement consent to mediation, they must meet within 14 days. If the dispute remains unresolved after the meeting, the parties may request the assistance of one or more expert advisors or a mediator. If the matter cannot be resolved within 14 days despite external assistance, the parties may have recourse to arbitration.

At the same time, Supreme Court Regulation No. 1 of 2016 regulates mediations in court proceedings and imposes certain requirements on timelines in this respect. Within five days from the mediator's appointment, the disputing parties must submit their case summaries to the mediator and the counterparties. The mediation must be completed within 30 days and may be extended upon the parties' agreement for 30 days. To extend the mediation process beyond 30 days, the parties should obtain the approval of the judge hearing the case.

Through Presidential Regulation No. 10 of 2021, in March 2021, the Government published Indonesia's New Investment List (Positive List), opening several sectors to foreign investment. Restrictions on foreign ownership mentioned in the Positive List do not apply to foreign investors holding special rights under IIAs between Indonesia and the investor's home countries – except where the terms of the Positive List are more favourable. Currently, Indonesia has 27 BITs in force. Over the last few years, Indonesia has embarked on a BIT reform process to align the older generation treaties with the country's new challenges, needs and opportunities. Its most recent BIT with Singapore, which entered into force on 9 March 2021, incorporates various innovative provisions. To prevent 'treaty shopping,' the BIT contains a 'denial of benefit' type clause disallowing holding companies or companies controlled by investors from third States to avail of its benefits if they do not have a substantive investment in the host country. The BIT also mentions corporate social responsibility and corruption, although there are no binding legal commitments on these issues. To bolster foreign investors' rights, the BIT grants them the exclusive right to request the arbitration tribunal to make the draft award available to the disputing parties for comments. The tribunal must consider the comments provided in making the final award. To promote transparency, the BIT requires the parties availing of Third-Party-Funding to disclose the name and address of the funder.

The BIT extends the 'cooling-off' period to one year, requiring the investor to wait for this period from when consultations are requested before it can submit an arbitration claim. A limitation period of three years has been included on the submission of an arbitration claim, starting from when the disputing investor became aware or should have reasonably been aware of a breach of an obligation under the BIT.

Law No. 25 of 2007 mandates that the Government shall take no measures of nationalisation or expropriation against the property rights of investors unless provided by law. Where the Government takes measures of nationalisation or expropriation, it shall pay compensation, the amount of which shall be established by market value. If both parties fail to agree on compensation or damages, the settlement shall be made through arbitration. It should be noted that 'market value' means the value established per the internationally-accepted methods adopted by an independent appraiser named by the parties. The Singapore-Indonesia BIT protects foreign investors against the direct and indirect expropriation of their property and assets and clarifies the definition of 'indirect expropriation'. It sets out detailed criteria for the valuation of the expropriation compensation. It excludes from the compensation any speculative or windfall profits claimed by the investor.

AREAS FOR IMPROVEMENT

Indonesia should create, at national level, a real-time record of foreign investors operating in the country and historical data on investor grievances. Such a database could help identify the sectors most prone to investor conflicts, recurrent issues arising between investors and public agencies, and patterns of investor non-compliance. The main findings could be shared with the relevant public agencies to recognise and address similar problems early on. The Government can also seek guidance from the Energy Charter Secretariat's Model Instrument on Management of Investment Disputes, which supports policy-makers in handling investment disputes while considering their needs and circumstances.

While the recent BIT between Singapore and Indonesia defines the term 'indirect expropriation', the Government may consider amending Article 7 of Law No. 25 of 2007 to clarify whether investors are protected from indirect expropriation. It may also set a definitive list of activities that constitute 'public interest' in the case of expropriation and the valuation methodology for determining the market value of the expropriated property.

Regulatory environment and investment conditions

QUICK FACTS

| Law No. 30 of 2009 (Electricity Law) governs and regulates activities in the electricity sector.

| The Indonesian Competition Commission (KPPU) conducts oversight of mergers and acquisitions to ensure such transactions do not lead to monopolistic practices or distort market competition.

STRENGTHS

The power sector's performance in 2021 improved compared to the previous year. According to PLN estimates, the country's total installed power capacity was 64,553.04 MW, with a year-on-year (YoY) increase of 1.92%. The electricity production was 289,471 GWh, up by 5.32% from 2020, while the power capacity was 57,679.27 MW (10.36% higher than 2020). Progress was also observed in the transmission and distribution sector. The length of the transmission network was 64,807 km (YoY increase of 5.66%), and that of the distribution network was 1,022,124 km (YoY increase of 1.58%). The System Average Interruption Duration Index (SAIDI) was 540.12 minutes per customer, down by 10.36% from 2020. At the same time, the System Average Interruption Frequency Index (SAIFI) was 6.7 times per customer, 27.62% less than the previous year. Total energy losses stood at 8.59%, with a 6.12% decrease YoY.

The Government is establishing a regulatory framework to promote the renewable energy sector. On 20 August 2021, the MEMR enacted Regulation No. 26 of 2021 on rooftop solar power. Regulation No. 26 applies to rooftop power systems of PLN customers and licence holders of other power business areas. It increases the net metering multiplier from 65% to 100% and the timeframe for accumulating net metering credits from three to six months. It introduces an online application and reporting mechanism that shortens the approval time from 15 to 5 days. Moreover, the Regulation allows rooftop solar owners to engage in carbon trading schemes.

There is a regulatory thrust on the expansion of grid infrastructure. Presidential Regulation No. 4 of 2016 (as amended by Presidential Regulation No. 14 of 2017) aims to increase the development of electric infrastructure through 35,000 MW for power generation and 46,000 km transmission lines to fulfil Indonesia's demand for electricity and stimulate economic growth. The RUPTL also sets ambitious plans for developing the country's power infrastructure. It aims to attract private investment in transmission projects on a build-lease-transfer, build-own-operate or power wheeling basis. While Indonesia's electrification ratio reached 99.45% in 2021 (up by 0.25% compared to 2020), PLN is trying to reach the 100% target as soon as possible. To this end, it has launched various programmes, including Lisa (Rural Electrification), Free Power Connection, One Man One Hope, Communal PLTS development, use of electric tubes (Talis), and so forth.

The RUPTL recognises the private sector's role in increasing the country's power generation capacity. It is expected that by 2030 independent power producers will develop 64.8% of the new capacities, including 56.3% of the new renewable power plants. 63.7% of solar power plants will be built by private companies. To mobilise the required financing, the Government has introduced

incentives for investors in several fields, including energy, such as an income tax reduction of 30% applied over six years, accelerated depreciation and amortisation, and VAT and import duty exemption for capital goods. The dividend withholding tax has been lowered to 10% or a percentage mentioned in an applicable tax treaty. Compensation for losses incurred over five years but not exceeding ten years is available.

Tax holidays for commercially operational plants will be granted for five to ten years. Corporate Income Tax (CIT) exemption is available for businesses with a minimum capital expenditure (CAPEX) of approximately IDR 500 billion (regular CIT is 22%). The CIT exemption is offered for five to 20 years, depending on the CAPEX. After that, CIT is reduced by 50% for two years. A 'mini tax holiday' with a 50% reduction in CIT is also offered for five years to businesses with a CAPEX of between IDR 100 billion and IDR 500 billion. Following this, a 20% reduction applies for two years. For businesses employing at least 300 local workers, there is a tax reduction on net income by 60% of CAPEX that will be applied in instalments over six years at 10% per year.

To implement its renewable energy target, the Government is developing one of the largest floating solar photovoltaic power plants, Cirata, with a capacity of 145 MW. This floating solar plant will make up for the limited supply from the Cirata hydropower plant by producing more power during the dry season when water availability is challenging. Besides this project, the Government has also announced the construction of a 40 MWp floating solar project at Nadra Krenceng reservoir and two floating solar photovoltaic projects of a cumulative 2.5 GWp on Batam Island.

Given the intermittent nature of solar and wind power, the Government and private investors are engaging in renewable power generation projects combined with storage solutions. In 2022, PLN signed a Memorandum of Understanding with the Indonesia Battery Corporation to build a battery energy storage system (BESS) with a capacity of 5 MW.

Indonesia has developed several innovative green financing mechanisms, such as the green Sukuk and green bonds. Moreover, in January 2022, the Government released Indonesia's Green Taxonomy 1.0, which was put together by eight ministries led by the Financial Services Authority. The taxonomy classifies economic activities supporting environmental protection and management, as well as climate change mitigation and adaptation. It is expected to support the financial sector in categorising green activities under their portfolios, monitoring credit and investment flows, encouraging disclosure

in sustainability reports, and promoting research and innovation in developing green projects.

Through Presidential Regulation No. 10 of 2021, the number of sectors wholly closed to foreign and domestic investors has been reduced from 20 to six, while sectors with foreign ownership restrictions have been lowered from 350 to 46. Several business activities previously closed to foreign investors or placing onerous requirements on them have been removed in the power sector. Small-scale electricity generation (1 to 10 MW), where a maximum of 49% foreign ownership was allowed, is now fully open to foreign investors. The Positive List also removes the 95% cap on foreign ownership for electricity generation above 10 MW and electricity transmission and distribution. The limits for constructing and installing high and extra high voltage installations (49% foreign ownership), medium and low voltage installations (100% domestic ownership) and electricity installation operation and maintenance (cap of 95% foreign ownership) have also been scrapped.

The Positive List also prioritises geothermal activities. Geothermal operation and maintenance services were subject to a maximum of 90% foreign ownership but are now fully open to foreign investors. Moreover, foreign ownership of geothermal electricity generation (10 MW), previously capped at 67%, is now 100% open to foreign investors.

Foreign ownership in the oil and gas sector has been liberalised to a large extent through the Positive List. The 75% foreign ownership cap on the construction of oil and gas platforms and offshore oil and gas drilling services has been removed. Moreover, 100% domestic ownership is required for constructing onshore upstream oil and gas production installations, onshore and offshore distribution pipelines, onshore drilling services, and undertaking oil and gas well operation and maintenance services and design and engineering services. This requirement has been eliminated, and all the activities are open to foreign investors. The Government has also started revising its approach to fossil fuel subsidies. It plans to allocate the fuel subsidy fund to other priority sectors and regulate fuel consumption and volume purchase.

The Government remains committed to protecting existing investments against new legal and regulatory restrictions. As a result, onerous conditions on foreign ownership introduced through the Positive List will not apply to investments established before 2 February 2021. At the same time, existing foreign investors are eligible for the Positive List's benefits.

AREAS FOR IMPROVEMENT

The Government must progressively introduce cost-reflective electricity tariffs to increase PLN's cash flow, limit its borrowing, and give independent power producers confidence that their off-take agreements will be upheld. At the same time, it must establish an independent energy regulatory authority responsible for ensuring market competition and restructuring PLN. This energy regulator should develop the national tariff strategy and be granted the flexibility to adjust it periodically.

The Government should consult PLN, the Ministry of Finance, regional governments and private sector investors to ensure changes to the tariff regime will maximise profits and minimise financial risks. At the same time, other categories of consumers affected by a tariff hike should also be informed in time to manage the financial impact. The MEMR should organise demand-side management training and information sessions for electricity customers, informing them of measures that can be taken to lower energy consumption and increase energy savings.

The MEMR should gradually reduce financial support granted to fossil fuels and re-direct public spending into renewable energy and clean transportation to make them competitive and attractive to potential investors. It should accelerate efforts to stop subsidies offered to energy companies for below-market pricing of fuels and replace these with direct subsidies for low-income customers and small businesses.

PLA should reanalyse the usefulness of 'take-or-pay' clauses in its future purchase agreements for fossil fuel-based electricity. Flexibility in the contractual arrangements for fossil fuels will allow the uptake of more renewable electricity by PLN and align with the country's ambition to phase out CFPPs by 2056. To give renewable energy investors confidence regarding off-take, the Government should adopt the regulatory framework under which PLN will purchase electricity from renewable power plants. It must specify the terms and conditions for purchase auctions, the tendering and award procedures, and clarify PLN's potential purchase price and capping. In parallel, the role of PLN in off-grid electricity supply should be limited to allow private sector participation in this area. A new agency under MEMR could regulate off-grid energy supply and explore business models and community-based renewable energy schemes.



Jordan

Population ¹	10,269,022
Area (km ²) ¹	89,318
GDP per capita (USD) ¹	4,405.84
TES/GDP (GJ/thousand 2015) ²	9.38
Net Energy Imports (TJ) ²	378.91
RE share in Final Energy Consumption (%) ²	8.2
Total CO ₂ emissions (MtCO ₂) ²	22.84

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	1 project 2 institutional buy-out deals	Republic of Korea: 1 RE project of 170,28 mEUR Value of 1 deal (Supranational) is n.a Value of 1 deal (United Kingdom) is n.a

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022.
For more information see Annex III of this report.

RE: Renewable energy based electricity production

Jordan’s overall risk level against the assessed areas is **low**.

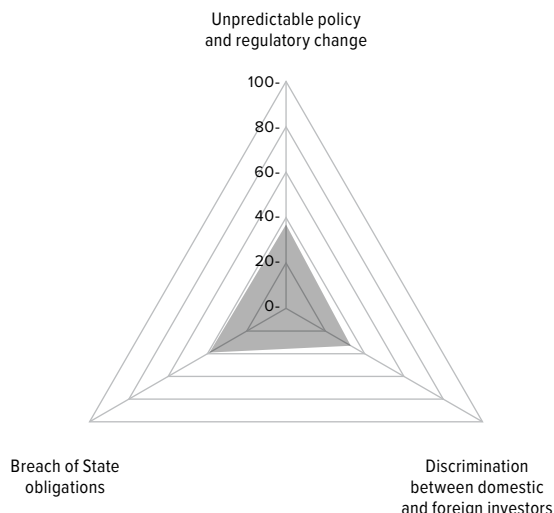
The risk of *discrimination between foreign and domestic investors* is lower than the risks of *unpredictable policy and regulatory change* and *breach of State obligations*.

Jordan has a good performance on three EIRA indicators and a moderate performance on two indicators. The highest-scoring indicator is *rule of law* at 73, followed by the indicator *management of decision-making processes* at 71. Its score on the indicator *foresight of policy and regulatory change* is 62, and on the indicator *regulatory environment and investment conditions*, it is 58. *Framework for a sustainable energy system* is the lowest-scoring indicator at 53.

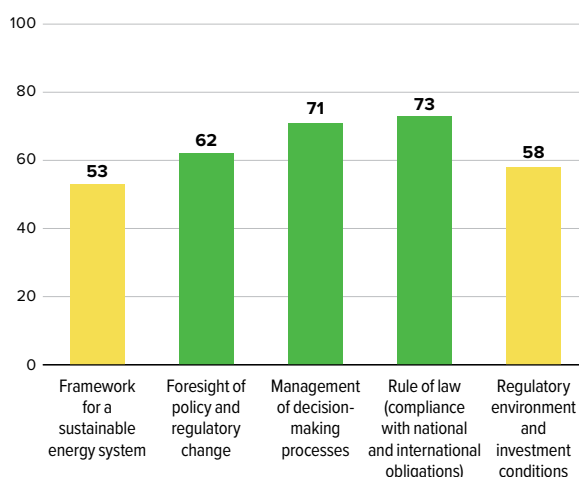
On a more detailed level, Jordan’s overall sub-indicator performance is good. The highest-scoring sub-indicators are *respect for property rights* at 81 and *policy planning on clean energy transition* at 76. Following these are the sub-indicators *institutional governance* at 75, *regulatory independence* at 72, *transparency and anti-corruption measures* at 68, *management and settlement of investor-State disputes* at 65, *communication of vision and policies* at 63 and *robustness of policy goals and commitments* at 61. Its score is moderate on the sub-indicators *restrictions on FDI* (59), *environmental protection, human rights and gender* (55), *enabling measures to support clean energy transition* (43), and *electricity industry market structure and competition* (42). The lowest-scoring sub-indicator is *energy resilience* at 40.

While Jordan is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to increase competition in the electricity market and strengthen the country’s energy resilience.

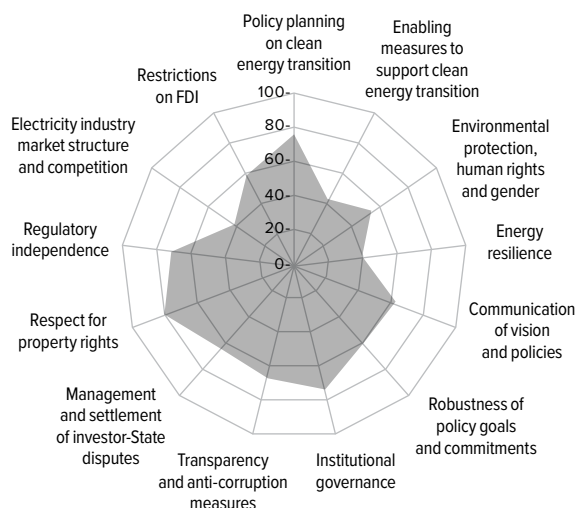
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

- Jordan submitted its updated NDC to the UNFCCC Secretariat in October 2021.
- The Green Growth National Action Plan 2021-2025 (GGNAP) sets out sector-level green growth frameworks for the energy, transport, water, waste, agriculture and tourism sectors.
- Climate Change Bylaw of 2019 defines the regulatory framework for climate-related actions.

STRENGTHS

In its updated NDC, Jordan has committed to more ambitious targets than before. It has raised the macroeconomic GHG emissions reduction target from 14% in the first NDC to 31% in the updated NDC, compared to the business-as-usual (BAU) scenario (using the 2012 GHG inventory as a base year). Compared to the BAU scenario, it has set an unconditional emission reduction target of 5% and a 26% one conditional upon international support and resource availability.

The updated NDC contains mitigation measures for the energy sector, such as increasing power generation from renewables to more than 35% by 2030 and implementing the Aqaba Amman Water Desalination and Conveyance Project (AAWDC). It envisages that two concentrated solar power plants of 100 MW and 300 MW will be commissioned by 2030. Along with this, it sets measures to increase by 9% efficient energy consumption across sectors, install solar water heaters in 90,000 houses, insulate all pipes, fittings and tanks in food industries and, renovate conventional burners in the steel reheating industry.

Jordan is taking steps to decarbonise its transport sector. The Government has issued the GGNAP for transport (T-GGNAP) 2021-2025, aligned with the National Green Growth Plan (NGGP), Jordan Vision 2025, and its NDC commitments. The T-GGNAP aims to develop a national electric mobility strategy and action plan and design a public transport electric mobility pilot programme for Amman. To implement the T-GGNAP, the Government has launched the Amman Bus Rapid Transit project, establishing electric transportation networks in Irbid and Zarqa through 100 new electric buses. The Government has also developed its Long-Term National Transport Strategy (2015-2030), which aims to launch low-carbon municipal bus fleets in the Irbid, Zarqa and Madaba municipalities, promote alternative fuels (such as liquified petroleum gas and compressed natural gas), and improve the quality of traditional fuels. Moreover, the Energy and Mineral Regulatory Commission (EMRC) has announced plans to ensure that new refuelling stations are equipped with electric charging facilities. In 2022, it issued 87 permits to establish public and private charging stations for electric vehicles, of which 54 have been built, and 33 are under construction.

Given Jordan's lack of conventional energy resources and high reliance on imports and intermittent renewable energy sources, the Ministry of Energy and Mineral Resources (MEMR) is conducting a detailed feasibility study for a 450 MW pumped hydro storage plant in Mujib Dam. At the same time, it is undertaking technical and economic feasibility studies with international agencies and consultants for scaling up battery storage systems.

There are high-level targets and actions planned to reduce emissions from the waste and Agriculture, Forestry, and Other Land Use sectors which contribute to 6% and 1% of emissions, respectively. Jordan plans to reduce methane emissions from 78% to 30% by reducing waste output through recycling, reuse and sorting. It has also expressed its intention to join the US- and EU-led initiative to reduce global methane emissions by 30% by 2030. The Waste Management Framework Law of 2020 introduces the polluter pays principle in domestic law and requires producers and polluters to take responsibility for the treatment and disposal of waste. On the policy side, the National Solid Waste Management Strategy (2015-2034) and its action plan aim to modernise waste management by taking the 'Reduce, Reuse, Recycle' approach over 20 years. The strategy sets short-, mid- and long-term targets for the different waste treatments and proposes actions for recycling and reduction of biowaste in landfills.

The Government recently developed the GGNAP for the agriculture sector to strengthen farmers' adaptation and resilience to climate change and support mitigation efforts in agricultural practices. It is also implementing the National Water Strategy 2016-2025, which sets out measures for addressing climate change, water-energy-food nexus, sustainability of overexploited groundwater resources, decentralised wastewater management, and reuse of treated wastewater. At the same time, the Government is progressing with the National Project for Water Quality Monitoring in Jordan to assess water quality and evaluate compliance with local technical specifications and rules in water exploitation activities.

AREAS FOR IMPROVEMENT

The Government is encouraged to finalise and adopt its action plan for deploying energy storage solutions in the short and long term. Given Jordan's massive solar potential, emphasis should be given to scaling up home solar battery systems. Economic and technical feasibility studies should also be conducted to explore the potential of grid-scale battery storage to address the intermittency of solar and wind energies, ensuring system flexibility and increasing the reliability and dispatch of renewable electricity. Moreover, as recommended by IRENA in its 2021 Renewable Readiness Assessment of Jordan (RRA), the Government should revise the National Energy Sector Strategy (2020-2030) to include targets for utility-scale and distributed energy storage and define services that can be provided by storage facilities, such as spinning reserve, arbitrage, load-shifting, peak shaving, and clarify the remuneration models for these services.

Foresight of policy and regulatory change

QUICK FACTS

- The National Energy Strategy 2020-2030 (NES 2030) is a ten-year roadmap defining Jordan's national energy goals.
- Under the purview of GGNAP, the Government has developed dedicated green growth plans, covering the period from 2021 to 2025, for the energy, agriculture, tourism, transport, waste and water sectors.

STRENGTHS

The NES 2030 prioritises domestic power generation from renewable energy sources, grid safety and reliability, reinforcing transmission and distribution networks, reducing electricity losses, strengthening existing interconnection projects and establishing new ones, and promoting the energy-water nexus through joint projects.

To meet the priorities mentioned above, the NES 2030 targets increasing the share of renewable power production from 2,400 MW in 2020 to 3,200 MW by 2030. Notably, by July 2022, the total installed capacity of power generated from renewable energy sources reached approximately 2,525 MW, contributing to 29% of the total electricity generated since the beginning of 2022, compared to about 26% in 2021. Approximately 59% of the total installed capacity (1,498 MW) was produced under PPAs, while 41% (1,027 MW) was generated for self-consumption.

Besides this, the NES 2030 anticipates energy efficiency across sectors will increase by 9% in 2030 compared to 2018, and smart meters will be installed before the end of 2022. It also plans to reduce CO₂ emissions by 10%. Given that the water sector has a substantially high energy consumption, the NES 2030 sets a target to reduce this consumption by 15% by 2030 through energy efficiency measures against the baseline year 2018.

Recognising the role of natural gas as a bridging fuel for the energy transition, the Government aims to start production from the Risha gas field by 2030. It is also looking to attract international investors in conventional and unconventional gas resources, although the option to import gas through the port of Sheikh Sabah in Aqaba will be retained in the mid-term.

The Government has developed action plans to support the implementation of these strategies and targets. The GGNAP uses a cost-benefit analysis approach to identify the challenges and opportunities for project implementation across six sectors. The energy sector GGNAP identifies five national green growth objectives. These objectives are translated into 16 sub-objectives, including reducing fossil fuel imports and air pollution from fossil fuel consumption, increasing biofuel production, lowering energy sector-based public debt, and decreasing total GHG emissions from energy sector activities.

The Government's Indicative Executive Program (GIEP) 2021-2024 outlines strategies and fiscal reforms for green growth and mechanisms to implement climate change measures. It also defines measures to optimally implement the NDC Action Plan and GGNAP, such as harmonising the national policies to ensure an economy-wide low-carbon transition, attracting foreign investment, and mobilising

international climate finance through carbon market instruments.

In 2019, the Government of Jordan validated its results-based NDC Action Plan, which defines climate change adaptation and mitigation actions for the transport, energy, agriculture, health, and water sectors. The NDC Action Plan is updated periodically based on the progress made toward the NDC's achievement. Its most recent July 2021 version is aligned with the updated NDC's objectives and sets a new output statement, key performance indicators and targets (for 2019, 2020 and 2021). The NDC Action Plan also clarifies the lead ministry responsible for implementing the NDC actions, the focus areas, funding requirements and source, cost co-share contributed by the lead ministry, and implementing partners.

Some projects and programmes are underway to promote the use of renewable and energy-efficient technologies among citizens. On 3 March 2022, the MEMR entered into agreements with local companies to replace 410,000 traditional lighting units with LEDs in the Irbid, Mafrqa, Ajloun and Jerash municipalities. The transition will help to achieve about 20 million Jordanian dinars (JOD) of annual savings, including JOD 14 million in savings in energy consumption and JOD 6 million on the annual maintenance allowance.

On 22 May 2022, the Renewable Energy and Energy Rationalization Fund launched the second phase of the national programme to support the residential sector in installing solar home systems and heaters. The Government will cover 30% of the cost of solar cells and heaters. At the same time, local financial institutions will contribute to reducing electricity prices for residents.

Some policies and action plans contain mechanisms to monitor and evaluate their progress. For instance, the National Climate Change Adaptation Plan of Jordan outlines monitoring and evaluation actions to track the progress made toward implementing adaptation interventions and measuring their impact on reducing vulnerability, improving adaptive capacity, and supporting the overall well-being of populations affected by climate change. Notably, the Ministry of Environment (MoE) manages the Measurement, Reporting and Verification (MRV) Registry System for national GHG emissions.

AREAS FOR IMPROVEMENT

To accommodate higher shares of renewables, the Government should develop a renewable peak load strategy and a least-cost strategy to expand the grid infrastructure. At the same time, it should develop disaggregated energy-efficiency targets for end-use sectors in an updated national energy efficiency action plan since the last one expired in December 2020.

Management of decision-making processes

QUICK FACTS

| The MEMR is tasked with policy-making in the energy sector.

| The MoE formulates and leads policy-making on environmental protection and climate change.

| The Jordan Investment Commission develops investment-related policies, while the Ministry of Industry, Trade and Supply (MITS) is responsible for economic, commercial and industrial policies and strategies.

STRENGTHS

The Government is trying to ensure economy-wide policy planning on climate change mitigation and adaptation. Climate Change Bylaw of 2019 establishes the National Climate Change Committee (NCCC) responsible for oversight and inter-ministerial coordination on climate change adaptation and mitigation measures. The NCCC is chaired by the Minister of Environment and comprises 16 Secretary Generals from the line ministries.

In January 2021, the Government instructed all ministries and public institutions to integrate the NDC Action Plan and the NGGP into their respective sector development plans for a whole-of-government approach to climate mainstreaming. It has also adopted the National Climate Change Action Plan (NCCAP) to coordinate climate actions between public, private and community-based organisations, improve knowledge-sharing and communication on climate issues, and develop a data management system for climate change adaptation.

In August 2022, the MEMR launched the Public-Private Partnership Council for the mining sector. The Council's purpose is to modernise the sector and identify steps to increase its contribution to the GDP. Steps are already being taken to develop a national programme for mining, collect and disseminate mining data per international standards, harmonise legislation and regulations with international standards, and set financial incentives to attract investment in the sector.

In 2022, the MEMR launched two electronic platforms to facilitate project developers in the energy sector. The first platform will allow the Government to approve custom duty and general sales tax exemptions for inputs of rationalising energy consumption, renewable power generation systems, solar water heating systems and cells. The portal is linked to the Companies Control Department (CCD), the MITS, the Jordan Customs Department, the Income and Sales Tax Department, and the Standards and Metrology Institution, so the recipient of the exemption does not need to approach these authorities separately. The second online system will help fast-track the mining activities procedures by linking all the concerned authorities into one database, thereby reducing the time and cost of obtaining the services and facilitating e-filing.

Ministries and State agencies regularly report their budget, expenditures and performance to the public. The EMRC has published its Strategic Plan for 2020 to 2022, while the MoE, MEMR and the National Electric Power Company (NEPCO) have posted their annual reports for 2020 on their respective websites. The MEMR has also uploaded its general budget and expenditure for 2020.

The General Budget Department of Jordan displays the draft Government budget for 2022 and the respective draft budgets of the MEMR, the MoE, the EMRC, the Jordan Atomic Energy Commission and the Ministry of Water and Irrigation. The draft budgets of these bodies reflect their strategic objectives and performance indicators, the baseline year (2020) and targets, the preliminary self-evaluation results, and the target to be achieved by 2025. The draft budgets also reflect the programme-wise budget allocation for 2022 and the estimated budget allocation for women under each programme between 2020 and 2024. They also summarise the overall expenditures from 2020 to 2024 (actual and estimated), capital expenditures for each governorate, and current expenditures estimated for each programme (2020-2024).

Through the online open data portal, the Government has made information available on the number and types of licenses and permits issued during 2022 in the renewable energy, mining, and petroleum and petroleum products sectors. It has also published information, as of March 2022, on the daily readings of the nuclear monitoring plants and the renewable energy systems linked to the electricity distribution network based on net metering, as well as reported on the number of inspection tours conducted by the EMRC in the petroleum and petroleum products sector.

Efforts are being made to strengthen public accountability. Companies Law of 1997 requires businesses operating in Jordan to provide the CCD with information on their ultimate beneficial ownership and the necessary documentation. In September 2021, the Government published the amended Companies Law of 2021, offering a three month grace period to companies yet to file beneficial ownership information. It also prescribes a fine of JOD 2,000 and/or a one-year imprisonment term for failure to comply with the amended Law's requirements.

AREAS FOR IMPROVEMENT

| Most information on beneficial ownership is not accessible to the general public except for direct shareholding data published on the CCD's online portal. Therefore, the Government is recommended to develop an online registry of ultimate beneficial ownership accessible by citizens and investors for free. The registry should be updated periodically and supported with documentation upon any change.

| The Government should finalise, at the earliest, the revised version of the Law on Guarantee of Access to Information of 2007.

Rule of law

QUICK FACTS

- | Jordan became a Contracting Party to the ECT on 11 December 2018.
- | Jordan has been a member of the WTO since 11 April 2000.
- | Jordan is a member of MIGA.

STRENGTHS

Over the last few years, the Government has made considerable efforts to establish investor-State conflict prevention mechanisms. In 2019, the Ministry of Investment (MoI) issued Investor Grievance Regulation No. 163 of 2019, establishing a Grievance Committee (GC) to which foreign investors may submit complaints against public authorities. On 23 January 2020, the MoI approved the Grievance Hearing Instructions No. 1 of 2020 to implement Regulation No. 163.

Hearing Instructions No. 1 of 2020 outlines the rules for application submission, documentation, referral to the GC and the hearing procedure. According to it, the GC must take into account the amicable dispute settlement referred to in the applicable IIAs or contractual agreements before considering a case. Since this conflict resolution mechanism applies to the 'pre-dispute' phase, an investor cannot submit a grievance application if it filed an appeal before the competent court or initiated alternative dispute resolution proceedings. However, a grievance application does not affect an investor's right to institute court or arbitration proceedings.

The GC must convene within two working days of receiving a grievance application from an investor to determine if the matter is urgent. It must give its reasoned decision within two days in urgent cases and ten days in other cases. A two-fold criterion is applied to determine urgency. Firstly, if the matter in question significantly impacts a project's operation or may cause business disruptions. Secondly, if it is a matter where the investor may miss a legally binding deadline to file an appeal in court in case the GC does not urgently take a decision.

While the GC exclusively assists investors, the Government has also created other avenues to address grievances of a general nature. Ombudsman Bureau Law of 2008 has been enacted to promote transparency, integrity and accountability in public administration. It establishes the Ombudsman Bureau (OB) to issue recommendations on complaints and objections from public service beneficiaries. To avoid conflicting decisions, the OB is not entitled to hear matters pending before an administrative tribunal, domestic court, or matters already adjudicated by a court. Besides the OB, the Integrity and Anti-Corruption Commission follows up on all investment-related procedures to ensure that investors face no unnecessary obstacles in dealing with public administration employees and the private sector.

The Government is committed to protecting the investments of domestic and foreign companies operating in Jordan. The Jordanian Constitution states that expropriation is prohibited unless deemed in the public interest. The Jordanian Civil Code No. 43 of 1976 affirms the provisions of the Constitution in this respect.

The Jordanian Acquisition Law of 1987 defines expropriation and stipulates public interest as grounds for expropriation. It also sets out the procedure to determine compensation in the case of expropriation. Typically, if the Government elects to expropriate property, including in the energy sector, the owner and the Government will attempt to agree on a fair compensation amount. Failing agreement, they may submit a request to the domestic court to determine the compensation. The Law on Property Ownership 2019 obliges the expropriating public authority to compensate the property owner within 30 days from (1) the date the domestic court issues its final decision on the compensation amount or (2) the date agreed by the parties, or (3) the date the agreement between the parties was certified. The property owner is entitled to an interest of 5% per year accrued until the compensation is paid.

On the international level, BITs signed by Jordan guarantee investors protection against arbitrary acts of expropriation. For instance, BITs signed with Singapore, Portugal, Japan and Germany state that an investment will not be expropriated or nationalised directly or indirectly except in the public interest, on a non-discriminatory basis, following the due process of law, and accompanied by payment of prompt, adequate and effective compensation.

Twenty-one BITs signed by Jordan require compensation to be paid without delay. Provisions on interest payment differ across BITs. For example, while the BITs with Austria and Finland refer to interest at a commercial rate established on a market basis, those with Greece, The Netherlands and Bahrain stipulate the normal/ordinary commercial rate. In a few BITs, such as those with Kuwait and Russia, the rate of interest shall be not less than the LIBOR rate. Other formulations of the interest rate include 'applicable commercial rate' in the BITs with the Republic of Korea and the Slovak Republic, 'fair and equitable rate' in the BIT with India and the 'rate applicable in the territory of the Contracting Party' in the BIT with Thailand. It should be noted that 49 BITs signed by Jordan are currently in force and provide access to international arbitration in case of a dispute with a host State.

AREAS FOR IMPROVEMENT

The Government may amend the Investment Law of 2014 and the Law on Property Ownership of 2019 to identify and list the 'public interest' activities for which the State may expropriate private property. Moreover, there should be a legally binding timeline for paying compensation and an explanation of the acquired property's intended use. There must be explicit mention that any act of expropriation will be non-discriminatory.

Regulatory environment and investment conditions

QUICK FACTS

The EMRC is the national regulator for all energy activities. NEPCO is the sole buyer of electricity, which it sells to the distribution network operators.

STRENGTHS

The EMRC performs its supervisory functions effectively in the energy and mining sectors. In 2021, it conducted 2,531 inspections compared to 2,154 in 2020. The number of seizures rose from 13,956 in 2020 to 18,472 in 2021 (18,346 in the electricity, energy and renewable sectors and 126 in mining). No seizures were recorded in the nuclear and oil and its derivatives sectors.

The MEMR and EMRC have made substantial progress on the electricity sector reforms over the last two years. In April 2022, the Government restructured electricity tariffs to eliminate price distortions and grant direct subsidies to households while reducing the tariffs for the commercial, industrial, health, hotel and agricultural sectors.

The EMRC has developed an online portal for citizens to apply for the new tariffs. Households are eligible for two types of subsidies. The first is a direct subsidy deducted from the electricity bill. For those consuming between 51 to 200 kWh, the direct subsidy is 2.5 JD, whereas those consuming 201-600 kWh will receive 2 JD. The second subsidy applies depending upon the tariff segment under which a household falls. The number of tariff segments has been reduced from seven to three to help households understand the bills based on their consumption and accordingly regulate their spending. The EMRC anticipates the new tariff will have minimal impact on households that consume less than 600 kWh per month.

There are only two segments of unsubsidised households, those consuming up to 1000 kWh (monthly consumption tariff is 120 Fils per kWh) and those consuming more than 1000 kWh (150 Fils). The unsubsidised tariffs apply to non-Jordanian customers, houses with multiple meters (one meter is subsidised), and uninhabited houses consuming less than 50 kWh for three consecutive months. For those with renewable energy systems, the unsubsidised tariff will apply only to the difference if the energy consumed from the electrical network is higher than that exported.

The new tariff scheme removes the maximum load tariff (JD 3.78) across all economic sectors, reducing operational costs and promoting competitiveness. For the commercial sector, the tariff for up to 2000 kWh is maintained at 120 Fils per month. For those consuming up to 2000 kWh, it has been reduced from 175 Fils per month to 152 Fils per month. The daytime tariff for the average industrial enterprise has been lowered from Fils 69 to Fils 79 per kWh per month, while the night tariff is maintained at Fils 65. For the agricultural sector, the flat tariff has been reduced from 60 fils to 55 fils. The daytime tariff has decreased from Fils 59 to Fils 55, while the night tariff remains at Fils 49 per kWh. The day and night flat and triple tariffs applicable to the hotel sector have been

unified at Fils 82 per kWh. The tariffs of private hospitals have been reduced from Fils 160 to Fils 140.

There are various incentives offered to energy investors operating in the country. A corporate income tax reduction of 50% is offered for ten years to enterprises undertaking activities in the least developed regions. Customs duty exemption and zero-rate General Sales Tax are offered to renewable energy and energy conservation systems equipment. Moreover, NES 2030 reduces the industrial sector's special tax on natural gas consumption from 16% to 7%, with tax reliefs for the first three years.

Besides the abovementioned incentives, the Government has launched initiatives to scale up investments in the energy sector in partnership with international development partners. On 26 March 2022, the MEMR and the US Agency for International Development in Jordan inaugurated a project worth USD 40 million to strengthen the electricity sector's economic performance and regulatory framework and improve the efficiency of services rendered in the oil and gas markets. Additionally, in September 2022, MEMR launched an interactive mineral resource and oil and gas exploration map that provides technical and geographical information on the two sectors. It aims to facilitate investors in identifying project opportunities by providing them real-time data on the sector. Information on areas open for oil shale exploration has also been included in the map.

The MEMR is looking to mobilise financing for renewable energy projects, bearing in mind the national grid's capacity. Since March 2022, it has resumed negotiations with the private sector on the prices NEPCO will pay to renewable electricity producers. These negotiations aim to ensure electricity prices remain economically viable for electricity generators while reducing NEPCO's financial burden.

AREAS FOR IMPROVEMENT

While the new tariff scheme is a step toward reducing cross-subsidisation, its impact on NEPCO's revenue will be marginal. Therefore, the Government should prepare a roadmap for phasing out all cross-subsidies in the short-mid term and transition to fully cost-reflective tariffs. It should also conduct technical and economic feasibility studies to implement time-of-use tariffs. At the same time, the MEMR is encouraged to continue ongoing discussions with investors on the potential restructuring of renewable-based PPAs, so policy revisions are based on mutually acceptable terms to ensure regulatory predictability and promote investor confidence.

INDICATOR 1

Improvements proposed in 2022

Develop an action plan to scale up home solar battery systems and conduct economic and technical feasibility studies to explore the potential of grid-scale battery storage for intermittent renewable energy sources.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2018

Adopt the national energy strategy for 2020-2030 at the earliest.

Fully implemented. In July 2020, the MEMR adopted the NES 2030.

Periodically evaluate the energy sector's incentive framework to ensure it evolves predictably and progressively.

Work ongoing. The MEMR is conducting a technical study on the capacity of the national grid to absorb more variable energy.

Ensure that the policy implementation authorities differ from those evaluating the progress made towards achieving the policy.

Pending

Improvements proposed in 2020

Update the National Energy Efficiency Plan 2017-2020 since the last one expired in December 2020.

Pending

Improvements proposed in 2021

Set disaggregated renewable energy targets for the industry, agriculture, heating/cooling, and transport sectors.

Pending

Develop a renewable peak load strategy and a least-cost strategy to expand the grid infrastructure.

Pending

Develop disaggregated energy-efficiency targets for end-use sectors.

Pending

INDICATOR 3

Improvements proposed in 2018

Introduce institutionalised stakeholder engagement mechanisms for consultation on draft laws and regulations.

Partially implemented. The Government conducted intensive stakeholder consultations while adopting the NES 2030 and the GGNAP. In April 2022, it restructured electricity tariffs after rigorous stakeholder engagement. Since March 2022, the MEMR has been organising regular meetings with the private sector to resume negotiations on the prices NEPCO will pay to renewable electricity producers.

Establish a unit within the Legislative and Opinion Bureau to prepare official translations of laws and policies in foreign languages.

Partially implemented. The Legislative and Opinion Bureau has launched an updated user-friendly website but the translations of draft and enacted laws are unofficial.

Improvements proposed in 2020

Continue to support the decentralisation and electoral reform.

Work ongoing. In early 2020, a draft local administration law was tabled in the Jordanian Parliament. The draft proposes the merger of the Law on Decentralisation and the Law on Municipalities, both enacted in 2015.

Adopt, after public consultation, amendments to the Law on Guarantee of Access to Information of 2007.

Pending

Improvements proposed in 2021

Develop an e-mobility strategy for the MEMR and the Ministry of Transport; ensure coordinated action by the MEMR, NEPCO and the electricity distribution companies to optimise network management.

Fully implemented. The Government has issued the T-GGNAP, which runs from 2021 to 2025 and is aligned with the NGGP, Jordan Vision 2025, and Jordan's NDC commitments under the Paris Agreement.

Improvements proposed in 2022

Develop an online registry of ultimate beneficial ownership, accessible by citizens and investors for free, which is updated periodically and supported with documentation upon any change.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2018

Establish a foreign investment ombudsperson or similar institution to settle issues arising in the course of projects.

Fully implemented. In 2019, the MoI issued the Investor Grievance Regulation No. 163 of 2019, establishing a grievance committee to which foreign investors may submit complaints against public authorities. On 23 January 2020, the MoI approved the Grievance Hearing Instructions No. 1 of 2020 to implement Regulation No. 163.

Update national laws to include a timeline for paying compensation in case the State expropriates private property; explicitly stipulate that any act of expropriation will be non-discriminatory.

Pending

INDICATOR 5

Improvements proposed in 2018

Appoint an independent auditor to oversee the EMRC's annual accounts.

Pending

Relax/fast-track investment screening procedures of the CCD.

Partially implemented. In 2020, the CCD launched an electronic portal through which investors can apply for business registration and submit the necessary documents, and the CCD can audit these requests automatically.

Improvements proposed in 2020

Implement a new and symmetrical tariff adjustment mechanism; conduct technical studies on protecting low-income and vulnerable households from the removal of cross-subsidies.

Partially implemented. In April 2022, the Government restructured electricity tariffs to eliminate price distortions and grant direct subsidies to households while reducing the tariffs for the commercial, industrial, health, hotel and agricultural sectors. The new tariff is expected to impact households consuming less than 600 kWh per month minimally.

Remove the suspension on new applications for renewable energy projects with capacity exceeding 1 MW.

Fully implemented. The Government has revoked its decision suspending new applications for renewable energy projects with capacity exceeding 1 MW.

Improvements proposed in 2022

Conduct technical and economic feasibility studies to implement time-of-use tariffs.

Improvement suggested in 2022. Status will be updated in 2023.



Kazakhstan

Population ¹	19,002,586
Area (km ²) ¹	2,724,902
GDP per capita (USD) ¹	10,041.49
TES/GDP (GJ/thousand 2015) ²	14.49
Net Energy Imports (TJ) ²	-3,907.44
RE share in Final Energy Consumption (%) ²	1.7
Total CO ₂ emissions (MtCO ₂) ²	205.04

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Extraction of natural gas and crude petroleum	1 acquisition deal 1 joint venture deal	Value of 3 deals (Luxemburg & United States of America) are n.a
Manufacture of refined petroleum products	1 new project	Russian Federation: 1 project of 77.6 mEUR
Support activities for petroleum and natural gas extraction	2 acquisition deals 1 joint venture deal	Canada: 1 deal of 168.3 mEUR Values of 2 deals (Austria & France) are n.a
Mining of uranium and thorium ores	1 new project	China: 1 project of 1,000 mEUR

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.

Kazakhstan’s overall risk level against the assessed areas is **low**.

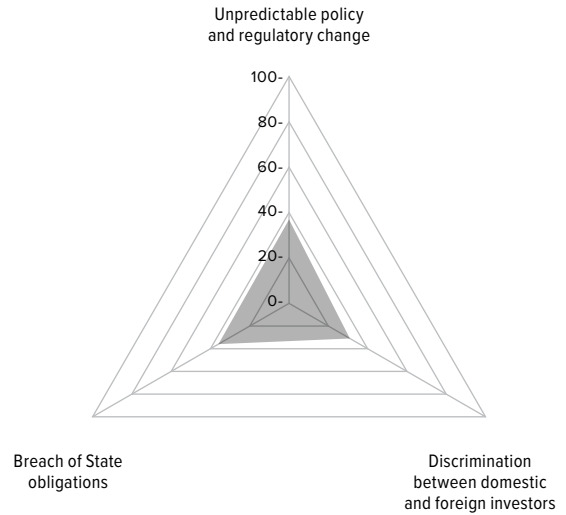
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *breach of State obligations* and *unpredictable policy and regulatory change*.

Kazakhstan has a good performance on three EIRA indicators and a moderate performance on two indicators. *Management of decision-making processes* is the highest-scoring indicator, with a score of 78, followed by the indicators *rule of law* at 69 and *framework for a sustainable energy system* at 61. On the indicator *regulatory environment and investment conditions*, it has a score of 52. Its score on the indicator *foresight of policy and regulatory change* is 47.

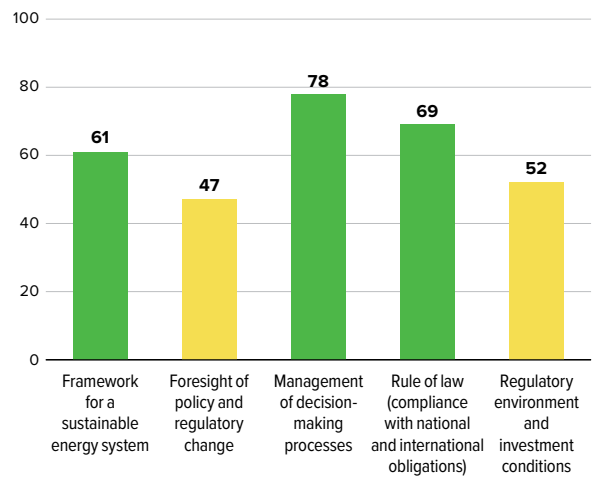
Kazakhstan’s overall sub-indicator performance is good. The highest-scoring sub-indicator is *institutional governance* at 83. Kazakhstan’s score is good on six sub-indicators, namely, *respect for property rights* at 78, *restrictions on FDI* at 78, *transparency and anti-corruption measures* at 72, *environmental protection, human rights and gender* at 70, *policy planning on clean energy transition* at 64, and *enabling measures to support clean energy transition* at 61. It has a moderate score on the sub-indicators *management and settlement of investor-State disputes* (59), *electricity industry market structure and competition* (54), *robustness of policy goals and commitments* (50), *energy resilience* (50), and *communication of vision and policies* (43). The lowest-scoring sub-indicator is *regulatory independence* at 25.

While Kazakhstan is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to increase regulatory independence in the energy sector.

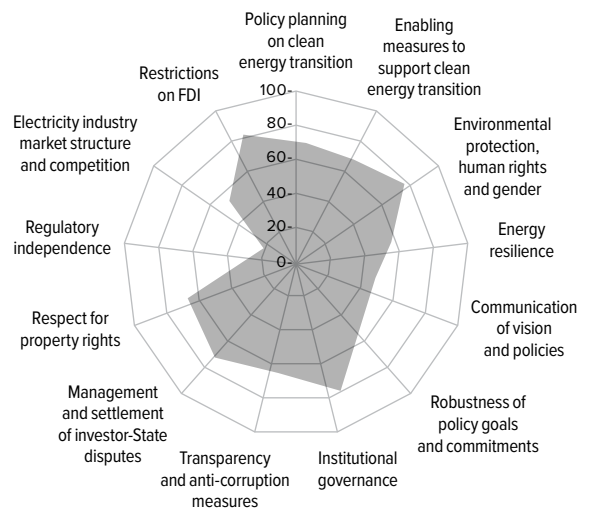
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

- | Kazakhstan submitted its first NDC to the UNFCCC Secretariat in December 2016.
- | On 27 December 2021, the Government adopted the new edition of the Environmental Code of the Republic of Kazakhstan.
- | In December 2021, a new project office was established to ensure Kazakhstan's transition to carbon neutrality by 2060 and finalise a strategy for this purpose.

STRENGTHS

Kazakhstan's first NDC commits to a 15% reduction in national GHG emissions by 2030. It also envisages the share of gas in power generation to be 25% by 2030. The contribution of renewable energy in electricity generation must be 15% by 2030 and 50% by 2050. Efforts are already underway to meet these targets. According to the Bureau of National Statistics, in 2020, stationary sources of pollution emitted 2,441 thousand tonnes of pollutants into the air, which is 1.7% less than in 2019. The treatment facilities of stationary sources captured and neutralised 93.1% of the total volume of pollutants.

Ensuring energy security while achieving the 2060 net-zero target is a priority for the Government. As a result, on 24 March 2022, it approved the Energy Balance of the Republic of Kazakhstan until 2035 (Energy Balance 2035). It is anticipated that by 2035 Kazakhstan's electricity consumption will reach about 153 billion kWh, well above the projected generation capacity of 89 billion kWh. The Energy Balance 2035 expects to increase power generation substantially, primarily utilising renewable energy sources and low-carbon technologies. Power generation from renewables will account for 6.5 GW by 2035, while the share of gas is expected to reach 5.1 GW. Hydropower plants will contribute about 2.1 GW. At the same time, the share of coal will be about 1.4 GW. The Energy Balance 2035 also introduces nuclear energy to the power generation mix and expects it to contribute about 2.4 GW by 2035.

According to preliminary calculations, building a nuclear power plant with at least two power units and a capacity of 1,000 to 1,400 MW is necessary to meet the country's growing energy demand. To this end, the Government is researching the development of nuclear energy based on natural and climatic factors and the possible impact of nuclear power plants on the environment. It is also analysing the technologies of six potential international suppliers and the project's financial needs. The cost of building a nuclear power plant with two units of 1 to 1.2 GW is expected to be between USD 6 billion and USD 12 billion. According to the preliminary findings, it is foreseen that 80% of financing for the plant's construction will come from external resources and 20% from the Government of Kazakhstan.

The Law 'On Energy Saving' pursues the goal of efficiently using fuel and energy resources. It also acknowledges the need to create an enabling environment for increasing the share of renewable resources in the energy balance.

The new Environmental Code aims to improve the quality and implementation of environmental standards and streamline the legal and regulatory framework for environmental protection. It introduces the polluter pays principle for industrial enterprises and requires them to take all necessary actions to restore the original environment. It requires project operators to pay a fee for emissions, particularly methane, and encourages project developers to introduce the State-prescribed Best Available Techniques (BAT). The International Center for Green Technologies and Investment Projects is responsible for preparing BAT reference books for different activities, including oil and gas processing, fuel combustion in large facilities, and cement, lime, and inorganic chemical production. Moreover, all facilities with gross emissions of 1,000 tonnes or more must obtain an integrated environmental permit before undertaking operations. Among other things, an integrated environmental permit will include information on technological standards, emissions standards, and actions to increase energy efficiency and energy savings.

The Government is working to mainstream gender in energy and climate change. During the Energy Forum of Uzbekistan, held in June 2022, KAZENERGY presented statistics on the number of women and men employed in Kazakhstan's energy sector, informed stakeholders on women's participation in the labour force, and provided data on their education, qualifications and career development. It also discussed the gender stereotypes in the energy industry that limit employment opportunities for women. The data was based on a joint study, Role of Women in the Energy Sector in Kazakhstan, by KAZENERGY and the European Bank for Reconstruction and Development (EBRD). The study was undertaken to expand the knowledge base on women's employment in Kazakhstan's energy sector and to facilitate ongoing discussions about increasing female representation in the industry.

AREAS FOR IMPROVEMENT

The Government should submit to the UNFCCC Secretariat its LT-LEDS and updated NDC. At the same time, it should prepare a national action plan to implement its updated NDC targets and a national climate change action plan with quantifiable mitigation and adaptation measures for high-emission sectors. The action plans must set step-by-step measures with deadlines for transitioning to low-carbon technologies while ensuring the country's long-term energy security.

Foresight of policy and regulatory change

QUICK FACTS

- | The Strategic Development Plan of the Republic of Kazakhstan until 2025 was adopted on 15 February 2018.
- | In 2013, the Government approved the Concept for the Transition of the Republic of Kazakhstan to a 'Green Economy' (Green Economy Concept).
- | To implement the Green Economy Concept, on 29 July 2020, Kazakhstan adopted the Action Plan for the Implementation of the Concept for the Transition of the Republic of Kazakhstan to a 'Green Economy' for 2021-2030 (Green Economy Plan).
- | In 2009, Kazakhstan enacted the Law 'On Supporting the Use of Renewable Energy Sources'.
- | The Joint Stock Company Kazakhstan Electricity Grid Operating Company (KEGOC) manages the national electric grid of Kazakhstan and acts as the system operator of the unified electricity system.

STRENGTHS

The Green Economy Concept targets 50% power generation from alternative and renewable sources (up from 3% in 2020), a 15% reduction in CO₂ emissions from electricity production by 2030 and a 40% reduction by 2050. To achieve these targets, it envisages phasing out outdated power infrastructure and accelerating the deployment of renewables to replace coal and oil. To increase energy efficiency, the Green Economy Concept aims to reduce the GDP energy intensity by 30% by 2030 and 50% by 2050 compared to 2010.

The Government is already making some progress towards meeting the targets set in the Green Economy Concept. According to a Bureau of National Statistics report, published on 6 October 2021, Kazakhstan produced 9.6 billion kWh of hydropower in 2020, 1.03 billion kWh from wind power plants, 1.24 billion kWh from solar power plants, and 6.5 million kWh from biogas plants.

KEGOC is trying to ensure a reliable power supply in the country. Since April 2021, it has been undertaking programmes to refurbish the electricity networks. Priority is given to modernising its overhead power lines and electrical substations. Moreover, it plans to repair 93 power lines and 43 pieces of substation equipment and replenish the emergency stock of relevant materials, spare parts, and fuels and lubricants.

On 18 July 2022, the Government adopted the Comprehensive Plan for the Development of the Gas Industry of the Republic of Kazakhstan for 2022-2026 (Gas Development Plan), which defines the main approaches to reform the gas industry in the mid-term. The main objectives of the Gas Development Plan are to provide safe and uninterrupted gas supply to consumers, sustainably fulfil gas transit obligations, expand the gas resource base, and increase export volumes. It also notes that in Kazakhstan, there are opportunities to increase commercial gas production from 29.4 billion m³ in 2021 to 42.1 billion m³ by 2030. Among other things, it sets the pathway to attracting investments in new gas production and processing projects by providing subsoil users with fiscal preferences and a favourable purchase price for marketable gas.

To maintain the long-term export potential of the oil and gas industry, ensure energy security, and meet the growing energy demand, Kazakhstan plans to develop its power and energy complex from 2021 to 2024. Consequently, the Ministry of Energy's Strategic Plan proposes to promote the transition of the oil and gas sector to an export-oriented production of high-value-added products and create a complete chain in the energy industry. According to the Strategic Plan, the Government intends to allocate 153.3 billion Kazakh tenge (KZT) to promote the transformation of the oil and gas sector from 2021 to 2023. It also estimates that by 2024, crude oil production in Kazakhstan will exceed 100 million tonnes, reaching 100.8 million tonnes. Natural gas production is expected to reach 62 billion m³. The use of local products by oil and gas companies will reach 22%, while procurement of local services in energy projects will be 50%.

It is expected that the production of high-quality fuel oil will be fully ensured with the modernisation of the three largest domestic refineries by 2025. In addition, Kazakhstan will continue to increase the exploitation and supply of natural resources and guide the private sector to the transition to new non-primary and high-tech sectors by improving the management of oil and gas resources. It is estimated that by 2024 the installed capacity of renewable energy sources in Kazakhstan will reach 5 billion kWh, while the total electricity generation in the country in 2024 will be 105.6 billion kWh.

The Office of the Prime Minister of the Republic of Kazakhstan is responsible for monitoring the Green Economy Concept. It is required to provide a summary to the President of the Republic of Kazakhstan on the Green Economy Plan's progress annually.

AREAS FOR IMPROVEMENT

Kazakhstan needs to finalise and adopt the draft concept of low-carbon development to meet its long-term decarbonisation goals. The concept's final version should be supported by an action plan with quantifiable targets, actions, timelines, key performance indicators, responsible agencies, and financing requirements.

Management of decision-making processes

QUICK FACTS

The Ministry of Energy leads policy-making in the energy sector.

In 2020, the Agency for Strategic Planning and Reforms was established to plan, monitor and evaluate strategic reforms and develop a new public administration system.

On 26 February 2021, the Government approved the Concept for Development of Public Administration in Kazakhstan until 2030 (PAC) and its Action Plan.

The Concept of the Anti-Corruption Policy 2022-2026 and its Action Plan was adopted on 2 February 2022.

STRENGTHS

The PAC defines the main principles, tasks and approaches to improve interactions between the State and citizens, increasing the efficiency of strategic planning and the quality of the civil service staff, optimising the state apparatus, and encouraging local self-governance, among others. Under the PAC, several measures have been taken to improve interactions between citizens and the State, such as organising reporting meetings with the population, personal reception of citizens, creating general councils, and regularly updating strategic and policy decisions on Government websites.

The Government is making efforts to transition from a bureaucratic model to a proactive, service-oriented and responsive form of governance that considers catering to the needs of citizens as its primary goal. For this purpose, citizens are offered the opportunity to be heard and take essential decisions for themselves, which, in turn, will increase trust in the State and make it 'human-centred'. Moreover, to determine the medium-term strategic objectives of the country, the National Development Plan until 2025 will be adopted, and work is underway to implement the Concept of 'data-driven Government'.

To promote Kazakhstan's sustainable socio-economic development and attract foreign investment in priority sectors of the economy, the national company KAZAKH INVEST JSC was established in 2017. KAZAKH INVEST acts as a one-stop shop by providing investors quick access to public services, including support measures in investment preferences and assistance in obtaining various permits necessary for establishing and operating projects. KAZAKH INVEST also monitors the implementation of investment projects. In 2018, KAZAKH INVEST approved its development strategy for 2018-2027, which defines its strategic directions, goals, objectives, activities, implementation mechanisms and performance indicators for the next ten years. The Strategy has been developed considering the objectives in the Kazakhstan 2050 Strategy, the National Investment Strategy, the development forecast of Kazakhstan in the coming years, and the global economic situation.

State agencies provide the public with information on the country's investment trends, performance, and budget utilisation. For instance, KAZAKH INVEST regularly

updates the country's investment inflow data. According to it, at the end of 2021, 57 investment projects worth USD 3.8 billion and creating over 7,700 jobs were put into operation with the participation of foreign investors. About 197 investment proposals worth USD 22.5 billion were prepared per international standards, and new investors were attracted for 66 projects worth about USD 4.5 billion.

The Government's official public procurement website, launched in 2009, acts as the State's information system, giving potential bidders and citizens real-time information on public procurement. The portal regularly publishes information about procurement needs for goods, works, and services, procurement procedures, supplier identification, the conclusion of electronic contracts and their execution.

Participatory decision-making on legal and regulatory matters is encouraged by the Government. In keeping with this, in 2022, KEGOC held several public hearings on its implementation of the approved tariff estimate and investment programme and its compliance with the quality and reliability indicators of regulated services. It also informed energy consumers and other stakeholders about the performance indicators achieved in 2021 and the first half of 2022.

The Concept of the Anti-Corruption Policy outlines the pathway to achieving greater public consciousness, eliminating all forms of corruption and nepotism, and prioritising anti-corruption measures. The Law 'On Public Procurement', as amended in 2022, applies to the acquisition of goods, works, and services necessary to ensure the functioning as well as the performance of State functions or statutory activities of the customer.

AREAS FOR IMPROVEMENT

The Government ensures stakeholder participation in developing draft regulatory and legal acts, per the Law 'On State Services' and the Law On Access to Information'. It may consider further institutionalising stakeholder engagement and facilitating the active involvement of different interested groups in public consultations, including civil society and business associations.

Rule of law

QUICK FACTS

Kazakhstan ratified the ECT on 18 October 1995.

Kazakhstan ratified the Convention on the Settlement of Investment Disputes between States and Nationals of Other States in 2004.

Kazakhstan acceded to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards in 1995.

In April 2022, the Government approved the Action Plan for Further Measures in the Field of Human Rights and the Rule of Law.

STRENGTHS

Kazakhstan's commitment to strengthening the rule of law has allowed it to secure financial support for the 2020-2025 Kazakhstan Rule of Law Program from the United States Agency for International Development (USAID). The project's main goal is to improve the country's investment and business climate and promote transparency and openness of the judiciary by providing businesses, civil society organisations, lawyers and other interested partners an opportunity to interact and advocate for change. Kazakhstan is also a member of the Central Asia Rule of Law Program 2020-2023, established in cooperation with the EU and the Council of Europe. The programme is intended to strengthen respect for human rights, the rule of law, and democracy in line with European and other international standards.

Kazakhstan seeks to ensure that domestic and foreign investors are treated fairly and promote the use of alternative dispute prevention mechanisms to resolve disputes between investors and the State. In 2017, the Court and Arbitration Center was established in Kazakhstan, operating under English common law and as part of the Astana International Financial Center (AIFC). The AIFC Court is independent of the judicial system of the Republic of Kazakhstan, and its decisions cannot be appealed in the national courts.

The Institute of the Investment Ombudsman has been set up under the Resolution of the Government 'On Approval of the Regulation on the Activities of Investment Ombudsman'. The Ombudsman's primary role is to identify controversial issues early on and resolve investor grievances before the domestic courts hear them. To facilitate amicable settlement, it also offers mediation services to the disputing parties that agree to voluntary negotiations through a neutral third-party mediator.

Kazakhstan has established a comprehensive legal framework to protect foreign investors and their assets. The Civil Code of Kazakhstan guarantees the right to private property. Moreover, the Entrepreneurial Code establishes limited and exceptional grounds on which an investor's property may be nationalised/expropriated subject to the payment of compensation. The Land Code states that a land plot may be expropriated for the State's needs in exceptional cases with the owner's consent or by a court's decision.

Domestic laws also stipulate the process of determining the compensation owed to the owner of the expropriated

property. According to the Law 'On State Property', the compensation must be based on the property's market value and determined from the evaluation date. The State must pay the amount in the foreign currency mentioned in the applicable IIA before it obtains the property title. Where there is no IIA, the expropriating authority can pay the compensation in the national currency. Similarly, the Law 'On Foreign Investment' requires that compensation be equal to the fair market value of the affected investments from when the investor becomes aware of the expropriation decision.

Similar to the national laws, the IIAs signed by Kazakhstan protect the property rights of international companies operating in its territory, including in the energy sector. Currently, it has 51 BITs signed, of which 43 are in force. The BITs protect all forms of foreign investments through the unqualified application of National Treatment and Most-Favoured-Nation treatment. Some BITs, such as those with Japan and North Macedonia, specifically mention business concessions awarded for extracting and exploiting natural resources in the definition of 'investment'.

IIAs signed by Kazakhstan state that foreign investments cannot be nationalised, expropriated or subjected to measures having an effect equivalent to nationalisation or expropriation except for a public purpose. The expropriation must be carried out following the due process of law, on a non-discriminatory basis and accompanied by prompt, adequate and effective compensation. Additional provisions may be stipulated regarding the issue of compensation, but this varies on a case-by-case basis. For example, the Hungary-Kazakhstan and Serbia-Kazakhstan BITs mention that compensation shall amount to the market value of the investment immediately before expropriation or when the expropriation becomes public knowledge. It should include interest from the date of expropriation, payable without delay, effectively realisable, freely transferable and in freely convertible currency. The BITs also grant an affected investor the right to prompt review by a judicial or other independent authority of the host State.

AREAS FOR IMPROVEMENT

The Government should update national legislation to include well-defined grounds for the expropriation of private property, with a detailed description of the process for determining the compensation amount.

Regulatory environment and investment conditions

QUICK FACTS

On 15 July 2022, the Government adopted the Concept of the Investment Policy until 2026 (CIP) and the action plan for its implementation.

The Concept of Protection and Development of Competition in the Republic of Kazakhstan for 2022-2026 was adopted on 22 June 2022.

The Samruk-Energy joint-stock company (KASE) was established on 18 April 2007 to develop and implement a long-term State policy for upgrading the existing power generation facilities and commissioning new ones.

STRENGTHS

The Law 'On the Electric Power Industry' defines the basic principles for the functioning of the electric power industry and creating a competitive electricity market. The Law 'On Supporting the Use of Renewable Energy Sources', adopted on 4 July 2009 and updated on 7 March 2022, aims to meet the clean energy objectives set in the Green Economy Concept. It outlines measures to create favourable conditions for renewable electricity technologies, reduce the energy intensity of the economy, and minimise the impact of thermal energy production on the environment.

The Ministry of Energy, in cooperation with State-owned power companies, is implementing measures to ensure power reliability and affordability. KEGOC has started developing a predictive model to develop the country's electricity grid. To facilitate this activity, the Ministry of Energy has approved the forecast balance of electric energy and capacity until 2035. This forecast plans to introduce about 17.5 GW of new generating capacities to cover the prospective energy consumption by 2035. Various technologies and their locations have been considered while setting the energy forecast. The future configuration of the electricity grid is expected to include the use of smart grid technologies. The western energy zone will be unified with the national grid, and the southern energy zone will be fortified to operate, if needed, independently of the Central Asian unified energy system. Large-scale involvement of renewable energy sources is anticipated in the country's western, eastern and southern regions, including the unique wind potential of the Dzhungar Gates and the Shelek Corridor, through the construction of the necessary network infrastructure and the introduction of energy storage systems.

A new wind power plant with a capacity of 60 MW, which is being built 140 km from Almaty, is expected to become operational in 2022. The energy facility is being constructed in the Enbekshikazakh district of the Almaty region in the Shelek corridor – a unique area for developing renewable energy potential, where the average annual wind speed at the height of 50 metres is 7.8 m/s, and the flux density is 310 W/m². The Ministry of Energy also plans to organise auctions for new power generation capacities that will increase system flexibility and dispatchability. In July 2022, auctions were held to commission new electrical capacities in the Turkestan (926.5 MW) and Kyzylorda (240 MW) regions. The Ministry of Energy published documentation of auction sales on their website for constructing these units based on preliminary feasibility studies. The return on investment for implementing these projects will be within the

framework of the electric capacity market and begin after the units are commissioned. The winners of the auctions may independently determine the configuration and manufacturer of the generation units, subject to the auction rules and schedule requirements.

The main goal of the country's investment policy is to create favourable conditions for foreign and domestic investors and implement projects that support modernisation, structural reforms and sustainable growth rates of the national economy, contributing to a high quality of life for the country's population. In line with these objectives, Kazakhstan has attracted substantial foreign investments in its energy sector over the last few years. According to the National Bank of Kazakhstan, between 2010 and 2020, the country's gross inflow of FDI was approximately USD 249 billion, of which 30.4% or USD 75.6 billion was in the oil and gas sector, and 23% or USD 42.1 billion in the extraction of metal ores and the development of metallurgy. The manufacturing industry attracted USD 39.4 billion (15.8% of all FDI).

There are 13 special economic and 36 industrial zones in Kazakhstan, which exempt investors from various types of taxes and customs duties. Special Economic Zones provide access to land and established infrastructure. According to KAZAKH INVEST, the Ministry of Energy launched 26 investment projects in 2022, including a gas turbine with a capacity of 57 MW at the Aktobe Combined Heat and Power (CHP) plant worth KZT 21,716 million, the 44 MW Turgusunskaya Hydropower Plant 2 worth KZT 40,000 million, a 600 MW combined cycle gas turbine (CCGT) at the site of Almaty CHP-2, a 450 MW CCGT at the site of Almaty CHP-3, a 250 MW CCGT at the site of Almaty CHP-1 worth KZT 616,000 million, and wind power plants of 39 MW and 17 MW with a total cost of KZT 40,500 million. While most of these projects are financed by domestic investors, some are sponsored by Russia, China and Switzerland.

AREAS FOR IMPROVEMENT

To enhance the energy system's financial recovery, Kazakhstan should consider gradually adjusting the electricity and heating tariffs to make those cost-reflective and phasing out the cross-subsidisation practice. This adjustment would generate the necessary income to rehabilitate and modernise the energy and heating systems. Moreover, rolling out the gas market liberalisation process will facilitate transparency in transmission tariffs, gas trading, and exchange. It will also allow for competition in gas exports and non-discriminatory third-party access.

INDICATOR 1

Improvements proposed in 2022

Submit to the UNFCCC Secretariat the country's updated NDC and LT-LEDS to achieve net-zero emissions by mid-century.

Improvement suggested in 2022. Status will be updated in 2023.

Develop a national action plan to implement the country's updated NDC targets and a national climate change action plan with quantifiable mitigation and adaptation measures for high-emission sectors.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2018

Improve coherence and alignment in the objectives identified under the different strategy documents, and revise the national energy policies and plans in a timely manner.

Work ongoing. On 27 December 2021, the Government enacted the updated version of the Environmental Code of the Republic of Kazakhstan. On 14 July 2022, the Government enacted the new edition of the Law 'On Access to Information'. The Government is currently updating its NDC.

Enhance the independence of policy monitoring and evaluation bodies.

Pending

Establish tracking mechanisms and incentive schemes to implement the country's NDC successfully.

Work ongoing. The new Environmental Code introduced mechanisms to conduct environmental impact assessments for large infrastructure projects. It streamlines procedures to impose environmental fines and sets mechanisms to reduce GHG emissions. The Government is currently updating its NDC.

Improvements proposed in 2021

Intensify discussions with stakeholders on the draft concept on low-carbon development. Prepare an action plan with quantifiable targets and timelines to support the concept's implementation.

Work ongoing. The Government is currently preparing the strategy for achieving carbon neutrality by 2060.

INDICATOR 3

Improvements proposed in 2018

Streamline the division of responsibilities among different State entities.

Work ongoing. On 26 February 2021, the Government approved the Public Administration Concept until 2030 and its Action Plan.

Promote public consultation in decision-making.

Work ongoing. Governmental websites offer electronic public services and give the public open access to legal acts, budgetary documents and reports, and the financial and performance evaluations of State agencies.

INDICATOR 4

Improvements proposed in 2018

Promote alternative dispute resolution mechanisms, such as mediation, among investors and State agencies; establish a foreign investment ombudsperson.

Work ongoing. On 7 August 2019, Kazakhstan became a party of the United Nations Convention on International Settlement Agreements Resulting from Mediation.

Update the national legislation to include well-defined grounds for the expropriation of property, with a detailed description of the process for determining the compensation amount.

Pending

INDICATOR 5

Improvements proposed in 2018

Phase out local content requirements in the energy sector.

Work ongoing. In 2019, the new Subsoil and Subsoil Use Code was amended to state that the minimum level of local content cannot exceed 50%.

Reduce State control in different energy activities.

Pending

Improvements proposed in 2021

Gradually introduce cost-reflective electricity and heating tariffs and phase out cross-subsidies.

Work ongoing. The National Project for the Development of Entrepreneurship for 2021-2025 has been launched to gradually remove the differentiation of tariffs between consumer groups for electricity services.



Mauritania

Population ¹	4,775,110
Area (km ²) ¹	1,030,700
GDP per capita (USD) ¹	1,723.01
TES/GDP (GJ/thousand 2015) ²	N/A
Net Energy Imports (TJ) ²	N/A
RE share in Final Energy Consumption (%) ²	24.7
Total CO ₂ emissions (MtCO ₂) ²	N/A

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Extraction of crude petroleum & natural gas	1 project	United States of America: 1 project of 4 mEUR

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.

Mauritania’s overall risk level against the assessed areas is **moderate**.

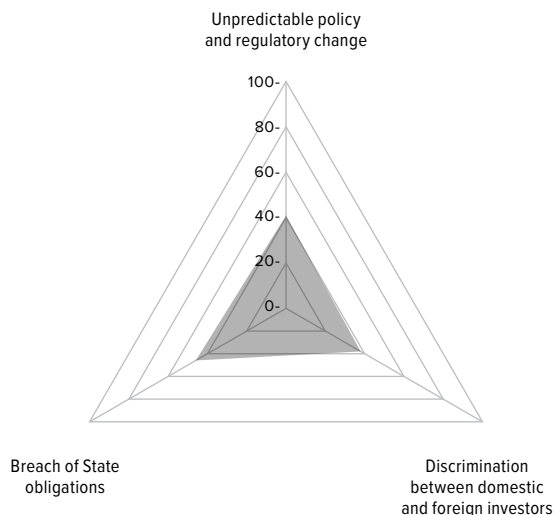
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *unpredictable policy and regulatory change* and *breach of State obligations*.

Mauritania has a good performance on one EIRA indicator and a moderate performance on four indicators. *Management of decision-making processes* is the highest-scoring indicator with 71 points, followed by *foresight of policy and regulatory change*, *regulatory environment and investment conditions*, and *rule of law* with 60, 58 and 56 points, respectively. Its lowest-scoring indicator is *framework for a sustainable energy system* at 48.

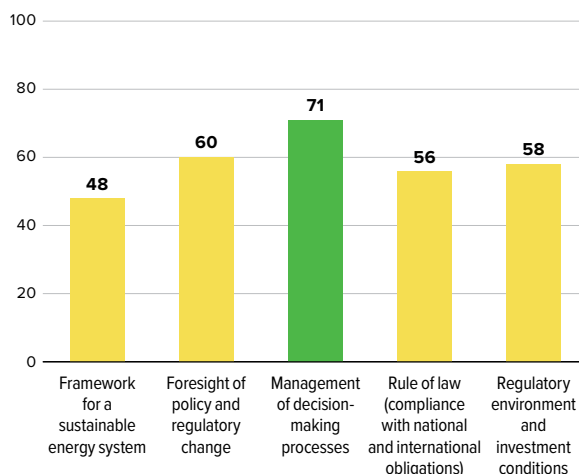
Mauritania’s overall sub-indicator performance is moderate. The highest-scoring sub-indicators are *institutional governance* at 83 and *regulatory independence* at 76. A good score has been obtained on three sub-indicators, namely *environmental protection, human rights and gender* and *restrictions on FDI*, both at 67, and *robustness of policy goals and commitments*, at 63. The sub-indicator *management and settlement of investor-State disputes* stands at 60, followed by *transparency and anti-corruption measures* at 59, *communication of vision and policies* at 58 and *respect for property rights* at 52. *Policy planning on clean energy transition* is at 44 and *energy resilience* at 43. The lowest-scoring sub-indicators are *enabling measures to support clean energy transition* at 36 and *electricity industry market structure and competition* at 32.

Mauritania must reduce legal and regulatory risks to energy investments by implementing measures to enable the clean energy transition and make the electricity market competitive.

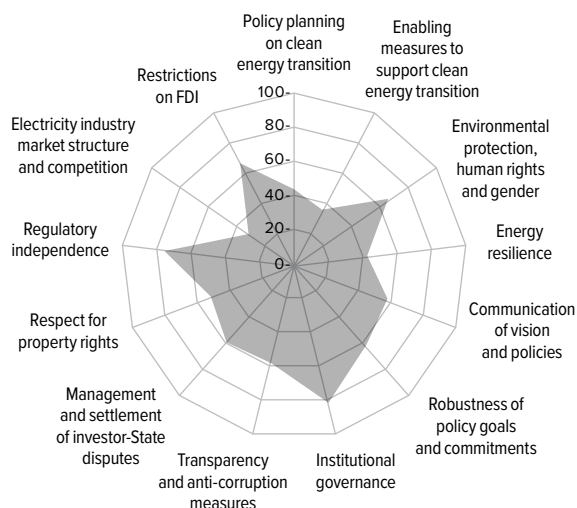
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

- | Mauritania submitted its updated NDC to the UNFCCC Secretariat in October 2021.
- | The Environmental Code was enacted in 2020 to guide the national policy for environmental protection.

STRENGTHS

The Government is trying to decarbonise the economy while ensuring the country's overall development. Mauritania's updated NDC aims to achieve an economy-wide unconditional net reduction in GHG emissions of 11% and a conditional 92.46% reduction by 2030 below business-as-usual. The updated NDC extends to energy, Agriculture, Forestry and Other Land Use (AFOLU), Industrial Processes and Product Use (IPPU), and waste. The energy sector is expected to contribute 37,452.46 GgCO₂e (93.10%) to the total mitigation efforts, of which 17.86% is unconditional. The deployment of renewables will contribute to reductions of 31,817.81 GgCO₂e, while 5,634.65 GgCO₂e will be mitigated through energy efficiency measures.

The mitigation measures to achieve energy sector targets include updating legislation to increase the share of renewables in the energy mix from 35% to 50% by 2030, commissioning green hydrogen projects and the Desert to Power G5 Sahel facility, expanding the Nouakchott wind power plant's capacity from 30 MW to 50 MW, installing two gas-fired power plants of 200 MW and 300 MW, and adopting programmes for solar energy in public buildings, home energy/water heating, schools and universities.

In the transport sector, the updated NDC targets emission reductions of 92.65 GgCO₂e, of which 5.21% is unconditional. This will contribute to a 0.23% reduction in the country's total GHG emissions. The mitigation measures to reach this target include completing the Nouakchott tramway project, implementing the Sahel train project (G5 Sahel, Nouakchott section – Selibabi-Kayes), and adopting tax cuts to incentivise the import of new vehicles and penetration of hybrid cars. The AFOLU share is 474.402 GgCO₂e, of which 37.24% is unconditional, while the IPPU share is 633.96 GgCO₂e, of which 55.56% is unconditional.

The Government is looking to expand 'green' electrification and grid connectivity and develop energy storage solutions. In June 2021, the World Bank provided the Government of Mauritania with USD 90 million for the Regional Electricity Access and Battery-Energy Storage Technologies (BEST) project. The project will give grid access for over 1 million people in the Sahel region and allow the West African Power Pool (WAPP) operators to utilise battery-energy storage capacities for storing renewable electricity during non-peak hours. In the context of BEST, Mauritania will extend the network of existing substations to rural areas, including the towns of Boghe, Kaedi and Selibaby, and villages on the southern border with Senegal. In September 2021, the Ministry of Petroleum, Mines and Energy (MPME) and

the Chariot company specialising in energy transition, signed a Memorandum of Understanding (MoU) to develop the green hydrogen project, Nour. The project, which successfully underwent a pre-feasibility and an environmental impact assessment in 2021, will extend over an onshore and offshore area of about 14,400 square km producing power of around 10 GW from solar and wind resources for electrolysis to produce green hydrogen. In May 2022, Mauritania, along with Kenya, South Africa, Namibia, Egypt, and Morocco, also launched the Africa Green Hydrogen Alliance to mobilise green hydrogen production for domestic use and export.

Mitigating the impact of economic activities on the environment is a priority of the Government. To this end, in 2021, the Global Environment Facility (GEF) launched a project to preserve biodiversity in the Adrar district by creating a new protected zone connecting El Ghallâouïya Key Biodiversity Area with the Guelb Er Richat Nature reserve in central Mauritania. This project complements the GEF-funded Great Green Wall (GGW), which aims to combat desertification across the Sahel region and North Africa by planting new trees on 100 million hectares of land. The GGW is expected to sequester 250 million tonnes of carbon and create 10 million new green jobs. Similarly, the Mauritanian Alliance against Climate Change seeks to restore degraded agroecosystems, ensure the preservation of biodiversity and the better management of water resources, and rationalise land use. With the World Bank's support, the Government is also preparing the Sustainable Landscape Management Project to facilitate interventions and investments at the community level for preserving and developing the Gum Arabic species.

AREAS FOR IMPROVEMENT

The Government should establish institutional and policy mechanisms to evaluate the implementation of GHG emissions reduction measures accurately and adjust them, if necessary, to achieve the updated NDC.

The Government should consider introducing legislative provisions imposing mandatory corporate social responsibility (CSR) obligations for public and private sector companies operating in Mauritania. For this purpose, it may amend energy, mining or company laws to include provisions on compulsory CSR for the benefit of affected communities and the environment. CSR considerations should also be included in the companies' mainstream annual reporting, while failure to meet these standards could result in negative ratings and financial penalties.

Foresight of policy and regulatory change

QUICK FACTS

The Accelerated Growth and Shared Prosperity Strategy (SCAPP) 2016-2030 defines the Government's vision for the country's socio-economic development.

The Production and Transmission Master Plan of 2011 (2011 Master Plan) aims to increase the country's access to reliable energy supply by expanding interconnections and the existing electricity network.

STRENGTHS

According to the SCAPP and the 2011 Master Plan, the Government aims to ensure 100% electrification in urban areas and 50% in rural areas by 2030. It has planned several projects and programmes to reach this target and is implementing grid extension and mini-grid projects described in the 2011 Master Plan. For instance, the African Development Bank's (AfDB) Green Mini-Grids Market Development Programme (GMG MDP) intends to establish a comparable, actionable understanding of the GMG market opportunity in Sub-Saharan Africa, promote linkages between communities, public institutions, developers, financiers, and technology providers on mini-grid development, and strengthen the capacity of developers to operationalise GMG business models. Similarly, from 2020, the EU and the Agence Française de Développement (AFD) are providing technical assistance to improve licencing processes for rural electrification and identify suitable governance structures for mini-grids. Preliminary responses from the Government and stakeholders favour a scenario where the national electric power company (SOMELEC) will be responsible for running tenders to select and grant licences to concessionaires.

In 2020, the target of 32% of renewables (17% from wind and solar and 15% from hydro) in the power mix was achieved. The Government has intensified its efforts to reach the 50% target set in the updated NDC by launching critical projects to deploy renewables and liquefied natural gas (LNG) for power generation. In 2022, the AfDB committed USD 379.6 million to fund the Desert to Power G5 Sahel Facility in Mauritania, Mali, Burkina Faso, Niger and Chad. The 500 MW solar project will provide electricity to about 695,000 households and reinforce Mauritania's existing and planned renewable energy production, with about 10% of the national grid supply already provided by a UAE-funded solar farm in Nouakchott. Another project is the 30 GW AMAN development, launched in 2022 through an MoU between the Government and the renewable energy developer CWP Global. The facility will be located in Mauritania's Dakhlet Nouadhibou and Inchiri areas. Its 18 GW of wind turbines and 12 GW of solar panels will power electrolysis inland, generating 1.7 million tonnes of green hydrogen and 10 million tonnes of green ammonia per year.

The Government is trying to meet the country's growing energy demand through regional cooperation and interconnections projects. In June 2022, the MPME signed an MoU with Algeria to supply the Mauritanian market with butane gas through pipelines and promote cooperation in mining and energy. Moreover, according to the Organisation for the Development of the Senegal River (OMVS) 2021 activity report, Nouakchott and other cities in the country are partially supplied with affordable electricity

from renewables from the interconnected network of Manantali. In March 2022, a 225 kV high-voltage power line of 21 km linking the dual-power station north of Nouakchott and the centre of the OMVS network was put into service. The line is expected to resolve the electricity shortage in the area and strengthen interconnections with the other OMVS countries.

Some programmes are underway to increase energy efficiency in the public sector. The Greening Mauritania project, steered by the United Nations Development Programme (UNDP), has deployed a team of experts to conduct an energy consumption audit on two major administrative buildings and the UN office in Mauritania. The audit's purpose is to assess the potential for a switch to solar energy for these authorities and to train selected Government officials in ecological solutions aligned with the energy transition. In addition to capacity-building assistance, the UNDP has offered Mauritania technical equipment for three wind measurement stations.

The Government of Mauritania and its international development partners continually monitor and evaluate ongoing energy projects and programmes. For example, the cost-benefit analysis of the AMAN project reveals that its implementation will reduce national unemployment by one-third, boosting the country's GDP by 50-60% by 2035. The Inter-Ministerial Steering Committee (CIP-SCAPP), comprised of experts from various ministries and State agencies, reports to the MPME and the Prime Minister of Mauritania on measures taken under the SCAPP. The MPME, in turn, reports to the Council of Ministers. In 2021, the MPME provided the Council of Ministers with an overview of the progress achieved under the renewable energy project with CWP Global and the mining cadastre's institutional improvements. Currently, the SCAPP Action Plan 2016-2020 is under review, and its outcome will be considered by the Government while implementing the Action Plan 2021-2025.

AREAS FOR IMPROVEMENT

The lack of a forward-looking strategy and regulatory framework for developing renewable energy can result in planning and institutional overlaps, inefficiency in support schemes, and barriers to price discovery for different renewable technologies. To address these issues, the Government should adopt a comprehensive national renewable energy policy that reflects the goals reflected in the updated NDC and defines the means to achieve them. It must establish a regulatory and institutional framework to inspire confidence in potential renewable energy investors regarding long-term investments and ensure consistency in the incentives and project development terms and conditions.

Management of decision-making processes

QUICK FACTS

The MPME is responsible for planning the country's energy policy, while the Ministry of Environment and Sustainable Development (MEDD) defines national strategies for environmental management.

The Ministry of Economic Affairs and Promotion of the Productive Sectors designs and monitors the country's economic and social policies per Decree no. 028-2021, adopted in 2021.

STRENGTHS

Under the SCAPP, the Government must modernise the country's administrative setup and balance power distribution at national and regional levels. To this end, with international assistance, the Government is digitalising the country's finance administration. Between 2018 and 2021, the IT-based budgeting and accounting system that manages spending, payment processing, budgeting, and reporting was established for the State treasury and local authorities.

In June 2021, the Economic Governance and Investment Management Support Project (PA2GI) was approved by the African Development Fund to assist Mauritania in ensuring robust, sustainable and citizen-oriented economic growth. PA2GI will help the Government optimise public spending, promote private investment, and strengthen tax and land governance. International donors are also training State entities and local authorities on monitoring the achievement of the 17 SDGs. An electronic system has been set up to evaluate the institutional performance capacity of 219 municipalities.

The Guichet Unique is the single point of contact for setting up a business in Mauritania. As a one-stop shop, it has started digitalising the business registration process, thus reducing the standard registration time from seven days to 48 hours. In March 2021, the Government created the Agency for Promotion of Investment in Mauritania (APIM) to assist foreign investors in navigating the business permit process, various administrative procedures, and the rules and regulations concerning foreign workforce. At the same time, the online platform InvestMauritania offers an overview of ongoing energy projects in all sub-sectors and future investment opportunities. The MPME's Directorate of Mines is also digitalising the mining cadastre and publishing online geological data on the sector.

Public authorities are obliged to publish legislative acts in the Official Gazette. All draft legislation must undergo public consultation. For example, the Research and Innovation Strategy 2022-2026, adopted in 2021, resulted from widespread dialogue and coordination among more than 400 stakeholders. Public consultations also took place to guide the environment and sustainable development sector for 2022-2024 and during the amendment of the legal framework on public-private partnerships (PPPs) by Law no. 2021-006.

MDAs released information on their financial performance to ensure public accountability. In 2021, the Government passed the 2022 budget and made it accessible via the Ministry of Finance website. The accounting documents accompanying the State budget provide a complete

picture of the Government's planned expenditures and revenues, including those from natural resources.

In December 2021, the Government enacted Law no. 2021-025, repealing and replacing Law no. 044-2010 on Public Procurement. The legislative amendments clarify the circumstances in which public work contracts can be awarded through mutual agreement, thereby reducing the degree of preliminary control by the competent body and granting the parties flexibility in concluding the procedure of awarding a contract and handling complaints. The Procurement Commission of the Economic and Finance Sectors is in charge of reviewing tenders and bids. The selection of suppliers for large government contracts is performed through a tender process initiated at the ministerial level. After publishing an official invitation to bid on government websites and local newspapers, the Procurement Commission selects the best offers that fulfil governmental requirements. The relevant State authorities announce the results of all public procurement bids.

Under the auspices of the EITI, the Government has been working to improve transparency in the extractive sector. Thus far, the reforms include adopting a legal framework to establish and maintain a public register of beneficial owners, including corporate entities that apply for, operate, or hold a participating interest in an exploration or production of oil, gas, or mining licence or contract. The Mining Sector Portal contains up-to-date information on the legal framework, production data disaggregated by company (for industrial mining), and a list of active licence holders. Moreover, the Government has initiated the collection of information regarding the identity of beneficial owners of all oil, gas, and mining companies operating in the country. Besides this, the National Committee (Comité National), which ensures EITI implementation and follow-up in Mauritania, has established the technical infrastructure for automated payment data collection from reporting entities. The National Committee oversees and monitors systematic disclosure, ensures data verification through international auditing standards, and supports reporting entities in providing timely and comprehensive data.

AREAS FOR IMPROVEMENT

The Government should adopt a law on access to information obliging State authorities to make legal and regulatory information publicly available in a comprehensive and timely manner.

According to the December 2021 assessment, Mauritania has met the initial EITI criteria on beneficial ownership. The Government is encouraged to move forward by ensuring that the relevant cadastres effectively collect and disclose data on beneficial ownership.

Rule of law

QUICK FACTS

- | Mauritania signed the European Energy Charter on 29 April 2014 and the International Energy Charter political declaration on 20 May 2015.
- | Mauritania ratified the Convention on the Settlement of Investment Disputes Between States and Nationals of Other States in 1966.
- | Mauritania ratified the Convention on the Recognition and Enforcement of Foreign Arbitral Awards in 1997.
- | Mauritania became a member of the WTO in 1995.
- | Mauritania is a member of MIGA.

STRENGTHS

Under the SCAPP, the Government is taking action to strengthen the credibility and efficiency of judicial institutions. Starting in 2019, the EU has committed EUR 12.6 million to increase the country's judicial competence and integrity by providing institutional, structural and infrastructural support to the justice sector (Programme d'Appui à la Réforme de la Justice).

Law no. 2000-06 of 18 January 2000 Introducing the Arbitration Code applies to domestic and international arbitration and is influenced by the UNCITRAL Model Law. It also establishes the International Center for Mediation and Arbitration of Mauritania (CIMAM). The Support Program for Strengthening the State of Law in the Islamic Republic of Mauritania finances study trips of the CIMAM management team to Burkina Faso's Center for Arbitration, Mediation and Conciliation of Ouagadougou (CAMC-O) as part of an expert technical support mission from the Permanent Secretary of this centre. The aim is to train arbitrators and mediators and raise awareness among economic operators about the possibility of inserting arbitration clauses in contracts and granting jurisdiction to CIMAM in the case of a dispute.

The Government is trying to resolve conflicts with investors through amicable means and by pursuing alternative dispute resolution mechanisms. Notably, in March 2022, it sought and achieved an amicable settlement of its dispute with Addax Energy SA under a contract for the country's supply of petroleum products. Moreover, Law no. 2019-020 amending and supplementing certain provisions of the Code of Civil, Commercial and Administrative Procedure has been promulgated to institute and regulate mediation in commercial disputes.

Mauritania has ten BITs (including France, Belgium, Spain, Tunisia, and Morocco), which envisage Investor-State Dispute Settlement mechanisms. It is also a member of two important regional agreements, namely the Cotonou Agreement between the EU and the African, Caribbean and Pacific countries and the African Union (AU). The AU Treaty covers energy issues, including articulating a common energy policy in research, exploitation, production and distribution and promoting the training of skilled human resources.

National legislation, particularly Law no. 52-2012 Introducing the Investment Code, protects property lawfully acquired by individuals and entities against nationalisation, direct or indirect expropriation, and requisition. Similar guarantees are included in Mauritania's BITs. Expropriation may be lawful only if followed by fair and effective compensation. In fact, the only recorded case of foreign company expropriation since Mauritania's independence was concluded with a compensation agreement between the Government and the affected party.

National Treatment and Most-Favoured-Nation principles are enshrined in all BITs to which Mauritania is a party and extend to real and intellectual property rights. Mauritania is a member of the African Organisation of Intellectual Property and, as such, is bound to uphold intellectual property rights. It is required to establish uniform procedures for implementing the relevant international treaties such as the Paris Convention for the Protection of Industrial Property, the Washington Treaty on Patents and the Vienna Treaty on the Registration of Trade Names.

AREAS FOR IMPROVEMENT

The Government should consider updating the legal framework protecting private property rights to include a definition of 'public interest' as grounds for expropriation and a valuation process to determine the compensation amount along with timeframes for its payment.

Establishing an ombudsperson to handle grievances of foreign investors against public authorities will contribute to addressing the problem of case backlog. The Government can seek guidance from the Energy Charter Model Instrument on Management of Investment Disputes which aims to assist States in handling investment disputes while keeping in mind their own needs and circumstances.

The Government is urged to reinforce the protection granted to the owners of intellectual property rights by implementing the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights and ratifying all the internet-related World Intellectual Property Organization treaties.

Regulatory environment and investment conditions

QUICK FACTS

The MPME regulates the production, import, export, transport, storage, and commercialisation of hydrocarbons in Mauritania. It also regulates the activities of SOMELEC.

Law no. 2021-006 of 19 February 2021 modified and completed certain provisions of Law no. 2017-06 of 1 February 2017 on Public-Private Partnerships (PPP Law).

STRENGTHS

The Government is working closely with international donors to update the country's legal and regulatory framework and mobilise investments in the energy sector. It has amended the PPP Law, which now includes in the definition of PPP contracts concessionary and public payment contracts that should be awarded based on freedom of access to public procurement, equal treatment and transparency. It is also amending the Code of Crude Hydrocarbons to attract private participation in prospecting activities in landlocked areas.

In March 2021, the sixth review under the International Monetary Fund's (IMF) extended credit facility arrangement was published. The IMF concluded that Mauritania remains committed to supporting growth, improving fiscal balances, stabilising debt, and implementing institutional reforms. At the same time, the Government has been presenting investment opportunities in clean energy technologies and mineral production in various international fora, such as the German-African Forum, the British Arab Chamber of Commerce and the 14th General Assembly of the Federation of Industries, Energy and Mines.

The Multisectoral Regulatory Authority (ARM) regulates the licencing, delivery and prices of off-grid energy services, approves subsidies, and ensures the quality of services delivered by concessionaires (délégataires). According to its latest statistics, the ARM has licenced 22 mini-grids operated by délégataires. Amendments to Law no. 2001-19 Introducing the Electricity Code are expected to improve the sector's performance by fully liberalising electricity production and harmonising the national rules for cross-border electricity exchange with the regional market rules (ECOWAS and Maghreb).

From an investment incentive perspective, the amendment of the General Tax Code in 2020 cancels the tax on industrial and commercial profits. The 2012 Investment Code envisages incentives for small and medium-sized enterprises, free export zones and targeted industries, including projects in renewable energy. Targeted industries can conclude a 20-year agreement with the Government defining the conditions for establishing a business in Mauritania and the advantages available in this respect. The Petroleum Code and the Model Mining Convention Law grant contractors tax exemptions such as a 36-month 'tax holiday' based on the production level determined in the feasibility study. At the same time, in collaboration with national stakeholders and external experts, including the EITI, the Government is working on a new local content strategy that will be commensurate with the extractive industry's growth in

Mauritania. The draft strategy presented in June 2022 integrates sustainable local content requirements into the economy without affecting its attractiveness for investment.

An increasing number of companies are active in the country's hydrocarbon sector. BP and Kosmos are developing the Greater Tortue Ahmeyim Project (GTA) in Mauritania and Senegal. To scale up the use of gas as a bridging fuel for the country's energy transition, BP is building a floating LNG facility to tap into the GTA's estimated 15 trillion cubic feet of gas, with 30-year production potential. In addition, BP and Kosmos, with Société Mauritanienne des Hydrocarbures et de Patrimoine Minier, have expressed their interest in the BirAllah conventional gas development project. Production is expected to begin in 2028 and is forecast to peak in 2030 at approximately 31,642 bpd of crude oil and condensate, 277 Mmcf of natural gas and 1,304 Mmcf of LNG. In March 2022, New Fortress Energy executed a non-binding MoU with Mauritania to develop the offshore Banda gas reserves into a new energy hub. Under the MoU, New Fortress Energy will deploy its fast LNG liquefaction technology to produce LNG for Mauritania's domestic gas and power markets and exports. In addition, an Exploration Production Contract was signed with the oil company Cairn Energy for block C7, located in the offshore Mauritanian coastal basin. Private investors are equally interested in renewable projects. For instance, in September 2021, the MPME signed an MoU with weelectrify.Africa for renewable energy projects and network stability.

AREAS FOR IMPROVEMENT

Since the Government is currently revising the country's Electricity Code, it should utilise this opportunity to extend the ARM's oversight to SOMELEC and reinforce its authority in setting tariffs and market rules. Moreover, the Government should minimise its role in appointing the ARM's National Regulatory Council members to eliminate any perception of bias in its decision-making.

To maintain the momentum in renewable projects, the Government should revise the electricity tariff framework that has been in place since 2007. The guiding principles underpinning such a revision should be market operators' economic viability by allowing front-load subsidies at the start of the project and the general population's purchasing power. Tariff equalisation could help ensure that customers in urban areas can contribute to subsidising rates in rural areas.

INDICATOR 1

Improvements proposed in 2022

Establish institutional and policy mechanisms to evaluate the implementation of GHG emission reduction measures accurately and adjust them, if necessary, to achieve the targets in Mauritania's updated NDC.

Improvement suggested in 2022. Status will be updated in 2023.

Introduce legislative provisions imposing mandatory CSR obligations for public and private sector companies operating in the country.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2021

Develop a national renewable energy policy that defines the country's goals in this area and identifies the means to achieve them.

Work ongoing. The Government has been undertaking efforts to reach the 50% target set in the updated NDC by launching critical projects to transform Mauritania into a regional front-runner in renewables production and a world-class liquefied natural gas (LNG) hub.

Adopt energy efficiency measures, including quantifiable targets, mandatory audits and penalties for large energy users, savings incentives for commercial users and the public sector, and financing mechanisms for energy efficiency activities.

Work ongoing. The UNDP-steered Greening Mauritania project has deployed a team of experts to conduct an energy consumption audit on two major administrative buildings and the UN office in Mauritania. The UNDP has also offered technical equipment for three wind measurement stations.

INDICATOR 3

Improvements proposed in 2021

Create a legal framework on public accountability and access to information.

Work ongoing. In 2021, the Government passed the 2022 budget and made it accessible to the public via the Ministry of Finance portal. The accounting documents accompanying the State budget provide a complete picture of the Government's planned expenditures and revenues, including those from natural resources. The documents were prepared according to internationally accepted standards. Moreover, the Government is digitalising the country's finance administration.

Improvements proposed in 2022

Ensure that the relevant State agencies effectively collect and disclose data on beneficial ownership.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2021

Establish criteria to determine which activities constitute 'public purpose' in the context of expropriation and introduce a valuation process and specific timeframes for the payment of compensation.

Pending

Improvements proposed in 2022

Establish an ombudsperson or lead agency to resolve conflicts between foreign investors and the public administration during project implementation.

Improvement suggested in 2022. Status will be updated in 2023.

Reinforce the protection granted to the owners of intellectual property rights by implementing the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights and signing and ratifying all the internet-related World Intellectual Property Organization treaties.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 5

Improvements proposed in 2021

Reinforce the ARM's institutional and functional independence and increase its authority on setting tariffs and determining the market rules.

Work ongoing. The Government is revising the Electricity Code, including the provisions on the ARM's role in the electricity market.

Improvements proposed in 2022

Revise the electricity tariff framework to ensure the market operators' economic viability and the contribution of customers in urban areas to subsidising electricity rates in rural areas.

Improvement suggested in 2022. Status will be updated in 2023.



Montenegro

Population ¹	620,173
Area (km ²) ¹	13,810
GDP per capita (USD) ¹	9,367.02
TES/GDP (GJ/thousand 2015) ²	9.58
Net Energy Imports (TJ) ²	15.36
RE share in Final Energy Consumption (%) ²	38.7
Total CO ₂ emissions (MtCO ₂) ²	2.6

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	1 minority stake deal	Serbia: 1 TD deal of 13.84 mEUR

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
 2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
 3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022.
For more information see Annex III of this report.
- TD: Transmission and Distribution of electricity

Montenegro’s overall risk level against the assessed areas is **low**.

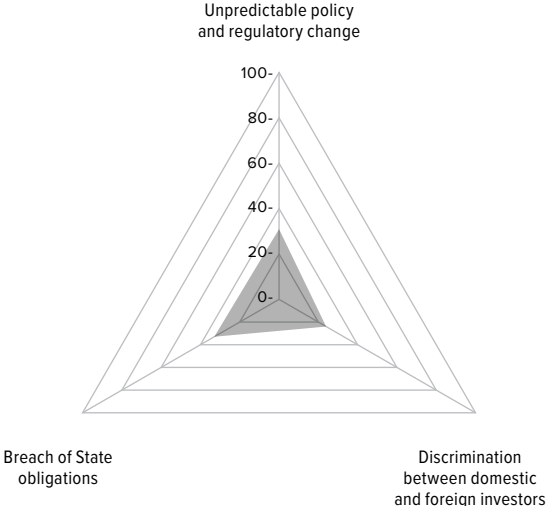
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risk of *unpredictable policy and regulatory change* and *breach of State obligations*.

Montenegro has a very good performance on one EIRA indicator, a good performance on three indicators, and a moderate performance on one. The highest-scoring indicator is *regulatory environment and investment conditions* at 83, followed by *management of decision-making processes* at 77, *rule of law* at 67 and *foresight of policy and regulatory change* at 66. The lowest-scoring indicator is *framework for a sustainable energy system* at 52.

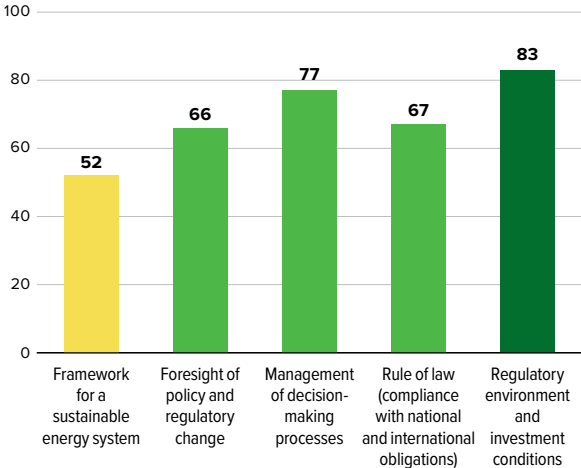
Montenegro’s overall sub-indicator performance is good. The highest-scoring sub-indicators are *regulatory independence* at 89, *electricity industry market structure and competition* at 85, and *transparency and anti-corruption measures* at 80. Montenegro’s score is good on six sub-indicators, namely *restrictions on FDI* (76), *institutional governance* (75), *robustness of policy goals and commitments* (72), *respect for property rights* (69), *policy planning on clean energy transition* (67), and *management and settlement of investor-State disputes* (65). It has received a moderate score on *communication of vision and policies* (59), *environment protection, human rights and gender* (52), and *enabling measures to support clean energy transition* (51). The lowest-scoring sub-indicator is *energy resilience* at 40.

While Montenegro is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to improve the resilience of its energy system and create an enabling environment to achieve a clean energy transition.

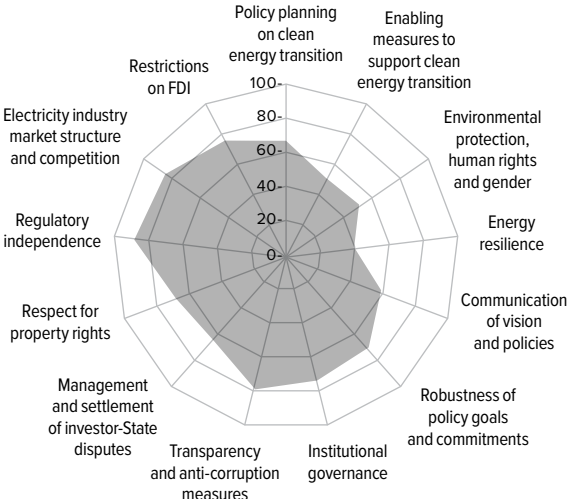
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

In June 2021, Montenegro submitted an updated NDC to the UNFCCC Secretariat.

The Ministry of Ecology, Spatial Planning and Urbanism (MESPU) is currently developing Montenegro's NECP. The first draft of the NECP was submitted to the Energy Community Secretariat for review in 2021.

STRENGTHS

Montenegro's updated NDC represents the Government's efforts to push forward with its clean energy transition and make the energy system sustainable. The updated NDC sets a new target of lowering GHG emissions by 35% by 2030 (instead of 30% as mentioned in its first NDC) compared to 1990. The target will be implemented from 1 January 2021 to 31 December 2030.

In 2021, Montenegro submitted its Third Biennial Update Report to the UNFCCC Secretariat. This report includes an update to the 2010 GHG emissions inventories, the results of the new GHG inventories for 2017, and describes the measures adopted and implemented by Montenegro to manage and plan GHG emissions reductions. Moreover, by signing the Sofia Declaration on the Green Agenda for the Western Balkans, Montenegro has committed to working towards carbon neutrality by 2050 together with the EU. The measures envisaged in the Declaration aim to introduce carbon taxation and market-based instruments to encourage renewable energy and reduce coal consumption. Montenegro is also one of seven leading countries to sign a pledge initiated by the United Nations to stop the construction of new coal power plants. It supports a global phase-out of coal by 2050 through the 'No New Coal Compact'.

The National Climate Change Strategy (NCCS) to 2030 and the National Strategy of Sustainable Development until 2030 (NSSD) identify transport as a priority sector for climate action. They outline targets and measures to increase public transport use (through a new fleet of buses) and promote energy-efficient electric vehicles for public and individual transportation. In 2021, Montenegro transposed the EU Directive on the promotion of the use of biofuels or other renewable fuels for transport (2003/30/EC) and the EU Directive on the promotion of the use of energy from renewable energy sources (2009/28/EC) relating to biofuels and bioliquids. The implementation of the sustainability criteria envisaged in these Directives is expected to increase the use of biodiesel, alternative fuels (liquefied petroleum gas and compressed natural gas), and electrical power in transport. Also, the updated NDC stipulates that the Government will launch a grant of EUR 50,000 for citizens and companies to purchase electric cars and an additional EUR 50,000 for hybrid vehicles. The grant, provided by the Eco Fund, aims to encourage the procurement of environmentally friendly modes of transport to improve air quality and ensure environmental preservation.

The Law on Protection against Negative Impacts of Climate Change, enacted in 2019, establishes the National System for the Measurement, Reporting and Verification of GHG emissions. This system conducts several activities, including collecting, maintaining,

and regularly informing national stakeholders and the international community on climate-related issues, as well as annual reporting on GHG emissions, vulnerabilities, and progress towards addressing challenges in adaptation and mitigation actions. Following the adoption of this Law, the Government passed the Decree on Issued Activities for GHG Emissions in 2020, setting out a regulatory framework for GHG emissions from industrial and energy plants. In addition, the Decree determines the participants in emission trading and the total amount and minimum price of the emission credits auctioned (EUR 24 per tCO₂). It also provides for the formation of a stabilisation reserve, the method of recording the allocated emission credits and the purpose of funds raised through the auction of emission credits. The funds are transferred to the Eco Fund and used for environmental measures, renewable energy support, and innovation financing.

The Government is taking measures on cross-cutting issues such as environmental protection and transitioning to a circular economy. The NSSD transposes the United Nations Agenda 2030 and underlines the importance of applying circular economy principles, particularly in waste management. In 2022, the United Nations Development Programme (UNDP) for Montenegro and the Chamber of Economy of Montenegro launched the Circular Economy Roadmap of Montenegro, which was developed with the Government's endorsement. The Ministry of Economic Development and Tourism is now preparing a Circular Transition Strategy until 2030 to ensure the country's sustainable economic recovery.

AREAS FOR IMPROVEMENT

The Government should consider gradually replacing the generation capacity of the 225 MW coal-fired plant in Pljevlja, which remains the biggest emitter of CO₂ in the country. To make up for Pljevlja's share in the capacity mix, the Government must set more ambitious targets for solar and wind generation in its NECP. The country should avail technical and financial support from international financial and development institutions and introduce auctions for installing new production facilities at competitive prices.

While Montenegro has made efforts to introduce circular economy principles in the past years, its focus has primarily been on the waste management sector. The Government should consider taking a broader approach to this issue and adopt best practices to apply circular economy approaches in the extractives sector. The reforms should include setting a circular economy vision in mining activities based on thorough statistical analyses, stakeholder consultations, and identification of key opportunities, outputs, and challenges.

Foresight of policy and regulatory change

QUICK FACTS

- I The Energy Development Strategy (EDS) was adopted in 2014 to outline Montenegro's objectives for the energy sector.
- I In April 2021, the Government announced that it is preparing a new energy strategy in parallel with the NECP.

STRENGTHS

The Government is implementing several measures to meet its energy sector targets and communicate its future ambitions and priorities to investors. Work is underway to increase the development and deployment of renewable energy resources. In 2019, Montenegro registered a 37.37% share of renewables in the gross final energy consumption, exceeding the overall target for 2020 stated in the National Renewable Energy Action Plan. The required sectoral targets for electricity (51.4%) and heating and cooling (38.2%) have also been reached. New capacities are expected to be introduced in the coming period through the Briska Gora Solar Photovoltaic Park (250 MW) and the tendering for the solar power plant Velje Brdo. The Gvozd (54.6 MW) and Brajići (100 MW) onshore wind farms are in the permitting stage.

The 2020 Law on Energy defines a net metering scheme for self-consumption, obliging suppliers to purchase the surplus of electricity produced after the annual settlement at the energy price indicated in the supply contract. This scheme has resulted in nine self-consumers by September 2021. Moreover, the national power utility, Elektroprivreda Crne Gore (EPCG), and the Eco Fund have launched a public tender for SOLARI 3000+ and SOLARI 500+ projects. The tender's objective is to construct integrated solar power plants by subsidising the purchase and installation of photovoltaic systems up to 10 kW for residential buildings and up to 30 kW for legal entities and business owners. Homeowners have been invited to participate in the scheme that should ensure a return on investment after seven years.

To encourage energy efficiency, the National Energy Efficiency Action Plan 2019-2021 sets an annual target to increase by 1% the energy savings of central government buildings. The 2020 Law on Energy transposes the EU Energy Efficiency Directive, which requires an assessment of the high-efficiency cogeneration and efficient district heating and cooling potential. The Ministry of Capital Investments (MCI) has also adopted a set of 12 rulebooks stipulating the conditions and practices for energy labelling and eco-design for energy-related products. Additionally, in 2021, the Government proposed amendments to the Law on Efficient Use of Energy in line with the NECP. Once adopted, the amended Law will provide clarity about the country's energy efficiency policy until 2030.

The Government recognises that electricity interconnections with neighbouring countries will be vital to Montenegro's energy security. To this end, it is developing the Montenegro-Serbia-Bosnia and Herzegovina-Italy Energy Interconnection Project, consisting of a new 455 km-long cable line between Italy and Montenegro and a 400 kW transmission line between Bosnia and Herzegovina and Serbia. At the same time, the new 400 kV connection between the

electricity transmission systems of Serbia, Bosnia and Herzegovina, and Montenegro is undergoing a feasibility assessment. This project, considered part of the Western Balkans Investment Framework, will allow the transfer of electricity in the region, including that produced from new renewable sources. The main beneficiaries of this project are the three national transmission system operators. The construction of the Ionian-Adriatic Pipeline will connect the existing Croatian gas transmission system via Montenegro and Albania to the Trans-Adriatic Pipeline system. Its construction is the most viable option for Montenegro's gasification and achieving supply diversification and market integration.

In 2021, the Government issued performance evaluation reports on the macro-economic level and for the energy sector. Budget execution and central government debt data were regularly made available by the Ministry of Finance on its website. In 2021, the MCI submitted the report on the progress achieved under the renewable energy and energy efficiency action plans to the Energy Community Secretariat. As of 2020, national legislation is aligned with the Strategic Environmental Assessment Directive (SEA) and the Environmental Impact Assessment (EIA) Directive, including all subsequent amendments. The SEA procedure was triggered during the drafting of the NECP and resulted in the participation of national stakeholders and local authorities. The most recent example of an EIA study is the one performed for the Komarnica hydroelectric project, which underlined the detrimental environmental impact on biodiversity conservation in the Komarnica area, categorised as a natural monument and a nature park.

AREAS FOR IMPROVEMENT

To fully transpose the EU acquis, the Government should progress with the transposition of the Regulation on Wholesale Energy Market Integrity and Transparency (REMIT), the adoption of the draft Law on Security of Supply of Oil Products, and the draft Law on Cross-border Energy Infrastructural Projects.

The Government is recommended to expediently adopt the NECP and the Action Plan for Development and Usage of the Distant Cooling and/or Heating and High Efficiency Cogeneration as required under the 2020 Law on Energy.

The MESPU should expedite the adoption of the Long-Term Low-Carbon Development Strategy to 2050, as envisaged in the Law on Protection against Adverse Impacts of Climate Change. Such a long-term policy can guide the overall vision, general and specific objectives, and measures to achieve mandatory GHG reduction targets across sectors.

Management of decision-making processes

QUICK FACTS

The MCI is responsible for the energy sector and developing investment projects in energy and mining.

The Law on Free Access to Information, adopted in 2012, regulates the process for exercising the right of free access to information.

STRENGTHS

As per the Public Optimisation Plan 2018-2020, following the 2020 general elections, the Government has substantially reduced the number of ministries to ensure a leaner public service structure and better align actual personnel needs with the internal job systematisation. The new ministries have adopted rulebooks for their internal organisation. Advisory councils, such as the National Council for the Fight against High-Level Corruption, the Council for Privatisation and Capital Projects, and the Council for Public Administration Reform, have been set up to enhance the expertise and efficiency of public administration.

The Government is taking measures to simplify procedures for establishing and operating businesses and removing bureaucratic barriers to trade and investment. The Central Register of Economic Entities of Montenegro (CREE) has been set up to maintain a record of the economic entities operating in the country. The CREE also provides the public with data on registered companies, information on the registration process, instructions, and forms. The Montenegrin Investment Agency (MIA) oversees the realisation of public-private partnership (PPP) projects and other forms of investments. It also conducts activities to promote the country as an investment destination. Five organisational units operate under the MIA (PPP Sector; Investment Sector; Investment Promotion and International Cooperation Sector; General Affairs Service; and Financial Affairs Service), closely collaborating with governmental authorities to provide investors with general and industry-related information.

The Government publishes its budget proposals, the enacted budget, and the in-year and final budget execution reports, such as the one for January-September 2021. The same level of transparency is required from State bodies, such as the State Audit Institution, which makes its reports available on its official website. Similarly, in 2021, the Energy and Water Regulatory Authority of Montenegro (REGAGEN) published the methodology for determining the regulatory allowed revenues and prices for the use of the electricity transmission and distribution systems and the Rules on licences for performing energy activities. Also, in 2021, REGAGEN conducted a public debate on the Draft Distribution and Transmission Development Plans 2023-2032 and published all the relevant documents. Another positive development regarding transparency concerns the Parliament's initiative to make its work available to the public. The Parliament sessions have been broadcasted live on online sharing platforms and the national public broadcaster since 2021.

The recently adopted PPP and public procurement laws have improved the procurement process of goods, services, and works and reduced irregularities in the public procurement system. Moreover, with support from the European Commission, the Government launched its first electronic public procurement system in 2021. By June 2021, nearly 2,000 users registered in the system, including contracting authorities and economic operators.

The Government is taking measures to eliminate corrupt practices and strengthen public accountability. In July 2021, the Revenue and Customs Administration established the online Register of Ultimate Beneficial Owners (UBO Register) as required by the Law on the Prevention of Money Laundering and Terrorist Financing. Associations, institutions, chambers, trade unions, trust funds, foundations or business and legal entities receiving, managing or allocating funds for purposes specified in the Law must register in the UBO. The entities must submit their application, with a qualified electronic signature, on a website managed by the Revenue and Customs Administration of Montenegro. In addition to establishing the UBO register, in June 2021, the Parliament adopted a set of amendments to the Law on the Prevention of Money Laundering and Terrorism Financing, reflecting the new priorities of the Financial Intelligence Unit (FIU) and aligning it with the recently adopted Law on Internal Affairs. The two laws confirm the FIU's operational independence and autonomy and aim to ensure compliance with the Financial Action Task Force standards and the Egmont Group's criteria.

AREAS FOR IMPROVEMENT

The Government should expedite the adoption of the revised Law on Free Access to Information pending since 2020 to guarantee proactive disclosure of legal and regulatory decisions and timely exchange of information held by public authorities. Similarly, it should replace the expired 2018-2020 Strategy for Improving the Environment for NGOs to improve cooperation mechanisms between State institutions and civil society organisations.

Although public consultation on draft laws and regulations is a legal requirement, in certain instances, such as the amendments to the Law on Freedom of Religion or Belief and the Law on Civil Servants and State Employees, this has remained a formality. It is recommended that State authorities avoid initiating or passing legislation through the fast-track procedure and foster a practice of openness toward civil society representatives' views.

Rule of law

QUICK FACTS

- | Montenegro ratified the ECT on 16 July 2015.
- | Montenegro is a member of MIGA.
- | Montenegro signed the UN Convention on International Settlement Agreements Resulting from Mediation (Singapore Convention on Mediation) in 2019.

STRENGTHS

Following the adoption of the Program of Alternative Methods of Dispute Resolution 2019-2021 and the Law on Alternative Dispute Resolution in 2020, the dispute resolution landscape has grown to include early neutral dispute evaluation, mediation and arbitration. As a result, mediation is increasingly being used in Montenegro to facilitate collaborative problem-solving between parties involved in a dispute. According to official statistics, the number of cases resolved through mediation has risen consistently, with 1,200 mediation settlement agreements concluded by 2021.

The Act on International Private Law regulates the procedure for recognising and enforcing foreign judgments. At the same time, the Law on Enforcement and Security of Claims of 2011 provides for the recognition and enforcement of foreign judgments and orders issued by EU courts. It covers both civil and criminal cases and is based on reciprocity, meaning that a decision issued by a Montenegrin court should also be recognised in EU courts.

Montenegro maintains BITs with 24 countries, covering investments across sectors, including energy. A number of these BITs coexist with the EU-Montenegro Stabilisation and Association Agreement and the ECT. Moreover, Montenegro signed the Central European Free Trade Agreement (CEFTA) in July 2007, along with Albania, Bosnia and Herzegovina, North Macedonia, the Republic of Moldova, the United Nations Mission in Kosovo (UNMIK), and Serbia. The free trade agreement (FTA) with Turkey entered into force in 2010, while the FTA with the European Free Trade Association (EFTA) countries came into force in 2011. These FTAs require the parties to facilitate and promote foreign investment, trade in goods and services beneficial to the environment, including environmental technologies, sustainable renewable energy, energy-efficient and eco-labelled goods and services, and address related non-tariff barriers. National Treatment and Most-Favoured-Nation principles are enshrined in all FTAs and BITs that Montenegro is a party to and extends to intellectual property rights. Exemptions from this obligation must be per the provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights.

Domestic courts post information on their respective websites about scheduled hearings, decisions, annual work reports, and other documents relevant to the general public. All court decisions are available on a dedicated website (www.sudovi.me). In 2019, the joint EU and Council of Europe action 'Improved procedural safeguards in judicial proceedings in Montenegro' started supporting

the development and publication of the Bulletin of the Constitutional Court of Montenegro. As part of this project, the most relevant case law from 2018 to 2020 will be compiled and published to provide objective summaries of the issues and arguments pertinent to the Constitutional Court's decisions. The Bulletin will offer legal opinions and extracts of the most relevant case law, which will serve as a useful tool for the legal community.

IAs signed by Montenegro, such as CEFTA, EFTA, and the ECT, protect foreign investments against expropriation, nationalisation or other measures having an equivalent effect. The IAs clarify that expropriation or nationalisation is permissible only for a public purpose, following due process of law, on a non-discriminatory basis and against compensation. At national level, the Law on Expropriation, as amended in 2018, provides a detailed description of the expropriation procedure, including the amount and types of possible just compensation. The owner of the expropriated immovable property is entitled to a fair remuneration in cash determined by the market price of the same kind of immovable property in the same or similar area of the municipality, plus one basis point above the LIBOR rate for the period between the date of expropriation and that of payment of compensation. The remuneration should account for profits lost in the relocation period depending on the use of the immovable property and relocation costs incurred when concluding the agreement or adopting the first-instance decision on compensation.

AREAS FOR IMPROVEMENT

The scope of 'public interest' as grounds for expropriation should be defined in legislation and comply with the EU legal standards.

The Government should consider establishing an ombudsperson or lead agency to handle conflicts and grievances between foreign investors and the public administration arising during projects. It can seek guidance from the Energy Charter Model Instrument on Management of Investment Disputes, which aims to assist States in handling investment disputes while keeping in mind their own needs and circumstances.

Although national courts must adjudicate disputes without delay and within a reasonable time, the introduction of timeframes for the conclusion of every step of the legal proceedings and limits on the number of adjournments for each case would help to reduce case backlogs further.

Regulatory environment and investment conditions

QUICK FACTS

- | As amended in 2020, the Law on Energy stipulates the regulatory powers and functions of REGAGEN.
- | Wholesale market operations are managed by the electricity market operator COTEE.
- | The Agency for Protection of Competition (APC) is an independent authority that monitors and analyses market competition.
- | Under the Law on Foreign Investment, domestic and foreign companies in Montenegro are guaranteed equal legal treatment.

STRENGTHS

REGAGEN remains committed to liberalising the electricity market. The unbundling and certification of the transmission operator, CGES, and the distribution system operator, CEDIS, have been completed in accordance with the EU acquis. In 2021, the operators prepared annual compliance reports and submitted these to REGAGEN for approval. The wholesale and retail markets are open to competition. The Law on Energy establishes the power exchange and defines the roles and responsibilities of COTEE. The balancing market is competitive, and the price of balancing energy is not regulated. In addition to the EPCG, which is a balancing service provider, a contract for providing balancing services was signed with an industrial customer in 2020. REGAGEN is responsible for determining the balancing reserve price until sufficient competition exists.

The amended Law on Energy allows REGAGEN to issue licences for performing energy-related activities at the request of businesses or natural persons who meet the criteria set through the amendment. As a result, in 2021, REGAGEN adopted several rules and decisions to implement these amendments. It revised the Rules on Licences for Performing Energy Activities to remove licensing requirements for certain energy-related activities. Some of these exempt activities are electricity generation for self-consumption, electricity generation from more than one plant if the collective installed capacity does not exceed 1 MW, operations of gas installation for self-consumption, and heat supply for district heating and cooling. Moreover, a certified electricity transmission system operator from another country may now perform activities of electricity transmission through an interconnector without a licence if (1) the interconnector is part of the public infrastructure, (2) the interconnector owner and CGES have signed a contract for the connection and, (3) the interconnector does not distort competition and ensures efficient electricity market functioning and proper functioning of the transmission system.

In October 2021, the Montenegrin power exchange (MEPX) operator Berza Električne Energije (BELEN), the European Power Exchange (EPEX SPOT), and the Slovenian power exchange operator (BSP SouthPool) signed a service agreement to create the day-ahead power market at the MEPX. The cooperation agreement focuses on processes required to operate a national day-ahead market in Montenegro, market coupling, day-ahead clearing, and settlement processes. Moreover, in early 2022, the legal framework regulating the functioning of the energy market was further amended with the adoption of the Law on Surveillance of the Wholesale

Electricity and Natural Gas Market. The initial obligation of market participants is to apply for entry into the register of wholesale market participants established by REGAGEN. By March 2022, 16 participants registered for the wholesale electricity market successfully.

Recent amendments to the Law on Protection of Competition have introduced changes in the APC's organisational structure, as well as to the requirements for the appointment of its bodies and their functions. From January 2022 onwards, the APC comprises a Council, a Director and a Deputy Director. The Directors are selected by the Council instead of the Government. The new duties of the Directors include, among others, proposing the Statute of the APC and ensuring its work is made publicly available.

The Government has prioritised the IT, energy, tourism, and transport sectors to attract investments. In March 2021, the MCI announced auctions within a comprehensive programme to increase the share of solar and wind resources in the country's energy mix. The programme includes plans to draft a new law on renewable energy sources to clarify the framework for competitive procurement of renewable energy, the design and implementation of auctions, and the transition mechanisms to the day-ahead market. Moreover, the MCI is currently monitoring the implementation of five solar power projects, including a 100 MW solar park constructed by the EPCG in partnership with Finnish utility Fortum and a floating photovoltaic power plant on the Slano artificial salt lake. The total installed power of these two plants is around 2.2 MW, while the planned annual production is expected to be 3 GWh.

AREAS FOR IMPROVEMENT

The Parliament and the Government of Montenegro should take steps to secure the functional and operational independence of REGAGEN. For instance, they may consider excluding REGAGEN's staff from the application of the Law on Salaries of Employees in the Public Sector. Similarly, the Parliament of Montenegro should approve REGAGEN's annual report on time. The period between the expiry of the term of office/release of REGAGEN's Chairman and Board Members from duty and their employment in regulated companies should be longer than a year.

The Government should consider eliminating the existing annual quotas on the number of foreign workers and the restrictions imposed on intra-corporate transfers.

INDICATOR 1

Improvements proposed in 2022

Replace the generation capacity of the 225 MW coal-fired plant in Pljevlja by setting more ambitious targets for solar and wind generation in its NECP; avail technical and financial support from international financial and development institutions in this respect and introduce auctions for installing new production facilities at competitive prices.

Improvement suggested in 2022. Status will be updated in 2023.

Formulate a circular economy vision for mining activities in line with best practices.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2018

Adopt national action plans that set long-term and outcome-oriented targets for the energy priorities.

Work ongoing. The 4th National Energy Efficiency Action Plan was adopted in 2019. Moreover, the Government is working on the NECP and the Law on Efficient Use of Energy in line with the NECP.

Enhance the independence of the monitoring bodies and increase the capacities of certain agencies such as the Inspectorate for Energy Efficiency and the Eco Fund.

Work ongoing. The Eco Fund became fully operational in 2020. It is financed under the polluter pays principle and must utilise its resources for environmental remediation and pollution prevention. Furthermore, the Law on Protection against Negative Impacts of Climate Change envisages the establishment of the National System for the Measurement, Reporting and Verification of GHG emissions.

Improvements proposed in 2020

Adopt the Action Plan on Compulsory Strategic Reserves of Oil and Petroleum Products, the draft Law on Security of Supply of Oil Products, the REMIT Regulation, and the draft Law on Cross-border Energy Infrastructural Projects that will bring the country's legal framework in conformity with the EU acquis.

Work ongoing. In 2020, the Government amended the Law on Energy. Also, in 2021, the Government adopted the Law on Infrastructure.

Improvements proposed in 2022

Adopt the NECP with updated national renewable and energy efficiency targets and the necessary policy monitoring and evaluation mechanisms.

Improvement suggested in 2022. Status will be updated in 2023.

Adopt the Long-Term Low-Carbon Development Strategy to 2050 to guide the overall vision, general and specific objectives, and measures to achieve mandatory GHG reduction targets across sectors.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 3

Improvements proposed in 2018

Reinforce stakeholder engagement and ensure the implementation of laws regarding transparency in decision-making.

Work ongoing. In 2020, the Government invited comments on proposed amendments to the Law on Energy.

Improvements proposed in 2022

Expedite the adoption of the revised Law on Free Access to Information pending since 2020 and replace the expired 2018-2020 Strategy for Improving the Environment for NGOs.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2018

Establish criteria to determine which activities constitute 'public purpose' in the context of expropriation.

Pending

Establish an ombudsperson or lead agency to handle conflicts and grievances between foreign investors and the public administration arising in the course of projects by seeking guidance from the Energy Charter Model Instrument on Management of Investment Disputes.

Work ongoing. Since 2019, a positive trend in alternative dispute resolution has been established with an increase in the number of cases referred to the Mediation Centre and the Agency for Peaceful Settlement of Labour Disputes.

Introduce timeframes for the conclusion of every step of the legal proceedings and limits on the number of adjournments for each case to reduce case backlogs.

Pending

INDICATOR 5

Improvements proposed in 2018

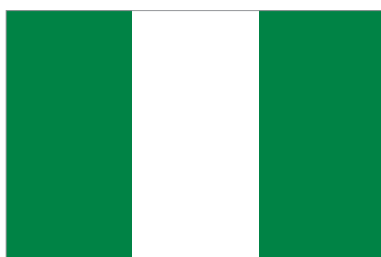
Relax annual quotas on the number of foreign workers that can be employed in the country.

Pending

Improvements proposed in 2022

Exclude REGAGEN's staff from the application of the Law on Salaries of Employees in the Public Sector and secure the timely approval of RERAGEN's annual report by the Parliament; extend the period between the expiry of the term of office/release of REGAGEN's Chairman and Board Members from duty and the employment in regulated companies to at least two years.

Improvement suggested in 2022. Status will be updated in 2023.



Nigeria

Population ¹	211,400,704
Area (km ²) ¹	923,770
GDP per capita (USD) ¹	2,085.03
TES/GDP (GJ/thousand 2015) ²	12.91
Net Energy Imports (TJ) ²	-4,207.94
RE share in Final Energy Consumption (%) ²	81.4
Total CO ₂ emissions (MtCO ₂) ²	92.02

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	2 new projects 1 joint venture deal	United Arab Emirates: 1 RE project of 90.8 mEUR United Kingdom: 1 RE project of 1,75 mEUR Value of 1 RE deal (Germany) is n.a
Extraction of crude petroleum	2 new projects 1 minority stake deal 1 acquisition deal	United States of America: 1 project of 1,000 mEUR The Netherlands: 1 project of 4 mEUR United Kingdom: 1 deal of 127mEUR Canada: 1 deal of 2.45 mEUR
Manufacture of refined petroleum products	2 acquisition deals	Singapore: 1 deal of 3.8 mEUR Value of 1 deal (United Arab Emirates) is N/A
Transport by pipeline	1 minority stake deal	South Africa: 1 deal of 49.05 mEUR
Support activities for petroleum and natural gas extraction	1 joint venture deal	Value of 1 deal (United Arab Emirates) is N/A

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022.
For more information see Annex III of this report.
RE: Renewable energy based electricity production

Nigeria’s overall risk level against the assessed areas is **moderate**.

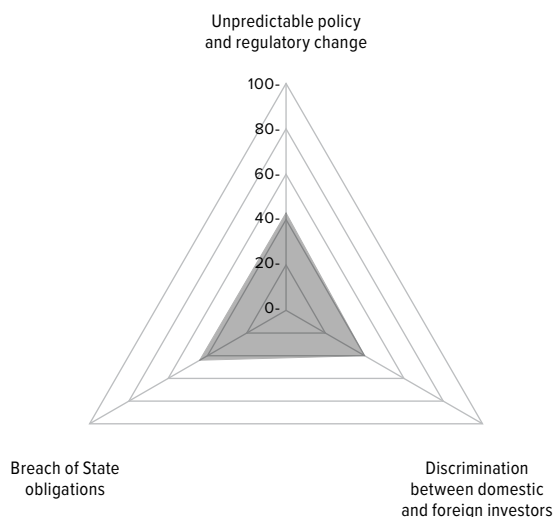
Among the three risk areas, *discrimination between foreign and domestic investors* is lower than *unpredictable policy and regulatory change* and *breach of State obligations*.

Nigeria has a good performance on two of the EIRA indicators and a moderate performance on three indicators. The highest-scoring indicator is *management of decision-making processes* at 70, followed by the indicator *rule of law* at 62. Its score on the indicator *framework for a sustainable energy system* is 57, and on the *regulatory environment and investment conditions* indicator, it is 49. *Foresight of policy and regulatory change* is the lowest-scoring indicator at 48.

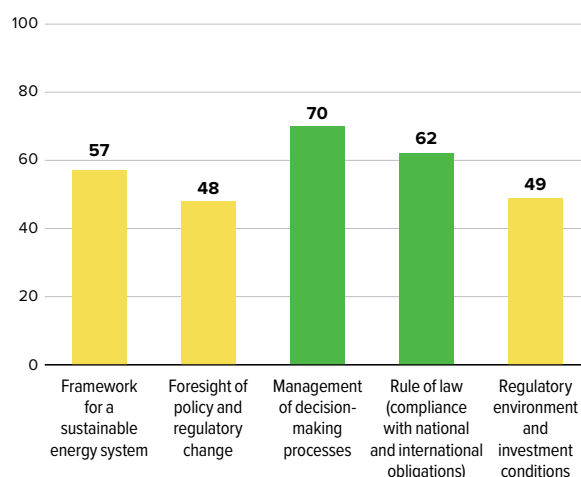
Nigeria’s overall sub-indicator performance is moderate. The highest-scoring sub-indicators are *policy planning on clean energy transition* at 76, *institutional governance* at 75 and *respect for property rights* at 70. Following these sub-indicators are *transparency and anti-corruption measures* at 64, *regulatory independence* at 63, and *environment protection, human rights and gender* at 61. Nigeria’s score is moderate on four sub-indicators: *communication of vision and policies* at 58, *energy resilience* at 57, *restrictions on FDI* at 56 and *management and settlement of investor-State disputes* at 53. The lowest-scoring sub-indicators are *robustness of policy goals and commitments* at 39, *enabling measures to support clean energy transition* at 33, and *electricity industry market structure and competition* at 30.

Nigeria must reduce legal and regulatory risks to energy investments by implementing measures to achieve a clean energy transition and making the electricity market competitive.

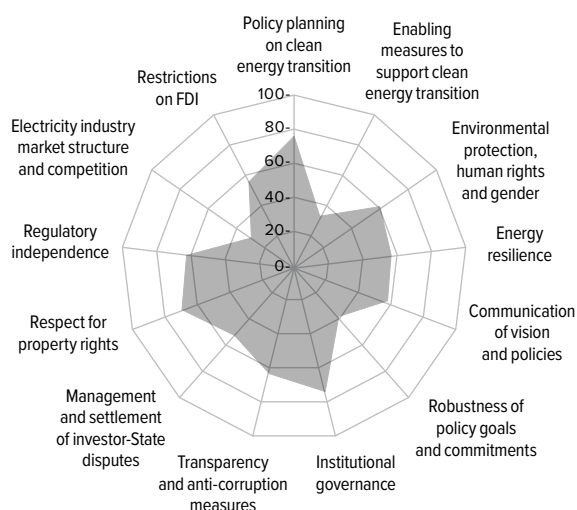
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

- | On 30 July 2021, Nigeria submitted its updated NDC to the UNFCCC Secretariat.
- | In 2021, the Nigerian Federal Ministry of Environment adopted the National Climate Change Policy 2021-2030.
- | The Federal Government of Nigeria (FGN) enacted the Climate Change Act in 2021 (CCA 2021). It is the first stand-alone climate change law in West Africa.

STRENGTHS

The FGN is making progress on its clean energy transition agenda. Nigeria's updated NDC increases the country's conditional contribution from 45% to 47% by 2030 (below business-as-usual). The updated NDC includes commitments to reduce emissions in the waste sector for the first time. It also contains quantifiable targets to generate at least 30% (25.2 GW) of on-grid electricity from renewable energy sources and 13 GW from off-grid renewable energy by 2030. It commits that Nigeria will reduce grid transmission and distribution losses to 8% of final electricity consumption by 2030 (down from 15% in 2018), replace all diesel and single-cycle steam turbines with combined cycles and phase out diesel and gasoline electricity generators.

The FGN is taking policy initiatives for GHG emission reduction and accelerating the deployment of renewable electricity. Recognising the substantial contribution of the forest and land sector to Nigeria's GHG emissions, the FGN established, in 2021, a National Reducing Emissions from Deforestation and forest Degradation Strategy (REDD+ Strategy) that will be implemented over thirty years, until 2050. Between 2021 and 2025, the REDD+ Strategy will focus on improving institutional and governance systems, spatial planning and the investment environment to fulfil Nigeria's GHG reduction commitment while maintaining economic growth.

The Rural Electrification Agency of Nigeria is implementing ambitious projects to scale-up off-grid solar energy solutions. The Solar Naija project, launched in December 2020, is the most recent initiative of the FGN. It aims to ensure energy access to 25 million individuals (5 million new connections) through solar home systems and mini-grids and create 250,000 new jobs in the energy sector. Other projects to promote off-grid solar power systems are the Nigeria Electrification Project, the Rural Electrification Fund and the Energising Economies Initiative.

Ensuring the accountability of investors towards local communities and regulating corporate social responsibility (CSR) activities is another priority of the FGN. In August 2021, it enacted the Petroleum Industry Act (PIA 2021), which makes CSR contributions a mandatory levy on corporations, thereby changing the voluntary nature of CSR to a legal obligation. Additionally, the FGN is attempting to increase the role of women in the energy sector. In 2020, the Federal Ministry of Environment adopted the National Action Plan on Gender and Climate Change, prioritising five sectors, including energy, transportation, and forest and land use. The Action Plan's objective for the energy and transport sectors is to ensure gender responsiveness in the relevant policies, legislation and programmes. The FGN is also exploring options

to increase circular activities in solid minerals, mining and steel development sectors. To this end, it plans to develop a circular economy and environmental protection programme that will reduce the footprint of mining waste and create new job opportunities.

AREAS FOR IMPROVEMENT

The FGN's efforts to utilise carbon-neutral energy resources and technologies are focused primarily on off-grid power generation. The FGN and the Nigerian Electricity Regulatory Commission (NERC) must liberalise the wholesale electricity market to mobilise private investment in on-grid renewable electricity. It should also finalise the 12 solar projects that have not reached a financial close since 2016 because the single electricity buyer, the Nigerian Bulk Electricity Trading Plc (NBET), could provide adequate credit enhancement instruments to the concerned independent power producers. Moreover, in November 2021, NERC renewed NBET's license for three years. It is recommended that during this time, NERC should establish the necessary legal and regulatory conditions to allow large, financially bankable consumers to buy electricity directly from generation companies (GenCos) and remove the need for government-backed guarantees.

The shift to electric vehicles is essential for Nigeria to reduce its dependence on imported diesel, which puts a financial burden on the national budget and end consumers. The average retail price of diesel has increased 129.10% for consumers, up from Naira 235.41 in March 2021 to Naira 539.32 in March 2022. Similarly, the average retail price paid by consumers for petrol has increased by 7.31%, from Naira 172.68 in March 2021 to Naira 185.30 in March 2022. Given these statistics, the FGN is advised to develop a short-term or long-term action plan to implement its vision for a decarbonised transport sector. It is also recommended that the National Automotive Industry Development Plan Bill, which has been pending with the National Assembly for over a year now, should be adopted at the earliest and include measures to attract private investment in electric vehicle charging infrastructure.

The FGN should develop short- and long-term policies, incentive schemes and bankable business models to attract investment in small and large scale energy storage. This approach will facilitate the integration of variable renewable energy into the electricity grid, increase the resilience of energy systems, and help commercial enterprises and households wean away from the extensive use of diesel generators that back up the unstable electricity supply from the grid.

Foresight of policy and regulatory change

QUICK FACTS

In 2021, the FGN adopted the Medium-Term National Development Plan 2021-2025 (NDP).

On 8 December 2021, Nigeria communicated to the UNFCCC Secretariat its '2050 Long-term Vision for Nigeria-Towards the Development of Nigeria's Long-Term Low Emissions Development Strategy' (LTV 2050).

STRENGTHS

In line with the EIRA recommendations from previous years, in 2021, the FGN published the NDP to inform investors of the energy sector's short-term national objectives. The NDP aims to increase electricity transmission from 3,592 MW to 10,000 MW by 2025. The amount of energy on the distributed network is expected to grow from 3,145 MW to 10,000 MW (70% gas and 30% other sources). The share of renewables in total power generation should rise from 13% to 23% by 2025.

The CCA 2021 embeds Nigeria's net-zero emission ambition in law and aims to reach this target between 2050 and 2070. The LTV 2050 informs investors of Nigeria's long-term plan to decarbonise the energy sector by cutting half of its emissions relative to current levels and increasing the share of renewables in the country's energy mix by 50%. The long-term vision for the oil and gas sector is to reduce carbon emissions from the value chains by 50% of the current level by 2050. In the transport sector, the FGN aims to develop a national transportation system by 2050 to ensure citizens have access to affordable transportation choices. 50% of all journeys must be undertaken by cars, at least 40% by public transport, and 10% by active travel (e. g. cycling, walking) to generate little to no GHG emissions.

While solar power will play a dominant role in the country's long-term energy planning, for now, Nigeria is looking for investments in the gas sector, considering it a bridging fuel to progress towards its net zero emissions target. The National Gas Expansion Programme sets a roadmap for transitioning Nigeria from an economy dependent on crude oil exports (70% of the FGN's revenues) to a gas-based industrial economy. To achieve its vision, the FGN aims to make substantial progress with the Ajaokuta-Kaduna-Kano (AKK) gas pipeline project in 2022. The 614 km natural gas pipeline (with an estimated cost of USD 2.8 billion) will be implemented in three stages through a build-transfer public-private partnership model. Moreover, on 23 February 2022, the FGN signed a memorandum of understanding with Equatorial Guinea to supply gas from Nigeria's offshore fields to the gas processing facility of Punta Europa in Equatorial Guinea.

While there is no legal framework for monitoring and evaluating (M&E) policy implementation, some strategic documents refer to these activities. For instance, the NDP states that the Federal Ministry of Finance, Budget, and National Planning will lead nationwide M&E, coordinating with all States and MDAs to collect data for routine monitoring. Additionally, despite the lack of a legal framework, MDAs make available data on their financial and operational performance. In March 2022, the Budget Office of the Federation published the Third Quarter

Budget Implementation Report for 2021, which provides information on the Executive Budget's performance during the period. The report was submitted to the National Assembly's Joint Finance Committee and the Fiscal Responsibility Commission. In March 2022, the National Bureau of Statistics published the power sector's data for 2020 and 2021, including the total electricity generated and sent out by GenCos in each month and quarter. It also published data on the average retail prices paid by consumers for imported diesel, kerosene and petrol in 2021 and 2022.

AREAS FOR IMPROVEMENT

The FGN should review and update the National Renewable Energy Action Plan 2015-2030 and the National Energy Efficiency Action Plan 2015-2030, which contain outdated policy targets for a 38% increase in the share of renewable energy sources in the electricity mix by 2020 and a 10% reduction in electricity losses by 2020 compared to the 2013 level. These action plans should be aligned with the NDP and the LTV 2050 to give investors clarity on the energy sector's current status and future growth trajectory.

Recent policies and action plans, including the LTV-2050 and the National Action Plan on Gender and Climate Change 2020, emphasise the role of M&E in policy planning and implementation but do not set out the modalities for these activities. The FGN should establish the institutional framework for monitoring the implementation of each action plan and define the engagement level with development partners, civil society organisations, neighbouring countries, and energy companies. Moreover, it should lay out a step-by-step process for conducting a financial and performance-based mid-term and post-facto evaluation that defines the follow-up actions for the measures not implemented. Finally, it should establish a framework for implementing sustainable monitoring, reporting and verification systems in the waste and energy sectors.

The FGN's medium-term development plans rely heavily on natural gas. While this seems a logical first step away from oil utilisation, the FGN will need a sustainable plan to exploit the resource. In particular, it will need to step up efforts to phase out flared gas. As a starting point, the FGN should revise upwards the penalty prescribed in the Flare Gas (Prevention of Waste and Pollution) Regulations 2018 and enforce it more stringently. It should also ensure that licensees producing natural gas submit a gas flare elimination and monetisation plan before the end of 2022, as required under the PIA 2021.

Management of decision-making processes

QUICK FACTS

| The Energy Commission of Nigeria is responsible for policy planning and coordination in the energy sector.

| In 2011, Nigeria enacted the Freedom of Information Act.

STRENGTHS

The FGN adopted the NDP after intense engagement with the private sector, sub-national governments, and civil society organisations. The NDP reviews the FGN's performance from 2017 to 2020 on strengthening governance, institutions and national orientation and sets targets for these areas to be achieved between 2021 and 2025. It includes strategies until 2025 to improve the public sector's efficiency by enhancing coordination between the various governmental tiers and redefining civil servants' competencies and measures to encourage the participation of the youth and women in decision-making processes.

Based on Nigeria's Ibrahim Index of African Governance (IIAG) score, the NDP sets Key Performance Indicators (KPIs) to assess the FGN's progress in strengthening public accountability and stakeholder engagement in decision-making. According to the NDP, Nigeria's IIAG governance score must go up from 45.5 in 2020 to 65.8 in 2025, while the anti-corruption score should increase from 30 in 2019 to 65 in 2025. Its IIAG score on participation, rights and inclusion is expected to increase from 43.6 in 2019 to 60 in 2025. On accountability and transparency, efforts will be made to improve the score from 51.5 in 2019 to 70.5 in 2025. The Federal and State-level governments are working to meet these ambitious targets. For instance, in April 2021, the Lagos State House of Assembly passed the Public Complaints and Anti-corruption Bill. The Bill establishes the Lagos State Public Complaints and Anti-corruption Commission that is empowered to investigate State-level MDAs and local governments, State-owned companies and persons employed by them and prosecute acts of corruption and financial crimes concerning the administration of justice.

In 2020 and 2021, MDAs engaged in energy activities made publicly available the data on their operational and financial performance. The Nigerian Upstream Petroleum Regulatory Commission (NUPRC) published statistics for 2020 and 2021 on the country's oil production by types of hydrocarbon, streams, and oil blends. It has also published the latest statistics on rig disposal. The Transmission Company of Nigeria published comprehensive data for 2020 on the country's available power generation capacity, average daily energy generated and sent out, total transmission losses and system collapses. It also released the status of payments made by NBET to GenCos, the annual collection of distribution companies (DisCos), the remittance shortfalls from DisCos to NBET, the Aggregate Technical, Commercial and Collection (ATC&C) losses, and the status of customer metering by DisCos. The 11 DisCos have published the financial statements and auditor's report for the years they have been operational on their respective websites. The most recent reports for 2019 and 2020 were published in 2021.

The FGN is making concerted efforts to disclose information on beneficial ownership of companies in

Nigeria. The Companies and Allied Matters Act 2020 (CAMA 2020) empowers the Corporate Affairs Commission to maintain a register on the beneficial owners of shell companies. Reforms are also ongoing in the extractives sector. The Beneficial Ownership Register for extractive companies has been established under the Nigeria Extractive Industries Transparency Initiative (NEITI). In November 2021, the FGN launched the Opening Extractives Programme (OEP), a global five-year scheme to disclose the real owners of assets in Nigeria's oil, gas, and mining sectors. EITI and Open Ownership will jointly implement the OEP to accelerate the progress of beneficial ownership transparency. These efforts of the FGN align with President Muhammadu Buhari's commitment at the London Anti-Corruption Summit of 2016 to create a public beneficial ownership registry of all companies operating in Nigeria.

Finally, MDAs facilitate information access on public procurement processes. The Bureau of Public Procurement has created the Nigeria Open Contracting Portal (NOCOPO) in partnership with civil society organisations to increase the disclosure of procurement information for all stakeholders. Through the online NOCOPO portal, citizens can access public procurement information. They can track procurement processes and give feedback on planning, tender, award, contract and implementation stages.

AREAS FOR IMPROVEMENT

The FGN must ensure the institutional framework envisaged in the CCA 2021 is established expediently by public and private entities. The Federal Executive Council should approve the carbon budget by November 2022, as required by the CCA 2021. The FGN must simultaneously establish the National Council on Climate Change, responsible for measuring, verifying and reporting on the alignment of the country's emission profile with its carbon budget. To guarantee the private sector's compliance with the CCA 2021, it should ensure that companies with more than 50 employees develop measures to achieve the required annual carbon emission reduction targets. Moreover, these entities should assign a climate change officer to submit yearly reports to the National Climate Change Secretariat on the achieved carbon emission reduction.

As required under the CCA 2021, the FGN should organise campaigns to make citizens, civil society organisations, and other stakeholders aware of its measures to mainstream climate change responses in different sectors and engage them in the process. It should also educate stakeholders on how public spending on climate action, such as renewable and energy-efficient technologies in transport, buildings, and power generation, will reduce reliance on imported petroleum products and improve electricity access in remote parts of the country.

Rule of law

QUICK FACTS

- I Nigeria signed the International Energy Charter political declaration on 7 March 2017.
- I The Convention on the Settlement of Investment Disputes between States and Nationals of Other States (ICSID) came into force in Nigeria on 14 October 1966.
- I Nigeria joined MIGA on 30 March 1961.

STRENGTHS

The Nigerian Investment Promotion Commission (NIPC), in collaboration with several MDAs, has embarked upon a BIT reform process to promote sustainable development objectives, balance the rights and obligations of investors, and preserve the State's policy space and right to regulate. Other goals for the reform are improving investment facilitation mechanisms and establishing safeguards against investor-State disputes.

The BIT reform process is currently focused on overhauling the existing 'old generation' BITs. As of 2021, the NIPC has mapped the old-generation BITs using 20 critical and reform-oriented parameters. Following the review, it concluded that while three BITs conform to the new policy direction of the country, 17 BITs will need to be amended, re-negotiated or terminated. The FGN is currently re-negotiating one BIT in force and two concluded BITs. Moreover, the modernisation of one outdated BIT is ongoing.

After modernising the existing BITs, the NIPC will commence the third phase of the reform to develop a coherent legal framework at all governance levels. During this stage, it will align the investment provisions in its domestic laws with international obligations undertaken at the bilateral (modernised BITs), regional (Investment Protocol of the African Continental Free Trade Area) and multilateral (The ICSID Rules Amendment Process and the UNCITRAL Working Group III on Investor-State Dispute Settlement) levels.

The FGN is promoting alternative dispute resolution mechanisms in conflicts involving investors and the State. The Arbitration and Conciliation Act (Repeal and Enactment) Bill, currently undergoing debate in the National Assembly, aims to eliminate local practices that protract arbitration proceedings, delay awards, and limit the involvement of courts in arbitration proceedings. It also implicitly provides for Third-Party Funding (TPF) in arbitration proceedings, allowing an independent party with no direct or vested interest to fund the proceedings and receive a share of the damages awarded.

The judiciary is also making efforts to streamline case management mechanisms and improve efficiency. The Constitution of Nigeria establishes a deadline of 90 days for the High Courts of Nigeria to deliver a judgment after the conclusion of evidence and adoption of final addresses. While administrative tribunals do not have such a legally binding deadline to render decisions, most tribunals tend to follow the 90-day-rule. The Supreme Court of Nigeria and High Courts make some information available on the status of ongoing cases. The weekly

cause list, latest orders, and judgments passed in a case are available on the website of the relevant court.

The NIPC Act 1995 and IIAs signed by Nigeria prohibit the expropriation and nationalisation of foreign investments and assets unless the acquisition is in the national interest or for a public purpose. The treatment extends to direct instances of expropriation and any other measures, direct or indirect, having an effect equivalent to expropriation or nationalisation. Where such a measure is taken in the public interest, it must be on a non-discriminatory basis, following due process of law, and against prompt, adequate and effective compensation. Most-Favoured-Nation and National Treatment obligations and protection against expropriation extend to intellectual property rights under BITs signed by Nigeria, including those with China, Finland, Spain, and Sweden. The IIAs signed by Nigeria typically carry stipulations regarding the compensation payable to an investor in the case of expropriation. This includes provisions requiring payment at a fair market value calculated in a freely convertible currency at the prevalent market rate of exchange for that currency on the valuation date.

At the moment, national laws do not require investors to exhaust local judicial remedies before recourse to international arbitration. According to the NIPC Act 1995, a foreign investor may initiate arbitration under any bilateral or multilateral investment protection agreement to which the host State and the investor's home State are parties. It may also commence arbitration proceedings under any other national or international machinery for settling investment disputes agreed on by the parties. However, if the underlying agreement makes it mandatory to first resort to Nigerian courts or refer the dispute to arbitration in Nigeria, they must comply with that provision. Moreover, the recent ICSID decision in *Interocean vs Nigeria* confirms that an investor can utilise ICSID or other international arbitration procedures based on the NIPC Act 1995 and customary international law. It increases the options to file investor-State claims for foreign investors who cannot avail of the substantive protections under any IIA.

AREAS FOR IMPROVEMENT

The FGN should create, on the national level, a real-time record of foreign investors operating in the country and historical data on investor grievances. Such a database could be useful in identifying the sectors most prone to investor conflicts, recurrent issues that arise between investors and public agencies, and patterns of non-compliance by investors.

Regulatory environment and investment conditions

QUICK FACTS

- | NERC regulates the generation, transmission, distribution and trading of electricity.
- | In August 2021, the FGN published the PIA 2021 in the Official Gazette.
- | Protection of foreign investment is provided for in the NIPC Act 1995.

STRENGTHS

After a decade of deliberations, the PIA's enactment is a key achievement of the FGN. The PIA 2021 sets a definitive legal, governance, regulatory, and fiscal framework for the petroleum industry. It establishes the NUPRC to regulate upstream petroleum activities, including environmental management, and the Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA) to regulate the technical and commercial aspects of midstream and downstream petroleum operations. The PIA 2021 also establishes the Nigerian National Petroleum Company Limited (NNPC Limited) – as an agent of the Nigerian National Petroleum Corporation (NNPC) – to manage NNPC's winding down of assets, interest, and liabilities. NNPC Limited will conduct its affairs on a commercial basis in a profitable manner without recourse to Government funds. It must also declare dividends to its shareholders and allocate 20% of profit as retained earnings to grow its business like other entities incorporated under CAMA 2020.

The FGN has advanced with its electricity sector reforms. In September 2020, NERC launched a service-based tariff regime (SBT) that allows DisCos to revise the electricity tariffs of metered customers only after consulting them and guaranteeing them uninterrupted electricity based on hours of supply. Customers that do not have meters or avail lifeline tariffs will not be affected by these changes. In October 2020, the FGN initiated the National Mass Metering Programme (NMMP) to close the metering gap and minimise the impact of the SBT on electricity consumers. The Central Bank of Nigeria issued the Framework Financing for the NMMP to define the operational guidelines for granting financial support to the DisCos and local meter manufacturers. In 2021, NERC introduced the Meter Asset Provider and National Mass Metering Regulations, effective from 9 August 2021. The Regulations guide DisCos to provide meters to customers of successive electricity distribution licensees and accelerate the roll-out of meters. NERC also published, in March 2021, an order to ensure the replacement of all faulty and obsolete meters given to end-users in compliance with the Metering Code and the NMMP.

The FGN is looking to increase private investment in mini-grids. In April 2021, NERC approved the new Multi-Year Tariff Order for mini-grids. The tariffs approved by NERC are subject to review if the mini-grid developer's actual cost or revenue differs from those agreed upon when the tariff was initially determined. Moreover, a key feature of the new mini-grid regulation is that it mitigates the risk of early termination in case of grid arrival and compensates investors. In such a case, the mini-grid permit will be converted into an interconnected mini-grid, or the assets will be transferred to the relevant DisCo based on the

asset's remaining depreciated value and the revenue accrued in the last 12 months.

Following the adoption of the PIA 2021, the FGN is trying to mobilise financing in the gas sector. The FGN has declared 2021-2030 the decade of gas. In the short term, it will pay attention to gas feedstock availability, construct gas processing plants and support industries that consume intermediate products from these processing plants. Since Nigerian gas fields are widely dispersed and medium-sized, the FGN intends to develop energy parks that aggregate the gas and transmit it further for industrial development. Three such energy parks in gas producing areas are already under consideration. To achieve zero flared gas by 2030 and reduce 60% of fugitive methane emissions by 2031 (the baseline year is 2021), the FGN plans to commercialise up to 80% of upstream gas for powering gas power plants and export. For this purpose, it is looking to attract investment in gas infrastructure and increase the financial viability and competitiveness of current gas production sharing contracts.

AREAS FOR IMPROVEMENT

The FGN should continue with the power sector reforms that will help to achieve fully cost-reflective tariffs and the timely implementation of the NMMP. The Government should also create public awareness of the use of energy-saving technologies that will help to reduce consumption.

In June 2020, the FGN was set to deregulate the downstream sector, remove subsidies for imported petrol and introduce a market-based pricing regime but then pushed its plans back by nearly 18 months. The FGN is urged to reconsider its subsidy payments and develop a comprehensive plan to eliminate these in a phased manner and distribute the amounts among priority sectors such as education, healthcare and infrastructure. Time-bound social assistance programmes can be introduced to protect the most economically vulnerable population instead of regressive subsidies that cause a heavy financial strain on the national revenue.

It is noteworthy that from 2018 to 2021, the value of announced investments dropped from USD 90.89 billion to USD 19.10 billion. Moreover, in 2019, the announced investments were worth USD 29.91 billion, but the actual FDI inflow was USD 2.31 billion. Similarly, in 2020, announced investments amounted to USD 16.74 billion, but FDI inflow was limited to USD 2.39 billion. As a result, the FGN must take a proactive whole-of-government approach to support investors across Federal and State-levels and close the substantial gap between announced investments and actual FDI inflow.

INDICATOR 1

Improvements proposed in 2022

Operationalise the 12 solar power purchase agreements pending since 2016 and phase out the single-buyer model in the electricity sector.

Improvement suggested in 2022. Status will be updated in 2023.

Develop an action plan to decarbonise the transport sector and enact the National Automotive Industry Development Plan Bill.

Improvement suggested in 2022. Status will be updated in 2023.

Develop policies, incentive schemes, and business models to attract investment in energy storage.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2018

Carry out an impact assessment of the existing laws and policies.

Work ongoing. In 2021, the FGN adopted the NDP 2021-2025 and the LTV 2050. In 2021, the Ministry of Environment adopted the National Climate Change Policy 2021-2030 and Nigeria's updated NDC.

Set key performance indicators for the energy sector.

Fully implemented. In 2021, the FGN adopted the NDP and the LTV 2050 to set performance targets and indicators for different sectors, including energy.

Improvements proposed in 2020

Regularly publish the policy monitoring and evaluation reports.

Work ongoing. The NUPRC published statistics for 2020 and 2021 on the country's oil production. The Transmission Company of Nigeria published data for 2020 on the electricity sector's operations. The National Bureau of Statistics published the power sector's data for 2020 and 2021.

Revise the policy targets that expired in 2020 for the oil and electricity sectors.

Fully implemented. In 2021, the FGN adopted the NDP and the LTV 2050 to replace the targets set in Nigeria Vision 20:2020 and the Economic Recovery and Growth Plan.

Improvements proposed in 2022

Update the National Renewable Energy Action Plan 2015-2030 and the National Energy Efficiency Action Plan 2015-2030.

Improvement suggested in 2022. Status will be updated in 2023.

Establish the institutional framework for (1) monitoring of the LTV 2050 and the National Action Plan on Gender and Climate Change 2020, and (2) implementing a GHG emission measurement reporting and verification system in the waste and energy sectors.

Improvement suggested in 2022. Status will be updated in 2023.

Increase the legally defined penalties for flaring gas; ensure that licensees producing natural gas submit a gas flare elimination and monetisation plan before the end of 2022.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 3

Improvements proposed in 2018

Introduce legal provisions that require public consultation by MDAs on draft laws and regulations.

Work ongoing. NERC has democratised the newly implemented service-based tariff structure to ensure that DisCos can only review tariff rates after consultations with the affected customers.

Promote better coordination among MDAs on the implementation of the national energy policies and plans.

Work ongoing. The second National Energy Summit was held in April 2021 as a step towards bringing together the relevant stakeholders and fostering constructive discussions.

Improvements proposed in 2022

Approve the carbon budget by November 2022 and establish the National Council on Climate Change; ensure that private companies with more than 50 employees have assigned a climate change officer.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2018

Establish a foreign investment ombudsperson to settle conflicts arising during energy projects.

Pending

Grant broader protection against expropriation to intellectual property rights.

Pending

Improvements proposed in 2020

Define rules to regulate the use and enforcement of Third-Party Funding agreements.

Pending

Improvements proposed in 2022

Create, on the national level, a real-time record of foreign investors operating in the country and historical data on investor grievances.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 5

Improvements proposed in 2018

Define the roles and responsibilities of the different regulatory authorities.

Work ongoing and partially implemented. In August 2021, the FGN published the PIA 2021 to set a legal, governance, regulatory, and fiscal framework for the petroleum industry.

Create a comprehensive legal framework on local content across sectors.

Work ongoing. The Local Content Development and Enforcement Bill 2020 recently passed its second reading in the House of Representatives.

Improvements proposed in 2020

Apply cost-reflective electricity tariffs at the earliest and ensure metering of all electricity customers.

Work ongoing and partially implemented. In September 2020, NERC introduced a service-based tariff regime.

Reconsider any additional price-based royalty and increased water depth-based royalties in the oil and gas sector.

Work ongoing and partially implemented. In August 2021, the FGN published the PIA 2021, setting a new fiscal regime for upstream oil and gas operations.

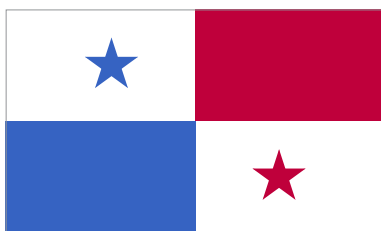
Improvements proposed in 2022

Deregulate the downstream oil sector and eliminate subsidies granted for imported petrol in a phased manner.

Improvement suggested in 2022. Status will be updated in 2023.

Take a whole-of-government approach to support investors across federal and State levels and close the gap between announced investments and actual FDI inflow.

Improvement suggested in 2022. Status will be updated in 2023.



Panama

Population ¹	4,381,583
Area (km ²) ¹	75,320
GDP per capita (USD) ¹	14,516.46
TES/GDP (GJ/thousand 2015) ²	3.21
Net Energy Imports (TJ) ²	362.58
RE share in Final Energy Consumption (%) ²	18.9
Total CO ₂ emissions (MtCO ₂) ²	12.57

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	1 new project 2 projects 2 acquisition deals	Italy: 1 RE project of 26.54 mEURO Netherlands: 1 RE project of 895.04 mEUR Bermuda: 1 RE project of 15.22 mEUR United States of America: 1 RE deal of 500.29 mEUR Belize: 1 FF deal of 31.52 mEUR

Sources:

- The World Bank 2020 (area) and 2021 (population and GDP per capita).
 - ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
 - Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022.
For more information see Annex III of this report.
- RE: Renewable energy based electricity production
FF: Fossil fuel based electricity production

Panama’s overall risk level against the assessed areas is **low**.

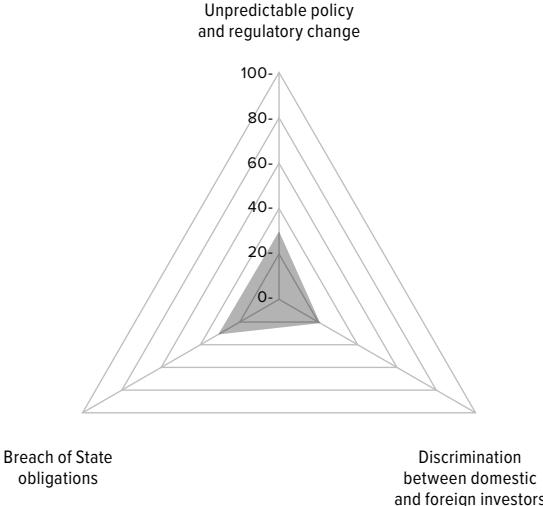
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *unpredictable policy and regulatory change* and *breach of State obligations*.

Panama has a very good performance on two EIRA indicators, a good performance on one indicator and a moderate performance on two indicators. *Management of decision-making processes* is the highest-scoring indicator at 90, followed by the indicator *regulatory environment and investment conditions* at 83. Its score on the indicator *rule of law* is 65, and on the *framework for a sustainable energy system*, it scores 60. Its score on the indicator *foresight of policy and regulatory change* is 50.

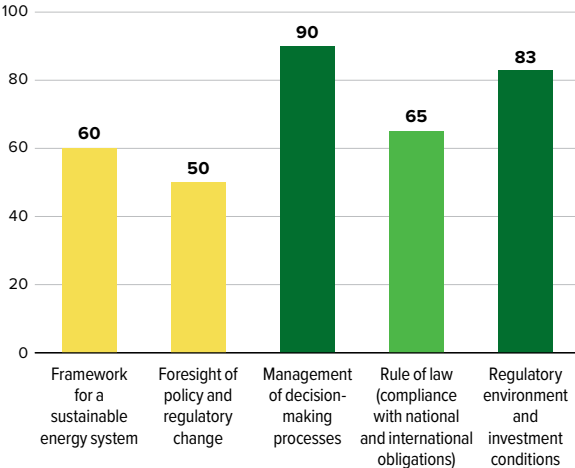
Panama’s overall sub-indicator performance is good. The highest-scoring sub-indicators are *institutional governance* at 100, *regulatory independence* at 94, and *restrictions on FDI* at 89. Panama’s score is good on six sub-indicators, namely *transparency and anti-corruption measures* at 79, *policy planning on clean energy transition* at 76, *respect for property rights* at 69, *environmental protection, human rights and gender* at 67, *electricity industry market structure and competition* at 67 and *management and settlement of investor-State disputes* at 61. The lowest-scoring sub-indicators are *robustness of policy goals and commitments* at 56, *energy resilience* at 50, *enabling measures to support clean energy transition* at 47 and *communication of vision and policies* at 44.

While Panama is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to effectively communicate its vision and policies to investors and implement measures to achieve a clean energy transition.

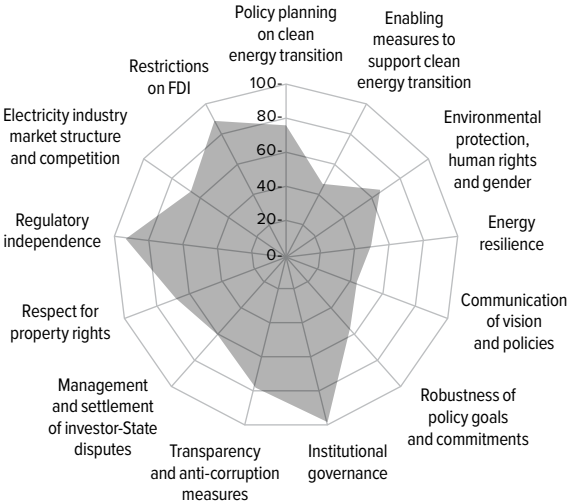
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

- | Panama submitted its updated NDC to the UNFCCC Secretariat in 2020.
- | On 24 November 2020, the Cabinet Council of Panama approved the Strategic Guidelines for Panama's Energy Transition Agenda.
- | Panama is one of the three negative carbon emissions countries, along with Bhutan and Suriname.

STRENGTHS

Panama's updated NDC reflects its vision of becoming carbon neutral by 2050. It anticipates a 24% reduction in total emissions from the energy sector by 2050 and at least 11.5% by 2030 (business-as-usual (BAU) scenario), representing an estimated 60 MtCO₂e accumulated between 2022 and 2050 and up to 10 MtCO₂e equivalent accumulated between 2022 and 2030. The Government has adopted Decree No. 100/2020 to set the Sustainable System for National GHG Inventories framework that tracks emissions at the national level by sector. The Decree also establishes the National Climate Transparency Platform to register, track and report the progress of the NDC's implementation.

Panama's Energy Transition Agenda aspires to increase the country's climate ambition based on the 'energy transition pays for itself' principle. Its four axes – decarbonisation, digitalisation, decentralisation and democratisation – aim to achieve the country's energy security, reliability, accessibility, affordability and sustainability objectives. The Agenda's most ambitious scenario estimates that the energy transition can double investment inflow, and result in 70% additional gains in real GDP, 26% in public income, and 4% in labour income.

The Agenda foresees three scenarios – the BAU Scenario, the moderately ambitious Energy Transition Agenda (ETA) Scenario, and the most ambitious Zero Carbon (ZC) Scenario. In the ETA Scenario, the Government plans to increase the penetration of electric vehicles by 72% by 2050. At the same time, the ZC Scenario will ensure 100% electrification of the passenger transport sector. The share of fossil fuels in power generation will reduce from 68% in 2020 to 48.2% by 2050 in the ETA Scenario and to 40% in the ZC Scenario. Assuming adequate investments in power generation technologies with a low levelised cost of electricity generation, by 2050, energy bills are expected to reduce by 7% in the ETA Scenario and by 16% in the ZC scenario, compared to BAU. This can contribute to a 1.3% and 22.5% reduction in power prices for final consumers compared to BAU, considering a fossil fuel subsidy phase-out.

In January 2022, Panama launched the Green Hydrogen Hub Roadmap 2030 as part of its resource diversification efforts. The Roadmap's mid-term target is to transit approximately 81.84 million long tonnes of hydrogen through the Panama Canal by 2030. It anticipates increasing the transited volume to 190.96 million long tonnes by 2050. The Roadmap outlines measures to meet these targets, such as developing an enabling environment for green hydrogen investments, cooperating

with industry players, academia and public agencies to make Panama a green hydrogen hub, and implementing infrastructural adjustments to support the hydrogen industry.

In December 2021, the National Assembly of Panama approved Law No. 262/2021 on 'Integrating, Implementing and Promoting Corporate Social Responsibility in the Concession Contracts'. This Law's objective is to implement corporate social responsibility in concession contracts between investors and the State.

In 2022, Panama adopted the National Strategy for Universal Access to Energy (ENACU) to support vulnerable social groups without direct access to modern energy services. Its ultimate objective is to achieve 100% access to energy by 2030. For this purpose, the ENACU proposes measures such as adopting clean and modern cooking methods, promoting renewable electricity consumption in rural areas and commissioning new interconnection projects.

In 2021, the Government, in cooperation with international partners, prepared the Diagnosis of Gender Equality in the Energy Sector report to collect disaggregated sex and gender data on energy jobs in Panama. The data was collected from thermoelectric and hydroelectric generating companies, renewable energy companies, electricity distributors, the national electricity transmission company, and companies operating in the hydrocarbons sector. According to it, in the renewable sector, 33.66% of jobs are occupied by women and 66.34% by men. Men account for 46%, and women for 54% of the employment force in the thermoelectric and hydroelectric sectors. Moreover, in March 2022, Panama adopted the Women-Energy Nexus Roadmap to ensure that, by 2050, 141,000 new jobs be generated through the Energy Transition Agenda and that 100% of the adult population has access to information about sustainable energy technologies with a gender approach.

AREAS FOR IMPROVEMENT

In 2019, Panama published its Climate Change Strategy with a view to 2050. Since the Government is currently updating this Strategy, it may consider including step-by-step measures to achieve the climate neutrality targets by 2050 and decarbonise the energy, waste and transportation sectors. Additionally, the Government should adopt and communicate to the UNFCCC Secretariat its LT-LEDS with absolute targets for emission reduction.

Foresight of policy and regulatory change

QUICK FACTS

- | The Government of Panama approved the National Energy Plan 2015-2050 (PEN 2015-2050) in March 2016.
- | The Government Strategic Plan 2019-2024 sets the pathway to achieving the national priorities of good governance and the rule of law, a competitive economy, and poverty and inequality eradication.

STRENGTHS

PEN 2015-2050 makes it a long-term objective of the country to increase energy security and ensure climate-neutral development. Its other priorities include giving energy access to 93,000 families, encouraging the rational and efficient use of energy, promoting electric mobility, and reducing fossil fuel imports by 2025.

The National Electric Mobility Strategy (ENME) of 2019 outlines strategies to increase the percentage of private electric vehicles by 10-20% and the sales of electric vehicles by 25-40% by 2030. Moreover, to reduce the transport sector's carbon footprint, it intends to ensure that 15-35% of buses and 25-50% of public fleet vehicles are electric by 2030. In April 2022, Law No. 295/2022 on 'Electric Mobility in Ground Transportation' was enacted to, among other things, support the implementation of the ENME. The Law sets targets to replace the fossil fuel vehicle fleet in circulation with electric vehicles starting with 10% in 2025, 25% by 2027 and 40% by 2030. It also offers financial incentives such as an exemption from paying vehicle licence registration fees for five years and the Selective Consumption Tax for importing electric vehicles until the end of 2030.

The Government is implementing policy measures and programmes to achieve the national targets for deploying renewable electricity and integrating energy-efficient technologies in end-uses. In August 2021, the National Secretariat of Energy (SNE) approved the Action Plan for the Implementation of Solar Thermal Energy in the Republic of Panama and launched the Panama National Thermosolar Programme (PNTP). The PNTP will ensure the installation of at least 1,000,000 m² of solar collectors in Panama by 2050 and increase energy savings through solar thermal systems to 6,450,000 MWh by 2050. Moreover, it aims to achieve an accumulative reduction of at least 2,230,000 tonnes of CO₂ by 2050.

In September 2021, the Ministerio de La Presidencia approved the National Distributed Generation Strategy (ENDEG) to promote clean electricity. The ENDEG Optimistic Scenario foresees an increase of 14% in electricity generation and installed capacity up to 1,700 MW by 2030, compared to the Tentative Scenario with an increase of 2% in electricity generation and an installed capacity of up to 250 MW by 2030.

In 2022, Panama approved the National Strategy for the Rational and Efficient Use of Energy (ENUREE), which sets incentives to increase energy efficiency and reduce energy consumption. The incentives include creating lines of credit and subsidies to replace inefficient refrigeration and air-conditioning products. Moreover, ENUREE requires that the Government set the energy efficiency criteria for consumer products eligible for financial incentives and State subsidies.

Panama is trying to guarantee higher electricity transmission capacities and improve grid reliability. In October 2021, the transmission system operator, Empresa de Transmisión Eléctrica (ETESA), announced its investment in a new project worth USD 5.13 million to increase the capacities of the transformation park in the La Chorrera substation. Moreover, in July 2021, ETESA enhanced the reliability and operational security of the transmission system by commissioning the new power autotransformer T2 of 175/175/0.5 MVA and 230/115/13.8 kV in the Panama substation.

State agencies regularly monitor and report on their operational and financial performance. In April 2022, the SNE published the Emission Factor Report for 2020, determining the CO₂ emission factor generated by operational power plants. The Panama Energy Information System Platform (SiePanama) was developed in October 2021 to monitor and report GHG emissions data on different sectors, including energy, transport, industry, residential, commercial and public services, agriculture, forestry and fishery. In April 2021, the Ministerio de La Presidencia published the Accountability Report, presenting the budget allocation and execution of the Ministry of Social Development, the Ministry of Health, and the Ministry of Public Order. The Government also published reports for July 2020 to July 2021 and July 2021 to July 2022 detailing its achievements in various sectors, including energy. Moreover, in 2021, the Comptroller General of the Republic published quarterly reports for April to June and July to September 2021, auditing the budget execution of the National Authority of Public Services (ASEP).

AREAS FOR IMPROVEMENT

To reduce the country's reliance on imported fossil fuels, the Government has committed to increasing the installed capacity for wind power by up to 688 MW by 2050 in the energy supply. In this regard, Panama has accelerated its efforts to increase the pace of wind power penetration. It has already reached 50% of its 2050 target with a total installed wind power capacity of 336 MW in 2022. However, to meet its target fully, it should develop a wind power generation roadmap with a view to 2050, clarifying procedures to obtain environmental and social permits, seabed leasing processes, and maritime concession regulations. The wind roadmap will help attract foreign investors, considering the continuous price drops of wind turbines and installation costs in the upcoming years.

The Government should make it a legal obligation to conduct a cost-benefit analysis of energy policies, projects and programmes and publish the results for citizens and investors.

Management of decision-making processes

QUICK FACTS

The SNE is responsible for developing the country's energy policy.

Panama enacted Law No. 6 on 'Transparency in Public Management and the Establishment of the Habeas Data Action' in 2002.

STRENGTHS

The Government is establishing the necessary institutional framework to facilitate investments in Panama. In April 2021, the President approved Law No. 207/2021 on 'Creation of the National Authority for the Attraction of Investments and Promotion of Exports of Panama' (ProPanama). This new entity is responsible for mobilising sustainable direct investment and acts as a bridge for promoting exports, knowledge, and technology transfer.

The Government makes information on the energy sector available to the public on several online platforms. For instance, SiePanama, launched in October 2021, provides unified and centralised information on the national energy policies, legal framework, and sectoral performance indicators. It also offers statistics on energy balances, GHG and other emission factors, investment and economic indicators, supply and demand, prices, reserves and the power infrastructure. Moreover, it incorporates a real-time energy map indicating the current investments and infrastructure of thermoelectric power plants, solar and wind power plants, energy concession zones, hydroelectric power plants, and electricity transmission and distribution lines.

In 2021, the National Authority for Transparency and Access to Information published monthly monitoring and evaluation performance reports on all State entities and municipalities in Panama to inform citizens and investors of the public sector's performance. ASEP also made its decisions on the tariff methodology available to the public for 2021. It published the electricity tariff rates for regulated clients for the first and second semesters of 2021 and the charge rates for using the distribution network for January to June and July to December 2021. Moreover, it published the transmission fee tariffs for January to June and July to December 2021.

State-owned enterprises periodically release information to the public on their financial performance. The electricity generation company Empresa de Generación Eléctrica S.A. has published its yearly financial statements and budget execution report for 2021. ETESA and the electricity distributor, Empresa de Distribución Eléctrica Elektra Noreste S.A, also made their monthly financial statements and budget execution reports available for 2021.

To ensure stakeholder engagement in regulatory decisions, in 2021, ASEP launched public consultation no. 1 on modifications proposed to the electricity distribution

and marketing regulations. It received comments from private operators and the Association of Large Electric Customers. It also launched public consultation no. 6 to hear from consumers, the National Dispatch Centre (NDC), and private operators on proposed modifications to regulations on electricity self-generation and cogeneration activities. In September 2021, the SNE launched a public consultation on the National Strategy for Distributed Generation (ENGED), which was approved in January 2022 by the Cabinet Council. ENGED is part of Panama's Energy Transition Agenda, which aims to promote the self-consumption of new, renewable, clean electricity.

Panama's Government and judiciary, in cooperation with international organisations, are addressing issues related to financial crimes, money laundering and corruption. A substantial measure was taken in March 2020 by approving Law No. 129/2020 on 'Creation of a Private and Unique System of Registration of Beneficial Owners of Legal Entities'. According to this Law, resident agents will be obliged to provide information on the ultimate beneficial owner of the entity incorporated in the Panama Public Registry. The timeframe for registering and providing updated information on the ultimate beneficial owners of legal entities has been reduced from 30 to 15 days. The Law penalises resident agents and companies that do not comply with its provisions.

AREAS FOR IMPROVEMENT

While ETESA gives access to public procurement in purchasing medium- and high-voltage grid infrastructure equipment through its online platform, the procurement processes are still performed in a sealed bid-type auction. To avoid excessive processes and encourage transparency, the Government should digitalise public procurement processes in the energy sector. Once implemented, digitalised public procurement will improve efficiency, ensure cost savings, simplify procedures and promote customer satisfaction.

The ProPanama portal is a notable achievement of the Government, but it provides limited information on the energy and mining sectors. Therefore, its coverage should be increased to offer detailed information on investment opportunities. It should be equipped with the relevant competencies to be a one-stop shop for issuing permits and licences in these sectors.

Rule of law

QUICK FACTS

- | Panama signed the International Energy Charter political declaration on 26 October 2017.
- | Panama ratified the Convention on the Settlement of Investment Disputes between States and Nationals of Other States in 1996.
- | Panama acceded to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards in 1984.

STRENGTHS

The Government is taking concrete measures to ensure judicial independence. In this regard, in January 2021, the Presidency of Panama approved an allocation of 1.5 million Panamanian balboas (PAB) through the Ministry of Economy and Finance to strengthen the budget of the Judicial Body of Panama (Organo Judicial) and improve its performance.

Steps are also being taken to increase the competence of judicial officers and introduce better case management mechanisms. In 2021, the Organo Judicial published the Judicial and Administrative Management Report 2021. According to the report, in 2021, the Superior Institute of the Judiciary of Panama carried out 98 academic activities, including courses, seminars, and workshops on the rule of law and legal ethics. A total of 4,613 professionals were trained, of which 1,553 were men and 3,060 were women. Moreover, in April 2022, the Organo Judicial signed a cooperation agreement with the Institute of Legal Study and Research in Nicaragua to deepen knowledge and expertise transfer.

In September 2021, the Inter-American Development Bank approved a non-reimbursable Technical Cooperation to ensure the domestic judicial system's digital transformation. In particular, it will support the development of a comprehensive digital strategy for the justice system aligned with the National Digital Agenda of Panama. Moreover, in April 2021, the Supreme Court of Justice (CSJ) of Panama implemented a new administrative management module to automate the distribution of case files and records among its Magistrates' Fourth Chamber of General Business. The new module has resulted in a more efficient workload distribution within the CSJ.

According to the most recent Judicial and Administrative Management Report, in the second half of 2021, the Automated Judicial Management System reached a new phase by integrating the Judicial File Module Electronic in the 1st, 2nd, 3rd, 4th, 5th and 6th Courts of Civil Circuit

of Panama and reactivating it in the First and Second Maritime Court. This marks a historic milestone in the Justice Administration of Panama since it enables the processing and consultation of judicial processes 24 hours a day, allowing real-time management and interaction between the Judicial Office and the attorneys-in-fact.

The Government has signed IIAs to promote investments across sectors, including energy. Panama has signed 25 BITs, of which 19 are in force. The BITs between Panama and Finland and between Panama and the Czech Republic incorporate ISDS provisions that extend to disputes concerning concessions on extraction or exploitation of natural resources. IIAs signed by Panama grant protection to activities that have an effect similar to expropriation and set out the process for determining compensation in the event of expropriation in the energy sector. According to the BIT between Panama and Canada, in the event of expropriation, compensation shall be based on the genuine value of the investment or returns expropriated immediately before the expropriation or at the time the proposed expropriation became public knowledge, whichever is the earlier. The compensation must be calculated from the date of expropriation at a normal commercial rate of interest, should be paid without delay, and must be effectively realisable and freely transferable.

AREAS FOR IMPROVEMENT

The Government may consider introducing domestic dispute prevention policies in future, such as early detection systems to prevent, manage and monitor potential investment disputes. These mechanisms may be accompanied by capacity building and training of public servants on dispute prevention policies and their implementation. The Government may take guidance from the Energy Charter Model Instrument on Management of Investment Disputes, which aims to assist States in processing investment disputes while considering their interests and circumstances.

Regulatory environment and investment conditions

QUICK FACTS

- | ASEP is responsible for regulating public services, including the national electricity market.
- | The SNE, under the Ministry of the Presidency, regulates the hydrocarbons sub-sector.
- | Law No. 54/1998 on 'Investment Stability' grants equal treatment between national and foreign investors.

STRENGTHS

ASEP continues to perform its regulatory functions effectively. In 2021, it conducted inspections of the electricity network to assess the quality and safety standards of substations located in Chiriqui, Cocle, Herrera, Los Santos and West Panama and Veraguas. It compiled and published monthly statistics reports for each licenced power generation company operating in Panama, including their installed capacity, generation capacities, the cost of electricity production from hydro, thermal, wind and solar photovoltaic, and the national quantities of electricity imports and exports. It also published the list of licenced operators engaged in electricity production from renewable energy sources. According to ASEP, six licenced solar power companies and two wind power companies with a total installed capacity of 55.21 MW and 266 MW are operational as of 2021.

In June 2021, the Ministerio de La Presidencia released the Plan for the Comprehensive Development of the Electricity Sector to create a competitive energy sector, promote clean power generation, and attract investments in electricity transmission. The Plan proposes a new generation matrix composed of hydropower, wind, solar and natural gas and contemplates substantial investments for rural electrification, including 76 projects that will achieve the interconnection of 3,500 homes and improve the quality of life of more than 18,000 Panamanians. It also anticipates investments worth USD 90 million to strengthen the power transmission system.

In March 2022, ASEP approved the Transmission Regulations that apply to ETESA, the NDC, power generators, distributors, and large customers connected to the grid system. The Regulations define the criteria and formulas for calculating the transmission fees, the procedures for expanding the National Interconnected System, the procedures for executing the Expansion Plan of the Transmission System, and the rights and obligations of the NDC, the owner of the transmission facilities and users of the transmission network. Moreover, the Regulations set the procedures and requirements to be fulfilled by an operator while connecting new equipment to the network and procedures and criteria to guarantee free access.

In March 2022, ETESA, in cooperation with the NDC, approved the Detailed Methodologies Developed for the Correct Operation of the System and Administration of the Wholesale Market. The document comprises 25 methodologies for various activities, such as the definition of variable costs, determination of payment guarantees, medium-term dispatch planning, electricity import and exports, interruption of international electrical energy exchanges and the methodology for calculating the

availability of generators for the wholesale electricity market.

The Government is facilitating private investment to develop clean energy resources. Under the ETA Scenario, investments needed to achieve the targets amount to USD 9 billion by 2030 and increase to USD 21 billion by 2050. Under the ZC Scenario, the projections reflect higher costs characterised by higher ambitions. In this regard, the minimum investment projections in the ZC Scenario are USD 20.01 billion by 2030 and are expected to increase to USD 47.09 billion by 2050. In both scenarios, most of the investment will be directed toward renewable power generation from solar photovoltaic and wind power plants and electrification for transportation.

To meet the ambitious investment targets across different sectors, in 2021, Law No. 223/2021 on 'Establishment of Environmental Incentives' was approved to introduce tax incentives for companies specialising in the energy and allied sectors. According to the Law, operating companies in the waste recycling sector will be exempted from income tax, dividend tax and import tax on equipment and machinery for their first five years of operation. The Law also grants an import tax exemption and a 15% income tax discount to existing companies operating in the waste management sector.

AREAS FOR IMPROVEMENT

ASEP should consider introducing a time-variant pricing mechanism to improve demand-side management and ensure flexibility in electricity supply and demand prices. It may also introduce real-time pricing to promote efficient financial planning by customers and support the integration of renewable energy sources.

The Government should consider gradually phasing out fossil fuel subsidies and taxing their usage. The monies collected by specific carbon taxes may be used to fund energy transition projects, such as renewable energy power plants and a national fund for the rational use of energy. Moreover, SNE should consider removing all tariff subsidies to make electricity production from renewables more competitive in the domestic market.

The roll-out and progress of low-carbon investments must be tracked step-by-step to evaluate their effectiveness in meeting the country's long-term decarbonisation strategy. In this regard, the Government may consider developing a monitoring and evaluation system to assess the key indicator performance of low-carbon investments and measure their contribution to creating an emission-free economy.

INDICATOR 1

Improvements proposed in 2022

Update the Climate Change Strategy With a View to 2050 to include measures on decarbonising the energy, waste and transportation sectors and achieving climate neutrality targets by 2050; adopt and communicate to the UNFCCC Secretariat Panama's LT-LEDS with absolute targets for emission reduction.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2019

Set quantifiable and time-bound policy targets for achieving the energy sector's short-, medium- and long-term priorities.

Work ongoing. On 24 November 2020, the Cabinet Council of Panama approved the Strategic Guidelines for Panama's Energy Transition Agenda. In January 2022, Panama launched the Green Hydrogen Hub Roadmap 2030 as part of its resource diversification efforts. The ENME strategy, approved in 2019, outlines measures to increase the percentage of private electric vehicles by 10-20% and the sales of electric vehicles by 25-40% by 2030.

Improvements proposed in 2021

Develop action plans to guide the country's energy goals, including those in the Energy Transition Agenda 2020.

Work ongoing. In August 2021, the SNE approved the Action Plan for the Implementation of Solar Thermal Energy in the Republic of Panama and launched the Panama National Thermosolar Programme. In 2022, Panama approved the ENUREE strategy, which sets incentives to increase energy efficiency and reduce energy consumption.

Improvements proposed in 2022

Develop a wind power generation roadmap with a view until 2050, clarifying procedures to obtain environmental and social permits, seabed leasing processes, and maritime concession regulations.

Improvement suggested in 2022. Status will be updated in 2023.

Set legal requirements for State agencies to conduct a cost-benefit analysis of all energy policies, programmes and projects and publish the analysis results for citizens and investors.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 3

Improvements proposed in 2019

Set up a single window to provide investors with information on energy projects and investment facilitation.

Fully implemented. In April 2021, the President of Panama approved Law no. 207/2021 to create ProPanama, which is responsible for mobilising sustainable direct investment and acts as a bridge for promoting exports, knowledge, and technology transfer.

Establish a one-stop shop for documenting and approving all licences, registrations, permits, and procedures related to energy projects.

Work ongoing. Information on the registration of domestic and foreign businesses is available on the Ministry of Commerce and Industry's website. In April 2021, the President of Panama approved Law no. 207/2021 to create ProPanama, which is responsible for mobilising sustainable direct investment and acts as a bridge for promoting exports, knowledge, and technology transfer.

Improvements proposed in 2022

Digitalise the public procurement processes applicable to the energy sector.

Improvement suggested in 2022. Status will be updated in 2023.

Provide detailed information through the ProPanama website on investment opportunities in the energy and mining sectors.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2019

Establish an investment ombudsperson to address grievances of foreign investors against public authorities.

Pending

Enact a law that defines 'public interest' in the context of expropriation, and addresses issues regarding the valuation of the compensation and the timeframe for its payment.

Pending

Improvements proposed in 2022

Introduce domestic dispute prevention policies such as early warning systems and create a dedicated institution for preventing, managing and monitoring investment disputes.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 5

Improvements proposed in 2019

Lower the restrictions imposed on investors regarding the employment conditions of skilled and technical personnel.

Pending

Improvements proposed in 2022

Introduce a time-variant and real-time pricing mechanism to improve demand-side management and ensure flexibility in electricity supply and demand prices.

Improvement suggested in 2022. Status will be updated in 2023.

Gradually phase out fossil fuel subsidies to make electricity production from renewables more competitive in the domestic market.

Improvement suggested in 2022. Status will be updated in 2023.

Develop a monitoring and evaluation system to assess the performance of low-carbon investments and measure their contribution toward creating a net-zero emission economy.

Improvement suggested in 2022. Status will be updated in 2023.



Republic of Moldova

Population ¹	2,573,928
Area (km ²) ¹	33,850
GDP per capita (USD) ¹	5,314.53
TES/GDP (GJ/thousand 2015) ²	18.32
Net Energy Imports (TJ) ²	140.68
RE share in Final Energy Consumption (%) ²	22.0
Total CO ₂ emissions (MtCO ₂) ²	10

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
N/A	N/A	N/A

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.

Moldova’s overall risk level against the assessed areas is **low**.

Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *unpredictable policy and regulatory change* and *breach of State obligations*.

Moldova has a very good performance on one EIRA indicator, a good performance on three EIRA indicators and a moderate performance on one indicator. *Rule of law* is the highest-scoring indicator at 81, followed by *management of decision-making processes* at 74, *regulatory environment and investment conditions* at 71, and *foresight of policy and regulatory change* at 65. The lowest-scoring indicator is *framework for a sustainable energy system*, with a score of 52.

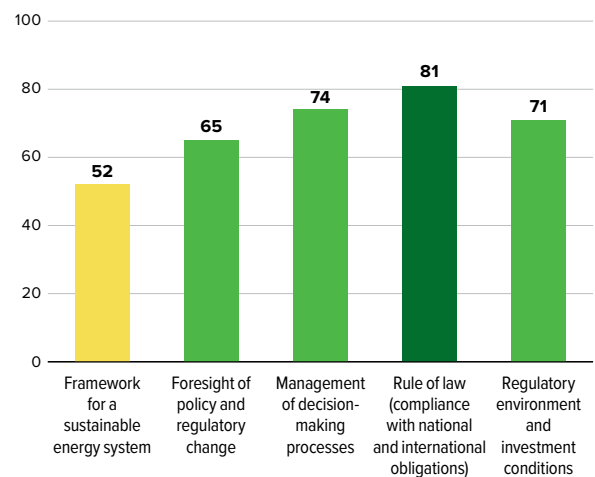
Moldova’s overall sub-indicator performance is good. The highest-scoring sub-indicators are *regulatory independence* and *respect for property rights*, at 94 and 85, respectively. It has a good score on six sub-indicators, namely *management and settlement of investor-State disputes* (76), *robustness of policy goals and commitments* and *institutional governance*, both at 75, *transparency and anti-corruption measures* (72), *policy planning on clean energy transition* (62) and *restrictions on FDI* (61). On the sub-indicator *electricity industry market structure and competition*, its score is 57, followed by *communication of vision and policies* at 56, and *environmental protection, human rights and gender* at 52. The lowest-scoring sub-indicators are *energy resilience*, at 50, and *enabling measures to support clean energy transition*, at 43.

While Moldova is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to improve the resilience of its energy system and create an enabling environment to achieve a clean energy transition.

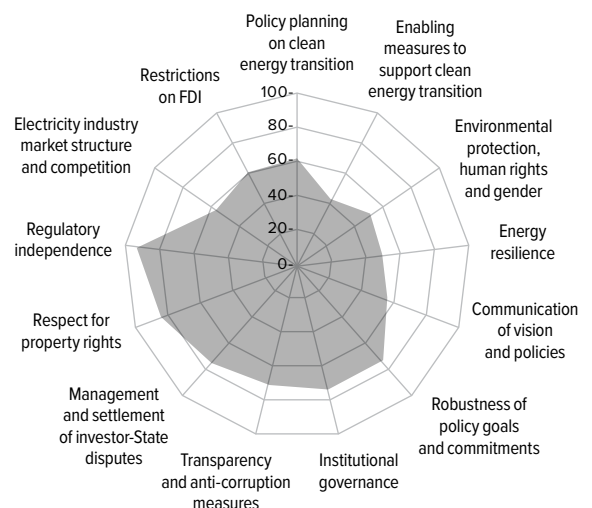
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

Moldova submitted its updated NDC to the UNFCCC Secretariat in March 2020.

Moldova is currently updating its Low Emission Development Strategy (LEDS) until 2030 and the Action Plan for its Implementation.

The Environmental Strategy for 2014-2023 and the Action Plan for its Implementation (Environmental Strategy) was adopted by Government Decision no. 301 of 2014 (as amended in 2018).

The Ministry of Agriculture, Regional Development and Environment (MARDE) develops policies on climate change, environmental protection, rational use of natural resources and biodiversity conservation.

STRENGTHS

Moldova's updated NDC represents the Government's efforts to raise its climate ambitions. Compared to the previous NDC, which aimed at a 64-67% unconditional emissions reduction, the updated NDC targets a 70% reduction by 2030 compared to the 1990 levels. The updated NDC outlines adaptation and resilience strategies, covering the agriculture, water, health, forestry, energy, and transportation sectors, which will be implemented by 31 December 2030. Sectoral targets are stipulated in the Environmental Strategy, which envisages a reduction of at least 25% of GHG emissions in the energy sector.

Law no. 92 of 2014 on Heating and Promotion of Cogeneration, as amended in 2021, aspires to improve the security, quality and reliability of heat supply and promote the efficient use of centralised heating systems. Similarly, Law no. 128 of 2014 on Energy Performance of Buildings, as amended in 2016 and 2021, aims to improve the energy performance of public and private buildings. Accordingly, after 30 June 2021, all new buildings must have almost zero energy consumption. To this end, in 2021, the Energy Efficiency Agency (EEA) of Moldova drafted energy audit templates for buildings, including audit requirements, guidelines for performing quality control audits, and the auditors' code of conduct. The District Heating Efficiency Improvement in Chisinau project supports supply-side priority investments to optimise and modernise the heat distribution network for a better and more efficient supply of heat and hot water in Chisinau.

The National Commission on Climate Change was established by Government Decision no. 444 of 2020. It is responsible for measuring, reporting and verifying GHG emissions reduction and facilitating the integration of climate change issues into national and sectoral programmes and plans. At the same time, the Environmental Projects Implementation Unit supports MARDE in implementing externally funded technical assistance projects on environmental protection and the use of natural resources. In 2021, Moldova submitted its Third Biennial Update Report to the UNFCCC Secretariat. This report includes a summary of the updated GHG emissions inventories until 2019 and outlines measures, both undertaken and planned, across 26 areas of Government intervention.

Since 2016, the country has been working with external specialists and donors to design green public investment programmes. The Moldova Sustainable Green Cities project seeks to spur funding for low-carbon green urban development options and establishes the Green City Lab

as a knowledge-management and networking platform. Concerning the public transport sector, the Clean Public Transport Programme, launched in 2021, will assist the country shift to modern buses using cleaner fossil fuels (compressed natural gas and liquified petroleum gas) and trolleybuses using electricity from renewable sources. Moreover, from 2020 onwards, imports of vehicles equipped with electric motors are exempted from VAT, while hybrid cars with charging capacity from the electricity network receive a 50% reduced quota of the excise tax.

National legislation requires conducting an environmental impact assessment (EIA) for building and upgrading energy infrastructure, as in the case of the District Heating Efficiency Improvement in Chisinau project mentioned earlier. The principles of transparency and participation underpin the EIA process. Public inclusion, especially of women, is central to the United Nations Development Programme (UNDP) projects unfolding in the country. For instance, the UNDP is working with women groups in 30 target communities to increase their knowledge and skills for sustainable and resilient agriculture and forest practices and explore alternative income generation activities in the respective sectors.

AREAS FOR IMPROVEMENT

Moldova overreached its 17% target for renewable energy in gross final energy consumption by 2020. However, the share of renewables in transport (0.17%) fell short of the 10% target the Government aimed to achieve by 2020. Thus, it should make additional efforts to accelerate the use of liquid biofuels, including through the transposition of the EU Directive on the promotion of the use of biofuels or other renewable fuels for transport (2003/30/EC) and the EU Directive on the promotion of the use of energy from renewable energy sources (2009/28/EC) relating to biofuels and bioliquids. Implementing the sustainability criteria envisaged in these Directives will increase the use of biodiesel, alternative fuels and electrical power in transport.

The Government must finalise the LEDS revision process that commenced in 2021 to integrate the targets set in its updated NDC into its national legislation as soon as possible. Based on the revised LEDS, the Government should also develop a national energy and climate action plan to include sectoral trajectories for decarbonisation, energy efficiency, energy security, internal energy market, and competitiveness.

Foresight of policy and regulatory change

QUICK FACTS

- | The Energy Strategy of the Republic of Moldova until 2030 (ES 2030) outlines the Government's policy in the energy sector.
- | In 2020, the Government approved the Moldova 2030 National Development Strategy through its Decision no. 377 of 2020 and subsequently presented it to the Parliament for consideration.
- | Moldova signed an Association Agreement/Deep and Comprehensive Free Trade Area (AA/DCFTA) with the European Union in 2014 to align its energy and climate change policies with the EU acquis.

STRENGTHS

Moldova's strategic objectives for its energy sector are ensuring the security of supply, promoting renewable energy sources, and fulfilling the prerequisites for market liberalisation. The Government is implementing measures to meet these objectives, paying particular attention to the security of supply. The commissioning of a gas interconnector between Romania and Moldova (Ungheni-Chisinau) in 2021 has opened up alternative routes for gas supply from EU hubs. Following extensive safety, security and stability analyses, in March 2022, the European Organisation of Transmission System Operators for Electricity (ENTSO-E) decided to provide emergency support to the Ukrainian and Moldovan power systems, connecting them to the synchronous continental European electricity grids. The Government has also authorised Energocom, the State-owned electricity utility, to procure gas on the spot market by running tenders mainly on the EU and Ukrainian borders. At the same time, Moldova has received a EUR 300 million loan from the European Bank for Reconstruction and Development (EBRD) to finance up to one-fifth of the country's planned gas imports for 2022, which are vulnerable to potential interruption. The loan is divided into two tranches. The first will be used in case of supply disruption from Russia. The second will create strategic gas reserves stored in Romania to avoid seasonal price spikes.

The Government is moving forward with its energy market reforms that will allow convergence with EU standards. As part of the reforms, the Government has unbundled the electricity distribution system operators. It has already privatised Premier Energy, a previously State-owned operator that controls 70% of the country's distribution grid. Privatisation of RED Nord, the second distribution grid operator, is underway. The wholesale electricity market rules, developed with support from the EU4Energy Programme, entered into force in June 2022. The rules set out procedures for the procurement of electricity on forward, day-ahead, intraday and balancing markets. They also include rules on ancillary services procurement, imbalance settlement, an improved procedure for procurement of electricity, and rules for balancing market participants located on the left bank of the Dniester River.

In terms of energy efficiency targets, the National Action Plan on Energy Efficiency 2019-2021 (NAPEE), adopted in 2019, envisages primary energy savings in 2021 of 21.52 ktep in the residential and public sectors. In March 2022, the United States Agency for International Development (USAID) and the Government of Moldova announced a new partnership activity, the USAID Moldova Energy Security Activity (MESA). MESA's intended outcomes include increased domestic renewable electricity

generation to power homes and businesses and enhanced energy efficiency on industrial, commercial, and residential levels, resulting in 6 Ktoe energy savings by 2026.

An ex-ante cost-benefit analysis is required under Law no. 100 of 2017 on Normative Acts for every legal and regulatory initiative. An economic analysis is performed by the Ministry of Infrastructure and Regional Development (MIRD) of energy policies and projects to ensure their compliance with domestic legislation and market economy principles. Government Decision no. 386 of 2020 on the Planning, Elaboration, Approval, Implementation, Monitoring and Evaluation of Public Policy Documents mandates public authorities to monitor the implementation of public strategies and programmes. Progress reports are prepared annually to present the monitoring results from the previous year. For instance, in 2021, Moldova updated the national assessment of its high-efficiency cogeneration and efficient district heating potential, per the EU Energy Efficiency Directive, and submitted its implementation report to the Energy Community Secretariat. Moreover, following the 2021 amendments to Law no. 260 of 2017, the Court of Accounts, the supreme audit institution in the country, must submit to the Parliament a comprehensive annual report analysing the findings of all audits carried out in the preceding period. Since 2019, the Parliamentary Public Finance Control Committee exercises oversight over the Court of Accounts.

AREAS FOR IMPROVEMENT

While Moldova has taken steps to comply with the EU acquis, important legislation is still to be transposed into the national legal order and fully implemented. As a result, the Government is recommended to progress with the transposition of the Regulation on Wholesale Energy Market Integrity and Transparency, the Regulation on energy labelling, and adopt the draft Law on Security of Supply of Oil Products.

As of April 2022, the country did not have national legally binding energy efficiency and renewables targets. The overall targets up to 2020 set in the ES 2030, Law no. 139 of 2018 on Energy Efficiency, the NAPEE, and the National Renewable Energy Action Plan for 2013-2020 have been met or even overreached, as in the case of renewables, whose share in the final energy consumption reached 27.3% in 2020. Therefore, it is imperative to adopt long pending strategy documents, such as the revised ES 2030 and the NECP, because they will provide existing and potential investors with information on the sector's future trajectory and allow them to set their business plans accordingly.

Management of decision-making processes

QUICK FACTS

- | The MIRD is the central public authority responsible for the energy sector.
- | The Ministry of Economy leads policy-making on economy, trade and investment.
- | The right to access public information is established by Law no. 982 of 2000.

STRENGTHS

The Government is committed to pursuing its pro-reform agenda in public administration. Supported by international experts and donors, it is upgrading its financial, technical, and human resources competencies. For instance, the Modernisation of Local Public Services project assists regional development councils and local administrations in improving their planning, coordination and implementation skills and organising needs-based training courses to modernise local public services. Similarly, UNDP Moldova has launched the Project Initiation Plan to support the State Chancellery in capacity-building for strategic policy formulation. The EEA acts as a de facto one-stop shop, providing all the needed assistance to prospective investors in its areas of competence. Moreover, progress is being made on the integrated taxpayers' register.

Law no. 239 of 2008 on Transparency in the Decision-making Process ensures that all stakeholders are informed about legislative and regulatory initiatives taken by the Government and State entities and that they participate in the relevant public consultation. Making good on this obligation, in 2021, the Government launched a public dialogue on critical policies and regulations, including the revised LEDS and the draft Government Decision approving capacity limits, maximum quotas and capacity categories for renewable electricity produced from 2021 to 2025. It also released the draft Strategy for Ensuring the Independence and Integrity of the Justice Sector 2022-2025 and its accompanying Action Plan for public consultation. Laws and regulations are published in the official gazette, *Monitorul Oficial*, while a database of laws and regulations is available online. Draft laws are also available publicly on the website of the Moldovan Parliament. As per standard practice, the National Energy Regulatory Agency (ANRE) made its 2021 activity report accessible to the public.

Fiscal management and budgetary planning decisions require a high degree of transparency. Under the Public Finance Management Strategy 2013-2020, extended until the end of 2022, the Ministry of Finance (MoF) has increased the accuracy of revenue projections and adherence to the budget calendar, improved the medium-term budgetary framework process and enhanced the accounting standards and governance of State-owned enterprises. Moreover, the Government Open Data Portal, administered by the MoF, offers updated information on the State budget through annual reports on the State budget's execution, data on the execution of the administrative-territorial units' budgets, the list of institutions financed from the State budget, data on

the external State debt by the currency of origin, and cumulative data on the amounts of overdue claims of budgetary authorities/institutions financed from the State budget and local budgets. Similarly, Energocom, RED Nord and Moldelectrica, the State-owned transmission system operator, publish yearly reports containing their financial activities and results.

The Public Procurement Law (PPL) no. 131 of 2015 defines the regulatory framework incorporating the fundamental EU principles governing the award of public contracts. It includes provisions for e-procurement, complete initial evaluation of tenders, and electronic auctions as the final stage of a competitive procedure. The PPL also establishes the right of unsuccessful bidders to file complaints against the contracting authority's decisions before the signature of the contract. The decision annulling, in whole or part, the contested contractual award is binding on the relevant authority. In addition to the PPL, it is notable that the main implementing regulations on the State registry for public procurement, the MTender, came into force in 2018. More recently, in 2020, the Government adopted a *lex specialis* on the utility sector to streamline procurement processes in the energy, water, transport and postal services with the EU Utilities Directive.

In November 2021, the Government amended Law no. 220 of 2021 on State Registration of Legal Entities and Individual Entrepreneurs, obliging the Moldovan Trade Registry to identify the ultimate beneficial owners of existing and newly incorporated Moldovan companies. The amendments were made to add beneficial ownership requirements regarding the information published after registration and stored in the Registry, the type of information publicly accessible, and the examination of it by the registrars.

AREAS FOR IMPROVEMENT

The Government should create a one-stop shop which operates across business sectors to relieve private investors of lengthy and complex registration, licence and permit procedures.

The Government has aligned its public procurement framework with international best practices. Its efforts must now focus on integrating into the MTender all PPA-related information, including procurement plans, award notices, and data on contract execution and actual use of funds, which currently appears on the individual website of each contracting authority.

Rule of law

QUICK FACTS

- I Moldova ratified the ECT on 10 June 1996.
- I Moldova ratified the Convention on the Settlement of Investment Disputes between States and Nationals of other States by Law no. 28 of 2011.
- I Moldova ratified the Convention on the Recognition and Enforcement of Foreign Arbitral Awards by Parliament Resolution no. 87 of 1998.
- I Moldova became a member of MIGA in 1993.

STRENGTHS

The Government has made significant efforts to promote alternative dispute resolution (ADR) mechanisms. The International Commercial Arbitration Court (ICAC) was established in 1994 under the umbrella of the Chamber of Commerce and Industry of Moldova and is the country's main permanent arbitration body. Besides the ICAC, there is a Mediation Council and 26 specialised arbitration institutions organised under various associations, such as the Arbitration Court Specialised in Industrial Property, the National Agency for the Settlement of Disputes in Public Procurement and the International Court of Commercial Arbitration under the auspices of the American Chamber of Commerce in Moldova.

Two critical pieces of legislation, Law no. 81 of 2004 on Investment in Entrepreneurial Activity and Law no. 24 of 2008 on International Commercial Arbitration, consolidate the right of parties to refer disputes to arbitration. Since adopting these laws, ADR has also gained prominence due to projects such as the Legal Transition Programme by the EBRD, which promote arbitration and commercial mediation on a national scale. Through training and mediation simulation, these projects aim to mainstream ADR methods for businesses in the country.

The National Courts Portal posts information about court hearings dates, applications and filings, decisions, and case law. The e-Court File IT is a component of the Judicial Information System. It represents an IT application system for creating and administering electronic court files accessible by the parties involved in a matter. In March 2022, the World Bank announced an assistance project, the Integrated Case Management System (ICMS), which is an electronic tool for the national courts to reduce corruption and promote transparency. The effective implementation of the ICMS will strengthen court administration processes in areas such as case workflow management, court performance data, budget planning and human resources.

Moldova maintains BITs with 39 countries. The most recent was one signed in 2018 with Canada. All these BITs contain Most-Favoured-Nation, National Treatment, and investment protection provisions. The AA/DCFTA with the EU promotes cooperation on freedom, security and justice to reinforce the rule of law and respect for human rights and fundamental freedoms. The 2021-2027 Association Agenda covers, among other issues, cooperation on freedom, security and justice, trade and investment-related matters, energy, environment and climate

change. In this context, the Government of Moldova has undertaken judicial reforms such as preparing a new Justice Strategy until 2025 and adopting constitutional amendments that strengthen the independence of the judiciary. It should also be noted that in June 2022, Moldova was granted EU candidate status.

National legislation safeguards the right to property and guarantees protection against expropriation and confiscation. More specifically, Law no. 488 of 1999 on the Expropriation for a Public Utility Cause enumerates examples of 'public utility' projects which justify the expropriation of private property and provides a detailed description of the expropriation procedure. Disputes on the compensation amount can be referred to an expert commission comprising a representative from the expropriating authority and the affected party. The awarded compensation, which in no case can be lower than that established in the expropriation proposal, is based on the property's real value and the damages caused to the owner. The payment is carried out in the currency of the initial investment and includes simple interest from the date of expropriation until the date of effective payment.

Intellectual property rights are recognised as a form of protected investment under the BITs signed by Moldova. At national level, the State Agency on Intellectual Property (AGEPI), a self-financed legal entity, is in charge of enforcing copyright, patent and trademark laws. The AGEPI has made the intellectual property rights database publicly available and free on its website, thus allowing the online filing of applications. The Intellectual Property Rights Enforcement Observatory, established by AGEPI, publishes the National Report annually on the Enforcement of Intellectual Property Rights in Moldova. Its most recent edition was released in 2021.

AREAS FOR IMPROVEMENT

The Government has been developing a draft law introducing an ombudsperson for entrepreneurs' rights, which was sent to the European Network of National Human Rights Institutions (ENHRI) for review in 2021. The Government is advised to proceed with adopting this law, considering the amendments proposed by the ENHRI, and after consulting on it with all relevant stakeholders. The new institution will offer business people an alternative venue to resolve their grievances against public authorities.

Regulatory environment and investment conditions

QUICK FACTS

Established under Law no. 174 of 2017 on Energy, ANRE is the authority with country-wide regulatory competencies in the gas, electricity, heat and oil sectors.

The Competition Council is an autonomous authority subordinated to the Parliament. It oversees the enforcement of Law no. 183 of 2012 on Competition and Law no. 139 of 2012 on State Aid.

Under Law no. 81 of 2004 on Investment in Entrepreneurial Activity, domestic and foreign companies in Moldova are guaranteed equal legal treatment.

STRENGTHS

ANRE ensures fair competition and efficient operation of the energy market and contributes to energy security by approving the system operators' investment plans and setting standards for distribution and transmission services and supply activities. In 2021, ANRE certified Vestmoldtransgaz, owned by the Romanian transmission system operator Transgaz, and adopted the gas and electricity network codes. Tariffs for accessing distribution networks are regulated and approved by ANRE per Decisions no. 108 and 107 of 2022 on Regulated Tariffs and Prices on Electricity.

The Competition Council of Moldova is committed to enforcing market rules and State aid laws in the energy sector. In 2020-2021, it investigated an alleged breach of rules concerning electricity distribution services rendered by a distribution system operator. Moreover, it investigated the organisation and implementation of a tender for purchasing and balancing electricity in the wholesale market. It also scrutinised support measures for energy efficiency and renewable projects, finding that they constitute State aid compatible with the market rules.

Unbundling of the distribution system operators is compliant with the EU energy acquis. Law no. 10 of 2016 on Promoting the Use of Energy from Renewable Sources (RES Law) entered into force in 2018. It envisages three support schemes for renewable electricity producers based on the project size: (1) net metering for small-scale installations with capacity up to 200 kW, (2) administratively set feed-in-tariffs for small-scale projects between 10 kW and 1 MW (4 MW in the case of wind), and (3) auctioned tariffs for larger projects. Energomcom must purchase all eligible renewable-generated electricity for 15 years at the guaranteed tariff. Eligible producers also benefit from non-discriminatory grid connection and priority dispatch. To implement the RES Law, Government Decision no. 401 of 2021 sets a total quota of 320 MW of renewable capacity (mainly wind and solar photovoltaic) to be supported by feed-in-tariffs and auctions.

There are currently 52 solar photovoltaic power plants with a total capacity of 2.93 MW. The most recently constructed is a 1 MW solar park in the village of Bacioi. In March 2022, ANRE approved the new capacity quotas, which envision that 400 MW of renewables will be allocated until 2025, of which 250 MW will come from intermittent and 150 MW from non-intermittent sources. In parallel, ANRE launched an auction to allocate quotas for 235 MW of electricity from renewable sources at 15-year fixed tariffs. A quota of 15 MW has been set for wind power projects (including 3 MW for small turbines), 70 MW for

solar (including 50 MW for rooftop projects on buildings), up to 100 MW for biogas-based cogeneration plants, 15 MW for syngas, 30 MW for cogeneration plants using direct combustion, and 5 MW for hydropower.

There are no limits on foreign control of property and land, except for agricultural and forest land, nor limitations on access to foreign exchange concerning a company's exports. Investment incentives and visa, residence and work-permit requirements apply uniformly to nationals and foreigners. Under the AA/DCFTA with the EU, the country has committed to gradually abolishing duties and quotas in mutual trade in goods and services and eliminating non-tariff barriers by adopting EU health and safety and intellectual property standards. In 2021, the Government managed to mitigate the negative economic impacts of the COVID-19 pandemic and the energy crisis. The EU Commission announced it would mobilise EUR 600 million over the next three years under the Economic Recovery Plan. The objective is to improve the business climate through building investment absorption capacity in priority areas, including energy efficiency, sustainable mobility, deploying renewable energies and boosting innovation in crucial technology areas such as renewable hydrogen and batteries. A further payment of EUR 60 million was made in December 2021 to alleviate the socio-economic impact of the rising gas prices.

AREAS FOR IMPROVEMENT

ANRE's institutional role should be respected, and its functional autonomy should be safeguarded from any political attempt to influence its decisions. Thus, the Government should refrain from actions that may jeopardise ANRE's internal structure, particularly concerning the recruitment and dismissal of its board members.

As the Government is developing a comprehensive strategy for fully exploiting its renewable potential, it should organise auctions that grant eligible producer status to large investors. To this end, the business environment could be facilitated by eliminating land use-related barriers and enhancing local banks' capacity to finance renewable projects. Simultaneously, secondary legislation must be adopted to clarify auction procedure details, including schedules, rules for bidder participation, and competition criteria, which are necessary to conclude bankable power purchase agreements. Moreover, the MIRD must finalise tendering bylaws and submit these for public consultation.

INDICATOR 1

Improvements proposed in 2022

Transpose into the national law the EU Directive on the promotion of the use of biofuels or other renewable fuels for transport (2003/30/EC) and the EU Directive on the promotion of the use of energy from renewable energy sources (2009/28/EC).

Improvement suggested in 2022. Status will be updated in 2023.

Adopt the revised LEDS to integrate the targets set in the updated NDC into national legislation as soon as possible.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2018

Adopt a revised version of Energy Strategy 2030 corresponding to the country's future needs and circumstances.

Work ongoing. The updated version of the Energy Strategy 2030 is undergoing consultation within the Parliament.

Enact secondary legislation to implement the RES Law.

Work ongoing. Following the adoption of the RES Law in 2018, the regulation on renewable energy tendering was approved. It provides an initial framework for organising auctions that grant 'eligible producer' status to large investors. In August 2020, ANRE adopted electricity market rules to implement the RES Law.

Ensure that the authorities implementing the national energy policy are different from those evaluating the progress made towards achieving the policy.

Work ongoing. The EEA was re-structured in 2018 and made responsible for financially supporting energy efficiency projects through the State budget and from regional and international financial markets. Following a change of government in June 2019, the Moldovan authorities have engaged in significant structural reforms, as specified in the EU-Moldova Association Agreement.

Improvements proposed in 2021

Adopt revised action plans outlining the priorities and desired outcomes to promote energy efficiency and renewable energy resources.

Work ongoing. The Government is working on transposing the REMIT Regulation, the Regulation on energy labelling, and adopting the draft Law on Security of Supply of Oil Products.

INDICATOR 3

Improvements proposed in 2018

Establish a one-stop shop for documenting and approving all licences, registrations, permits, and procedures related to energy projects.

Work ongoing. Local one-stop shops for public service delivery have been established under the Public Administration Reform Strategy for 2016-2020. Moreover, the EEA acts as a de facto one-stop shop, providing all the needed assistance to prospective investors in its areas of competence.

Ensure that all the State authorities regularly publish their documents, public expenditure and other relevant reports, and properly maintain their respective websites.

Work ongoing. The Court of Accounts is taking action to make its audits more effective and ensure better oversight of the budget implementation. In 2019, the Government made the State Registry of Legal Acts the only source of updated information on Moldovan legislation. The Government's Action Plan for 2020-2023 describes steps to ensure civil society's involvement in developing public policies.

Improvements proposed in 2022

Integrate into the MTender all energy procurement contracts, procurement plans, award notices and data on contract execution and actual use of funds, which currently appears on the individual website of each contracting authority.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2018

Introduce timeframes for national courts to examine cases and deliver judgments.

Pending

Improvements proposed in 2022

Adopt the draft law to establish an ombudsperson for guaranteeing entrepreneurs' rights.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 5

Improvements proposed in 2018

Reinforce the independence of ANRE.

Work ongoing. In February 2020, ANRE approved and published the rules of the natural gas market and made progress with the unbundling of Moldovagaz, the vertically integrated natural gas monopoly.

Improvements proposed in 2022

Create an enabling regulatory framework to attract investment in renewables through competitive procurement, support schemes, and simplified administrative procedures; clarify the auction procedure details, including schedules, rules for bidder participation, and the competition criteria.

Improvement suggested in 2022. Status will be updated in 2023.



South Sudan

Population ¹	11,381,377
Area (km ²) ¹	646,883
GDP per capita (USD) ¹	N/A
TES/GDP (GJ/thousand 2015) ²	2.69
Net Energy Imports (TJ) ²	-339.50
RE share in Final Energy Consumption (%) ²	26.6
Total CO ₂ emissions (MtCO ₂) ²	1.7

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
N/A	N/A	N/A

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.

South Sudan’s overall risk level against the assessed areas is **moderate**.

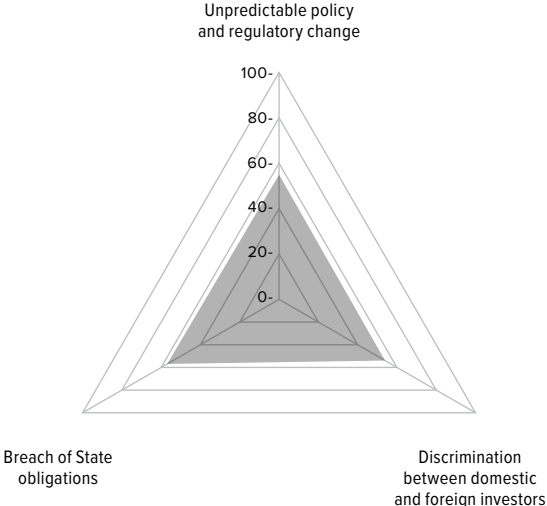
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *unpredictable policy and regulatory change* and *breach of State obligations*.

South Sudan’s performance is moderate on four EIRA indicators and low on one indicator. The highest-scoring indicators are *foresight of policy and regulatory change* and *management of decision-making processes*, both at 49, followed by *regulatory environment and investment conditions* at 48. Its score on the indicator *framework for a sustainable energy system* is 41. *Rule of law* is the lowest-scoring indicator at 40.

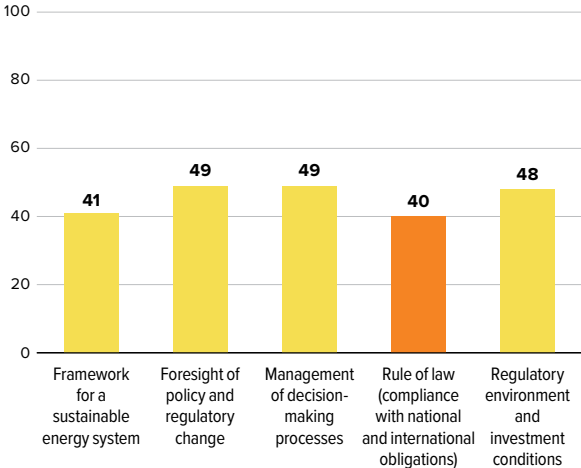
South Sudan’s overall sub-indicator performance is moderate. The highest-scoring sub-indicators are *institutional governance* at 67 and *restrictions on FDI* at 63. South Sudan’s performance is moderate on six sub-indicators: *environmental protection, human rights and gender* at 59, *regulatory independence* at 53, *communication of vision and policies* at 52, *energy resilience* at 50, *robustness of policy goals and commitments* at 46, and *respect for property rights* at 41. The lowest-scoring sub-indicators are *management and settlement of investor-State disputes* at 39, *policy planning on clean energy transition* at 36, *transparency and anti-corruption measures* at 32, *electricity industry market structure and competition* at 27, and *enabling measures to support clean energy transition* at 19.

South Sudan must reduce legal and regulatory risks to energy investments by making the electricity market competitive and implementing measures to support the clean energy transition.

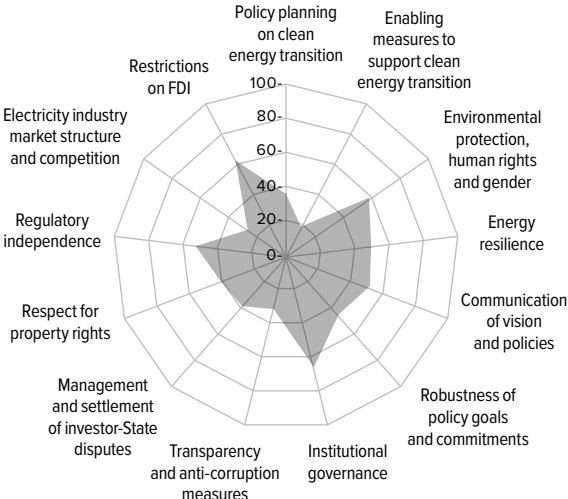
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

- | On 22 February 2020, South Sudan formed the Revitalised Transitional Government of National Unity (R-TGoNU).
- | On 21 September 2021, South Sudan submitted its second NDC to the UNFCCC Secretariat.
- | On 30 November 2021, South Sudan released its first National Adaptation Plan (NAP) for Climate Change.

STRENGTHS

South Sudan's second NDC sets the pathway for achieving a clean energy transition. It defines activities to reduce GHG emissions from different sectors, the implementation timeframe, and the progress status. Under the emissions reduction scenario, South Sudan aims at a cumulative emissions reduction of 11.9 million tonnes of CO₂e by 2030 through solar, wind, hydro, and biomass power generation. Subject to the availability of financing, it has committed to reducing 109.87 million tonnes of CO₂e and the potential emission sequestration of 45.06 million tonnes of CO₂e by 2030.

The second NDC reflects the Government's intention to improve biomass efficiency, reduce the carbon intensity of the existing power plants, expand the national grid and interconnected transmission lines, and deploy decentralised grids and renewable technologies in rural areas. In the petroleum sector, the goal is to introduce regulations for reducing the emission intensity of oil extraction, improving the efficiency of the extraction process overall, and replacing petroleum products with alternative resources. The adaptation strategy for the petroleum sector includes the construction of climate-resilient infrastructure.

Although there is no legal framework on environmental protection, the R-TGoNU's State Budget for the fiscal year 2021/2022 lists specific actions to fast-track the enactment of the Draft Environmental and Forestry Bill and the Water Bill. At the same time, South Sudan has a policy framework for sustainable land use, combating deforestation, and preventing biodiversity loss. The National Environmental Policy 2015-2025 introduces an afforestation project to plant 100 million trees in ten years. The National Biodiversity Strategy and Action Plan 2018-2027 acknowledges the need to strengthen policy, legislative and institutional capacity for biodiversity conservation, restore degraded ecosystems, and promote access to and benefit-sharing of biodiversity and ecosystem services.

South Sudan's National Adaptation Programmes of Action (NAPA) identifies priority adaptation projects for environmental protection, water resources, agriculture, disaster risk reduction, and policy and institutional framework. The NAP aims to implement short-term and priority adaptation programmes for these five themes. In the energy sector, the NAP presents programmatic activities to assess the impact of climate change on power demand and generation, design frameworks, procedures and guidelines for resilient energy systems, and introduce incentives for renewable electricity, energy efficiency, and clean transportation fuels and technologies.

The second NDC addresses the opportunities for the country's transition from a linear to a circular economy.

The suggested strategies focus on converting industrial and agricultural waste volumes into fuel and promoting alternative energy sources for the country's electrification. The R-TGoNU is also tailoring projects to empower young people and women by enhancing their entrepreneurial skills. In November 2021, the African Development Bank (AfDB) approved the USD 2.145 million Private Sector Development in Fragile Context: Capacity Building and Access to Finance for Youth and Women (PSDFC) project that will run from 2022 to 2024. It aims to increase employment opportunities and income for 450 women and 1,500 young people in the Western Bahr-el-Ghazal and Western Equatoria areas. The Ministry of Finance and Planning (MoFP) has also been collaborating with the AfDB since November 2021 to implement the Youth Enterprise Development and Capacity Building project, which aims to enhance employability and create job opportunities for citizens aged between 18 and 35.

AREAS FOR IMPROVEMENT

South Sudan's current installed power generation capacity is less than 130 MW, and only 7% of its population is connected to the grid. Given the low electricity supply vis-à-vis the growing demand, the R-TGoNU must work with donor agencies to develop a comprehensive least-cost power sector development plan encompassing electricity production, transmission, and distribution. The least-cost plan must include a vision of the final structure of the power system, which should be a combination of the national grid and decentralised mini-grids, based on proper cost-benefit analysis. The R-TGoNU should also work with the donor community to promote autonomous rooftop solar power systems and establishing mini- and micro-grids to serve small communities and households. This approach will help end-consumers phase out use of diesel generators and reduce dependency on expensive imported fuel.

South Sudan's territory is characterised by extreme weather events and high rainfall variability that causes droughts and floods. 95% of its population depends on local natural resources for their livelihood and is severely impacted by climate change. Since women dominate the agricultural sector and rely on revenue from the rain-fed crop yield, these climatic events affect women more than other gender and social groups. Cross-sectoral institutional, legal, and regulatory frameworks on climate change mitigation and adaptation should be adopted to address the existing and potential challenges caused by climate change, in line with the country's most recent NDC objectives. This framework should focus on ensuring food security while mitigating the impact of climate change on women in agriculture and balancing the interest of diverse stakeholders.

Foresight of policy and regulatory change

QUICK FACTS

In November 2021, the R-TGoNU approved the extension of the National Development Strategy (2018-2021) to 2024.

The National Electricity Policy Paper was adopted in 2007 to define the roles and responsibilities of actors in the power sector and regulate their relationships.

STRENGTHS

The R-TGoNU has identified some policy targets and programmes to stimulate investments in South Sudan's energy sector. It plans to increase the total power generation capacities from 131.4 MW in 2018 to 580 MW by 2025 and ensure electricity access for 75% of urban households by 2025. At the same time, as outlined in the second NDC, it intends to develop and deploy 2,729.5 MW of renewable energy-based power to meet its CO₂ emissions reduction targets.

In addition to scaling up power generation, the R-TGoNU is trying to secure regional support for boosting the country's energy infrastructure. As a member of the Eastern Africa Power Pool (EAPP), South Sudan seeks to establish with other EAPP member countries the least-cost and most reliable interconnections, facilitate efficient power trading, and develop a competitive electricity market in East Africa. The collaboration within the EAPP has led to significant outcomes that will critically boost South Sudan's energy security. In May 2022, the Ministry of Energy and Dams (MED) signed a Memorandum of Understanding (MoU) with Ethiopian Electric Power to import 100 MWh of electricity over the next three years. The parties have agreed to gradually increase the total volume of the power supplies to 400 MWh. Based on the conclusions of a feasibility study, the MoU also envisages a 230 kV transmission line spanning 357 km between the Gambella region in Ethiopia and the Malakal region in South Sudan and a 700 km high-voltage line connecting the town of Tepi in southern Ethiopia to Juba.

To strengthen the domestic power infrastructure, since 2019, the South Sudan Electricity Corporation (SSEC) has been implementing a USD 14.6 million project, financed by the AfDB, to replace the existing 11 kV lines in Juba with 33 kV lines and install new concrete poles. Moreover, in March 2022, the World Bank approved the disbursement of a USD 120 million grant for enhancing community resilience and local governance in South Sudan. The project will be implemented between 2022 and 2027 by the MoFP jointly with the Local Government Board to improve access to essential services such as electricity, clean water, health care, and education for over 900,000 people, of which a minimum of 50% will be women.

The R-TGoNU is currently developing mechanisms to monitor and evaluate the progress made on the policy targets and actions. The Ministry of Environment and Forestry, the national NDC Focal Point for South Sudan, is responsible for tracking the progress of implemented projects. MDAs are required to periodically monitor interventions and prepare reports on targets achieved and the use of funds. The Petroleum Revenue Management Act (PRM Act) of 2013 regulates the allocations to the Consolidated Fund to finance the National Budget and the Reserve Funds comprising the Oil Revenue Stabilization

Account and the Future Generation Fund (FGF). The PRM Act of 2013 requires the Minister of Finance and Planning to submit quarterly reports to the Transitional National Legislative Assembly (TNLA) and the Council of States on investment performance related to these funds. It also requires the submission of an annual report on audited financial statements for the Petroleum Revenue Account and the Reserve Funds consisting of the Oil Revenue Stabilization Account and the FGF. The Minister is also required to publish records of petroleum revenues.

The R-TGoNU gives the public access to its financial performance and the State's budget cycle. In early 2022, the National Budget for 2021/2022, the Draft Appropriation Bill for 2021/2022 and the Draft Financial Bill for 2021/2022 were submitted by the R-TGoNU to the TNLA and subsequently adopted. The MoFP has released the Draft Budget for 2021/2022 and its simplified version with an overview of the macroeconomic projections and the State's income, expenditure, and budgetary deficit. The Transitional Constitution of South Sudan mandates the National Audit Chamber (NAC) to oversee the accounts of the national and local government levels, independent commissions, public institutions and corporations, and any other institutions as determined by law.

AREAS FOR IMPROVEMENT

Given South Sudan's ambitious target to ensure 75% electricity access by 2025, the R-TGoNU needs to urgently adopt a comprehensive energy sector rehabilitation strategy that outlines short- and long-term actions to achieve this target in the post-conflict period. This strategy should set quantifiable targets and implementation measures to expand the electricity grid, improve power reliability, and reduce network losses.

Considering the current limitations and the small size of the power transmission and distribution network, the Government should develop a legal framework to support medium- and large-sized public-private partnership projects. The legislation could set procedures for selecting projects and define the types and nature of State support. Implementing regulations may be introduced to categorise the projects by size and nature, list priority areas, and specify typical requests for qualifications. It should also consider developing model infrastructure contracts based on the International Federation of Consulting Engineers agreements.

South Sudan should introduce ex-ante and ex-post policy monitoring and evaluation mechanisms. The TNLA should review the implementation status of energy policies and publish annual performance evaluation reports on the progress achieved.

Management of decision-making processes

QUICK FACTS

- | South Sudan has a presidential system of Government and a bicameral legislature.
- | In 2018, the Transitional Government of National Unity (TGoNU), the South Sudanese People's Liberation Movement/Army-In Opposition, the South Sudan Opposition Alliance, former detainees, and other opposition parties signed the Revitalised Agreement on the Resolution of Conflict in the Republic of South Sudan (R-ARCSS) to share power in the two houses of the national legislature, namely the TNLA and the Council of States.
- | The Transitional Constitution of South Sudan provides fundamental legal basis for the establishment and functioning of the State.
- | The MED develops and implements electricity sector policies, programmes and projects.
- | The Ministry of Investment (MoI) is responsible for developing national investment strategies, policies and programmes.

STRENGTHS

Following the R-ARCSS and the establishment of the R-TGoNU, the major political forces of South Sudan have agreed to complete the legislative transition by 2023. In August 2021, the national legislature of South Sudan was reconstituted to give the agreed representation to the parties that signed the R-ARCSS and the country's diverse communities and people. Efforts have been made to encourage the participation of women in political and legislative decision-making. The R-ARCSS already requires 35% affirmative action for women's representation in the R-TGoNU, established in February 2020. In line with the R-ARCSS's spirit, South Sudan appointed, in 2021, a woman speaker to its newly established TNLA and a deputy woman speaker to the Council of States.

The R-ARCSS requires the parties to decide on guidelines for steering the constitution-making process. The R-TGoNU has already begun drafting the country's new constitution and remains committed to its adoption before the national elections in 2023. In 2021, notable progress was achieved through pre-consultation workshops. The Ministry of Justice and Constitutional Affairs finalised the Constitution-Making Process (CMP) Bill. The CMP Bill identifies the National Constitutional Review Commission and Constitutional Drafting Committee, the National Constitutional Conference, and the TNLA as the institutions leading the constitution-making process.

South Sudan is promoting public accountability and transparency by disclosing some data on the financial performance of the R-TGoNU and State agencies. In September 2021, the NAC released the Consolidated Compliance Audit Report on the First Tranche of the Rapid Credit Facility from the International Monetary Fund. Moreover, in June 2021, it released the Stakeholder Engagement Strategy 2019-2024, which aims to improve communication within the NAC and strengthen its relationship with the recently established Public Accounts Committee of the National Legislature.

As part of the public finance management reform, the R-TGoNU created, in 2020, the Public Financial Management Oversight Committee (PFMOC) to control revenue collection and allocation, budgeting and expenditure, and review public debt. The PFMOC, chaired by the Minister of Finance and Planning and comprised of various ministers and the international aid community, is responsible for implementing the Treasury Single Account,

reviewing and verifying loans and contracts collateralised or guaranteed against crude oil, and strengthening the Anti-Corruption Commission (ACC) and the NAC. The PFMOC must also establish a Public Procurement and Asset Disposal Authority (PPADA) to monitor financial allocations.

The R-TGoNU is making data on the utilisation of its oil revenues publicly available. In September 2020, the national oil company Nile Petroleum Corporation (NILEPET) launched its website, which provides information on the company's profile, management, business strategies, upstream and downstream operations, projects and joint activities, and recent actions and events. Recently, the Ministry of Petroleum (MoP) centralised the revenue accounts within the Bank of South Sudan to enable greater scrutiny and control over the petroleum sector revenue flows and further income distribution.

The PRM Act of 2013 regulates the disbursement of petroleum revenues. In June 2021, the NAC released an audit report covering 2011-2020 to assess whether the MoFP had complied with the PRM Act of 2013, requiring the transfer of 2% and 3% of the net oil revenue to the producing States and the local communities. The NAC was obliged to ensure that the Council of States and other sub-national authorities were involved in making decisions regarding the usage of the 2% and 3% net oil revenues transferred to the States and communities.

AREAS FOR IMPROVEMENT

The business community will benefit if State-owned funds and enterprises publish annual reports summarising the activities completed in the previous years and provide information on financial flows and revenues. The Oil Revenue Stabilization Account and the FGF, which receive certain shares of oil revenues, should make financial disclosures to improve public accountability. Similarly, the State-owned company NILEPET, involved in oil production and the distribution of oil refinery products, should make all the relevant financial disclosures. Finally, the MoFP is encouraged to provide auditors and the general public with access to information, data, and documents relating to the payment and utilisation of the net oil revenue share transferred to the producing States and the affected communities.

Rule of law

QUICK FACTS

- | South Sudan signed the International Energy Charter political declaration in 2021.
- | South Sudan ratified the Convention on the Settlement of Investment Disputes between States and Nationals of Other States on 18 April 2012.
- | South Sudan has been a member of MIGA since 2012.

STRENGTHS

The R-TGoNU's creation in 2020 paved the way for constitutional and judicial reforms in South Sudan. Recently, some progress was made towards setting up an ad-hoc Judicial Reform Committee (JRC) that will examine the current situation in the justice sector and recommend appropriate reforms. The R-TGoNU and the Intergovernmental Authority on Development (IGAD) in Eastern Africa developed and signed the Terms of Reference for establishing the JRC. The IGAD is currently identifying prominent regional experts to be appointed as the JRC's Chair and Deputy Chair and will suggest that the parties to the R-ARCSS nominate their representatives to the JRC. Additionally, the R-TGoNU has announced the establishment of the Hybrid Court for South Sudan. It also aims to set up the Commission for Truth, Healing and Reconciliation and the Compensation and Reparations Authority, as required by the R-ARCSS.

The R-TGoNU is taking measures to empower the judiciary and is allocating funds to this end. The State Budget 2021/2022 includes allocations for implementing budgetary programmes and activities to facilitate the drafting of Constitutional amendments, contributing to constitutional and legal reviews, and revising the Judiciary Act of 2008 and the Judicial Service Act of 2008. It also assigns funds for developing new legislation in the areas lacking sufficient legal frameworks, recruiting and training more judicial and support staff, increasing the number of mobile courts to expedite court hearings, and preparing a new land policy.

South Sudan is creating mechanisms to collect and maintain investment-related data. While the MoP is responsible for maintaining databases of investment contracts and special undertakings in the petroleum sector, the MED has analogous responsibility for the electricity sector. The Mol is the central authority that keeps records of contracts and specific deals in other sectors.

Efforts are being made to provide investors with guarantees against the direct and indirect expropriation of assets and to uphold property rights. The Land Act of 2009 provides a legal basis for expropriation in the public interest. It describes the expropriation procedure and stipulates a fair and equitable compensation for expropriated land that, among others, shall consider its market value. Meanwhile, the national legislation does not include provisions requiring mandatory technology transfer in the energy sector. The draft land policy

currently undergoing consultations with stakeholders, will lay a foundation for the policy framework on land rights and tackle important issues like identifying much-needed land dispute resolution mechanisms.

As a party to the Treaty for the Establishment of the East African Community (EAC), South Sudan is engaged in the further institutional and economic integration of the Member States. All EAC Member States are currently involved in consultations on the EAC-EU Economic Partnership Agreement (EAC-EU EPA), which contains trade in goods, dispute settlement, and economic and development cooperation provisions. The draft EAC-EU EPA includes a clause for negotiations in several areas, including competition policy, investment and private sector development, and intellectual property rights.

AREAS FOR IMPROVEMENT

South Sudan must ratify the Convention on the Recognition and Enforcement of Foreign Arbitral Awards as this will convey to foreign investors that the country is committed to promoting dispute resolution through international arbitration. It will give the necessary legal support to enforce and recognise foreign awards within its territory.

The national legislation does not set definitive timelines for courts to conduct judicial hearings and deliver final judgments in cases. The Government should consider amending the Judiciary Act of 2008 to introduce legally binding timeframes for adjudicating cases. At the same time, to ensure transparency and efficiency in case management, the judiciary should set up an online portal that provides investors and citizens with the status of all court cases, the most recent judicial orders passed, case summaries, and pleadings submitted by the parties involved.

The R-TGoNU should develop conflict prevention and management mechanisms to avoid disputes with potential investors. For instance, establishing an investment ombudsperson in the country will allow local and foreign investors to refer disputes with public agencies and find amicable dispute resolutions without allocating resources to time-consuming and expensive arbitration proceedings. It may also seek guidance from the Energy Charter Model Instrument on Management of Investment Disputes, which aims to assist States in handling investment disputes while keeping in mind their particular needs and circumstances.

Regulatory environment and investment conditions

QUICK FACTS

- | The MED regulates the power sector and issues licences for activities in the electricity market.
- | The SSEC is responsible for determining electricity tariffs in consultation with the MED and the MoFP.

STRENGTHS

Following the signature of the R-ARCSS, R-TGoNU is now developing a legal and regulatory framework for the energy sector. The Executive Cabinet of South Sudan has passed the National Electricity Bill of 2015, and it is now awaiting the approval of the national legislature. The Bill introduces a legal framework for power generation, transmission, bulk supply, distribution, supply, export and import, system operation, and other relevant areas. During a validation workshop of the Common Market for Eastern and Southern Africa (COMESA) on 3 and 4 March 2022, South Sudan received an official offer for technical support to establish an independent national energy regulatory body. In the petroleum sector, R-TGoNU has initiated the revision of the Petroleum Act of 2012 to cover regulation of the downstream segment. The consultations on the revisions started in June 2022 and are led by the National Constitutional Amendment Committee.

R-TGoNU is taking steps to facilitate foreign investment in the country. The Investment Promotion Act of 2009 grants domestic and foreign investors equal treatment and guarantees unconditional transfer of freely convertible currency in and out of South Sudan. In July 2021, R-TGoNU launched an online portal to proceed with the applications for work permits by foreigners interested in working in the country. The National Revenue Authority also launched an electronic portal in June 2021 to simplify the taxpayer registration process and issue tax identification numbers.

South Sudan seeks to benefit from its substantial petroleum reserves and invest in the country's sustainable development. In June 2021, the MoP launched the country's initial oil licensing round for 14 new oil blocks, ranging from 4000 km² to 25,000 km². Nine blocks will be awarded in 2022 and 2023. There is some investment expected in the downstream oil and gas sector. The Strategic Fuel Fund of South Africa has expressed interest in building a 60,000 barrel per day refinery in South Sudan. In late 2020, the local oil marketing firm Trinity Energy Ltd announced its plan to invest USD 500 million in a 40,000 barrel per day module refinery in Paloch. The new facility, built by the US-based Chemex Global engineering firm, is expected to provide South Sudan, Kenya, Uganda, Tanzania, and Congo with various refined oil products.

Although the oil and gas sector remains prominent, South Sudan is looking to diversify its energy mix. R-TGoNU will soon install hydropower plants (HPPs) of 3.5 MW in Kentti, 12 MW in Sue, 235 MW in Shukoli, 420 MW in Lakki, and 540 MW in Beden. Two HPPs, Fula Rapid (42 MW) and Grand Fula (1080 MW), will be established in Fula. Wind farms will be commissioned across the Eastern Equatoria, Greater Upper Nile, and Jonglei states. Additionally, in May 2022, Kampala-based Aptech Africa announced its plans to build a 12 MW solar power plant in Juba. The project will

be financed by Ezra Construction, a part of the Ezra Group. Aptech Africa has already negotiated the purchase of electricity from this new plant.

Some renewable energy projects are already in the implementation phase. South Sudan recently secured financing for the Malakal Teaching Hospital 700 kW solar power project that will be completed in late 2022 and financed through the Peace Renewable Energy Credit Programme. OFGEN Africa, a Nairobi-based solar power manufacturer, recently installed an off-grid 350 kW solar power plant to power the UAP Equatorial Tower, the tallest building in Juba. Moreover, in 2022, the UAE-based Asunim Solar and I-kWh completed the installation of the USD 45 million Juba Solar Photovoltaic Park in Nesitu County. This park comprises a 20 MW solar power plant and a 35 MWh battery storage on nearly 25 hectares of land. It was constructed by the Egyptian Elsewedy Electric T&D and would supply power to around 60,000 households while reducing almost 11,000 tonnes of CO₂e annually.

AREAS FOR IMPROVEMENT

R-TGoNU should prepare a long-term plan to diversify South Sudan's economy and increase revenues from non-oil sectors. This strategic plan should be coupled with reforms to effectively enforce provisions of the PRM Act of 2013, improve accountability in revenue disbursement and utilisation, and stricter oversight of the financial flows to and from the FGF and the Oil Revenue Stabilization Account. At the same time, R-TGoNU should develop a regulatory framework to encourage micro- and small-scale renewable energy systems, introduce appropriate tax incentives and other support schemes, and simplify administrative procedures for those willing to invest in these projects.

South Sudan must urgently update its electricity tariff methodology to ensure prices are progressively made cost-reflective. This approach is essential to rehabilitate the financial health of the power market and attract more private investment in the country. In parallel, the SSEC should identify mechanisms to protect low-income consumers from the high electricity costs resulting from a gradual shift to cost-reflective tariffs and the elimination of cross-subsidies. With support from donor agencies, it should organise public awareness campaigns to promote energy savings and invest in demand-side management tools to control peak load shifts, reduce technical losses, and cut transmission and distribution costs. It could also include educational and training components to change unsustainable energy consumption behaviours, such as using wood and charcoal for cooking and heating purposes, which could help reduce carbon footprints.

INDICATOR 1

Improvements proposed in 2022

Develop a comprehensive least-cost power sector development plan encompassing electricity production, transmission, and distribution.

Improvement suggested in 2022. Status will be updated in 2023.

Develop support schemes to promote autonomous rooftop solar power systems and establish mini and microgrids to serve households and small communities.

Improvement suggested in 2022. Status will be updated in 2023.

Adopt a cross-sectoral institutional, legal and regulatory framework on climate change mitigation and adaptation in line with the country's most recent NDC objectives.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2021

Urgently adopt a comprehensive post-conflict energy sector rehabilitation strategy that outlines short- and long-term actions to achieve 75% electricity access by 2025.

Pending

Establish an institutional, legal and regulatory framework to complement the comprehensive post-conflict energy sector rehabilitation strategy.

Pending

Introduce a legal framework to implement medium and large-size projects based on the public-private partnership model.

Pending

Improvements proposed in 2022

Introduce ex-ante and ex-post policy monitoring and evaluation mechanisms.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 3

Improvements proposed in 2021

Require State-owned funds, including the sovereign wealth fund, to publish annual reports summarising the activities completed in the previous years and make financial disclosures.

Work ongoing. In June 2021, the NAC released an audit report covering 2011-2020 to assess whether the MFP had complied with the PRM Act of 2013, requiring the transfer of 2% and 3% of the net oil revenue to the producing States and the local communities. In September 2021, the NAC released the Consolidated Compliance Audit Report on the First Tranche of the Rapid Credit Facility from the International Monetary Fund.

Legally oblige NILEPET to make financial disclosures, including on its revenue and cash flows.

Work ongoing. In September 2020, NILEPET launched its website, which provides information on the company's profile, management, business strategies, upstream and downstream operations, projects and joint activities, and recent actions and events.

Improvements proposed in 2022

Ensure the engagement of stakeholders while developing policies and laws; provide all stakeholders prior notification, of sufficient duration, on public debates to collect opinions and ensure inclusivity.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2021

Expedite the ratification process of the Convention on the Recognition and Enforcement of Foreign Arbitral Awards.

Pending

Improvements proposed in 2022

Amend the Judiciary Act of 2008 to introduce legally binding timeframes for adjudicating cases.

Improvement suggested in 2022. Status will be updated in 2023.

Set up an online portal that provides investors and citizens with the status of all court cases, the most recent judicial orders passed, case summaries, and pleadings submitted by the parties involved to ensure transparency and efficiency in case management.

Improvement suggested in 2022. Status will be updated in 2023.

Develop conflict prevention and management mechanisms to avoid disputes with potential investors, such as by establishing an investment ombudsperson and seeking guidance from the Energy Charter Model Instrument on Management of Investment Disputes.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 5

Improvements proposed in 2021

Update the electricity tariff methodology to ensure prices are progressively made cost-reflective while identifying mechanisms to protect low-income and vulnerable consumers from a gradual shift to cost-reflective tariffs and cross-subsidies elimination.

Pending

Improvements proposed in 2022

Develop a long-term plan to increase revenues from non-oil sectors and introduce reforms to effectively enforce provisions of the PRM Act of 2013, improve accountability in oil and gas revenue disbursement and utilisation, and ensure stricter oversight of the related financial flows.

Improvement suggested in 2022. Status will be updated in 2023.

Establish a regulatory framework to encourage micro- and small-scale renewable energy systems, introduce appropriate tax incentives and other support schemes, and simplify administrative procedures for those willing to invest in renewable energy projects.

Improvement suggested in 2022. Status will be updated in 2023.

Organise public awareness campaigns to promote energy savings and invest in demand-side management tools to control peak load shifts, reduce technical losses, and cut transmission and distribution costs.

Improvement suggested in 2022. Status will be updated in 2023.

Include educational and training components in the regulatory framework to change unsustainable energy consumption behaviours, such as using wood and charcoal for cooking and heating purposes, which could help reduce carbon footprints.

Improvement suggested in 2022. Status will be updated in 2023.



The Gambia

Population ¹	2,486,937
Area (km ²) ¹	11,300
GDP per capita (USD) ¹	835.59
TES/GDP (GJ/thousand 2015) ²	N/A
Net Energy Imports (TJ) ²	N/A
RE share in Final Energy Consumption (%) ²	N/A
Total CO ₂ emissions (MtCO ₂) ²	N/A

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
N/A	N/A	N/A

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.

The Gambia’s overall risk level against the assessed areas is **moderate**.

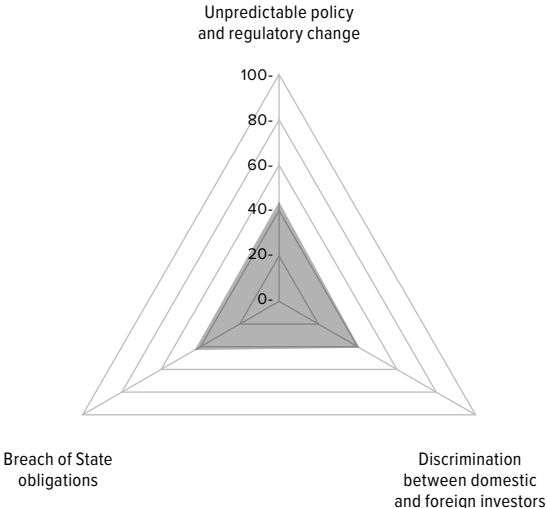
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *breach of State obligations* and *unpredictable policy and regulatory change*.

The Gambia’s performance is good on one EIRA indicator and moderate on four indicators. The highest-scoring indicator is *regulatory environment and investment conditions* at 64. Its score on the indicator *rule of law* is 57, while *management of decision-making processes* is at 55. On *foresight of policy and regulatory change*, its score is 53. *Framework for a sustainable energy system* is the lowest-scoring indicator at 50.

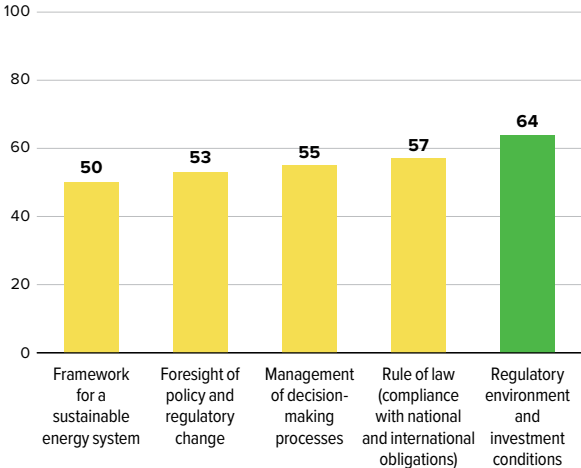
The Gambia’s overall sub-indicator performance is moderate. The highest-scoring sub-indicators are *restrictions on FDI* at 89 and *regulatory independence* at 83. Following these are the sub-indicators *institutional governance* at 75 and *respect for property rights* at 70. The Gambia’s score is moderate on seven sub-indicators: *environmental protection, human rights and gender* at 58, *robustness of policy goals and commitments* at 57, *policy planning on clean energy transition* at 52, *communication of vision and policies* at 50, *energy resilience* at 47, *enabling measures to support clean energy transition* at 46 and *management and settlement of investor-State disputes* at 44. The lowest-scoring sub-indicators are *transparency and anti-corruption measures* at 35 and *electricity industry market structure and competition* at 20.

The Gambia must reduce legal and regulatory risks to energy investments by liberalising the electricity industry market and implementing anti-corruption measures.

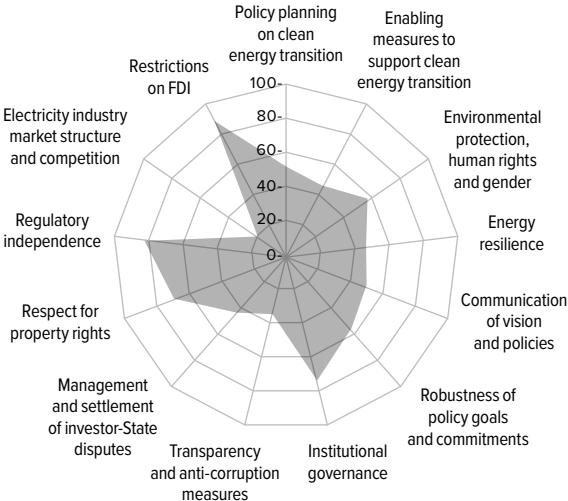
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

On 12 September 2021, The Gambia submitted its second NDC to the UNFCCC Secretariat.

In March 2021, the Ministry of Environment, Climate Change and Natural Resources (MECCNAR) released The Gambia 2050 Climate Vision.

STRENGTHS

The Gambia's second NDC contains enhanced targets and covers more sectors than its predecessor. It takes into account GHG emissions from agriculture, forestry and other land use (AFOLU) as opposed to the first NDC, which only addressed emissions from agriculture. Moreover, the waste sector includes emissions for solid waste and wastewater, whereas the previous NDC did not include wastewater emissions. The second NDC proposes mitigating measures to reduce 449 GgCO₂e GHG emissions from different rice ecologies in agriculture by 2030. Moreover, it aims to improve the sector's resilience by implementing climate-smart agriculture that will reduce 205 GgCO₂e of GHG emissions by 2030. In waste management, it proposes mitigating measures to integrate solid waste and wastewater and reduce 497 GgCO₂e of GHG emissions. The Gambia's goal is to reach net-zero emissions by 2050 and use forests as sinks to remove emissions by the second half of the century.

The Gambia's 2050 Climate Vision sets the pathway for it to become, by 2050, a climate-resilient, middle-income country through green economic growth supporting sustainable, low-emissions development. It aims for The Gambia to reach net-zero emissions by 2050. Another priority of the Government, as per the 2050 Climate Vision is to establish a modern, green and efficient transport system for the country's growing young population. For this purpose, it intends to gradually introduce clean and energy-efficient transportation modes, contributing to a GHG emissions reduction of 114.5 GgCO₂e in 2025 and 193.3 GgCO₂e in 2030.

One of The Gambia's key priorities is managing and protecting the country's forest cover, waters, wildlife, wetlands and biodiversity through a robust national forest monitoring system. To this end, the Government strives to maintain 30% of the total land area under forest cover and implement afforestation actions that will contribute to reductions of 275.4 GgCO₂e in 2025 and 330.5 GgCO₂e in 2030. In line with this commitment, in 2018, the Government launched the Ecosystem-Based Adaptation project funded by the Green Climate Fund to restore 10,000 hectares of forests, mangroves, and savannas. It will also replace flooded rice paddies with dry upland rice fields and promote efficient cookstoves to avoid excessive exploitation of forest resources, conditional to international support. On 17 February 2022, the Ministry of Finance and Economic Affairs (MoFEA) and the Agence Française de Développement (AFD) signed two financing agreements for climate change mitigation and adaptation. Under these agreements, the AFD has offered a grant of EUR 6.9 million for the project Resilience Gambia that will be implemented through the MECCNAR. The project aims to make coastal communities and natural ecosystems

resilient to climate change by adopting strategic and technical approaches to large-scale mangrove restoration.

The Government recognises the impact of climate change on women, particularly those engaged in agriculture, which is one of the largest contributors to emissions in the country. As a result, in 2013, it launched the ECOW-GEN programme to mainstream gender in legislative drafting and climate resilience projects and programmes. ECOW-GEN aims to introduce gender-specific policies and incentive instruments and create a critical mass of gender-aware policy-makers and technicians. In the energy sector, the Ministry of Petroleum and Energy (MoPE) has established a six-member Gender Focal Unit (GFU) to implement the National Action Plan 2021-2025 on Gender Mainstreaming in Energy Access. The GFU's main task is to ensure that gender is accounted for in energy policies, programmes, and budget streams. In 2022, the GFU started collecting gender-disaggregated data on energy use, production, and provision of energy services at regional and local levels. It is also preparing a 'gender assessment' checklist that can be utilised by other MDAs and an annual action plan that reflects its activities.

AREAS FOR IMPROVEMENT

The Strategic Roadmap 2021-2040 – Universal Access by 2025 and Transforming The Gambia Electricity Sub-sector (Strategic Electricity Roadmap) relies primarily on electricity imports from Senegal or Cote d'Ivoire to meet The Gambia's universal energy access target by 2025. While this approach may be a short-term solution, increasing imports will create energy security risks in the longer term. Therefore, the Government should reconsider the modest share of solar photovoltaic (70 MW) and battery energy storage systems (total installed capacity between 8 MW and 108 MW in different scenarios) in the Strategic Electricity Roadmap and set long-term measures to incentivise investment in on-grid and off-grid renewable electricity. This will allow it to reduce import dependency, increase domestic power generation, and meet its decarbonisation goals.

The Gambia's agricultural sector is its major growth driver, constituting almost 24% of its GDP and employing most of its labour force. It is recommended that the MoPE, MECCNAR and the Ministry of Agriculture jointly prepare an agricultural adaptation strategy to climate change and an action plan to implement the strategy's objectives on agriculture and sustainable land use. The strategy should propose concrete measures in this respect, such as using drought-resistant crops and their diversification, establishing sustainable land conversion processes, improving irrigation efficiency, developing cropping patterns, and adapting to convenient calendars for planting crops.

Foresight of policy and regulatory change

QUICK FACTS

- I In November 2021, the Government of The Gambia released the Strategic Electricity Roadmap 2021-2040.
- I The MoFEA is in the process of revising the country's National Development Plan (NDP) with a vision for 2050.

STRENGTHS

The Strategic Electricity Roadmap communicates the sector's long-term vision to citizens, existing and potential investors, and development partners. According to it, the Government aims to ensure universal energy access by 2025. It also targets the construction of the 225 kV Eastern Backbone for Basse and the strengthening of the Barra grid by 2025. By 2040, all sub-stations at Bansang and Basse will be built. Moreover, it plans to reduce network losses from 22% in 2020 to 15% by 2040. In terms of domestic power generation, it plans to integrate at least 60 MW from solar photovoltaic into the grid by 2025 and 250 MW by 2040. The Strategic Electricity Roadmap also foresees an interconnection with Senegal to increase the transmission purchase capacities for its domestic market and develop a robust inter-transmission grid.

The Renewable Energy Act 2013 sets a target of 30% renewable energy in the national power mix by 2030. To reach this target, the Government has taken some policy and programmatic initiatives. For instance, under the National Renewable Energy Action Plan for The Gambia, the Government plans to install 50 MW of solar and 20 MW of wind power by 2030 compared to 17 MW of solar and 7 MW of wind in 2020. Moreover, it will equip 50% of public buildings with solar thermal systems by 2030, compared to 25% in the baseline scenario of 2020. With financing from the World Bank, the Government is constructing the country's first large-scale photovoltaic plant of 20 MW and is restoring and modernising 400 km of distribution lines. Another EU-funded solar project in the pipeline will make The Gambia the first African country to provide renewable energy electrification for its 1,000 public schools and 100 health facilities.

In energy efficiency, the Government aims to reduce transmission and distribution losses to 10% compared to 2020 and achieve 15% energy savings in the building sector by 2030, compared to 5% in 2020. To meet these targets, the Government plans to establish a system for monitoring, verifying and evaluating the minimum energy performance standards of the lighting systems in public buildings and infrastructure. It will also introduce mandatory labelling for electrical appliances such as refrigerators and air conditioning units and set quality standards for solar water heaters. These initiatives will be supported through programmes to change consumption patterns and promote energy savings.

The MoPE has developed the Domestic Cooking Energy Action Plan (2015-2030), which aligns with the ECOWGEN programme to promote alternative energy for domestic consumption in the Sahel region. In this regard, a nationwide sensitisation campaign has been carried out to distribute improved cookstoves and clean

cooking fuels. Alternative fuels are being provided to women to transition away from firewood. Other ongoing initiatives in this respect include the solar home system project in Balanghar Chamen (running since 2021) and Budukin (2022). Furthermore, two solar water pumps in the Julangel community banana plantation and the Wassadou community garden are being developed to improve the water supply in the community gardens.

In 2021 and 2022, MDAs made information on their financial and operational performance available to the public. In March 2021, the MoFEA published the final Mid-Term Evaluation Report of the NDP 2018-2021. According to this Report, 60% of the NDP's outcomes have been achieved or will be achieved by December 2021. In September 2021, it published the country's Medium-Term Debt Management Strategy 2021-2025 and the 2021 Debt Sustainability Analysis. The MoFEA has also published, for 2021 and 2022, monthly national budget implementation reports and quarterly progress reports on the implementation of The Gambia Public Finance Management Strategy 2021-2025. In 2021, the National Audit Office published an audit performance report on the National Water and Electricity Company (NAWEC) for electricity distribution in the Greater Banjul Area. This report examines the state of investment planning, power generation, transmission and distribution, auction sales, quality control, and financial arrears.

AREAS FOR IMPROVEMENT

The National Energy Policy 2015-2020 (NEP) should be updated in line with the recent developments and needs of the country. The updated NEP must be aligned with the 2050 Climate Vision, the Renewable Energy Act 2013, the country's second NDC, the Strategic Electricity Roadmap 2021-2040, and the upcoming NDP 2050. Moreover, the MoPE should provide detailed information on the achieved targets, those it could not achieve, and the reasons for their non-fulfilment. The updated NEP should account for the lapses and integrate measures to ensure that all the unachieved targets are met within defined timeframes.

The Government must periodically monitor and evaluate the achievement of its policy targets and publish the results. It should conduct an ex-post impact assessment of the NEP 2015-2020 and a mid-term evaluation of the National Renewable Energy Action Plan (set in 2015) to align the targets for renewable electricity, clean cooking, solar water heaters, and biofuels with the second NDC and 2050 Climate Vision. Finally, it should make the performance evaluation and budget execution reports of MDAs publicly available to improve accountability.

Management of decision-making processes

QUICK FACTS

The MoPE is responsible for implementing government policies on electricity supply and distribution, water supply and distribution, petroleum products, and renewable energy.

In July 2021, the National Assembly enacted the Access to Information Act.

The Gambia's National Assembly approved the Anti-corruption Act on 3 February 2022.

STRENGTHS

The MoFEA has started developing The Gambia's new NDP extending to 2050. The new NDP will establish a strategic framework for achieving the country's mid-term policy priorities and mainstream the 2030 Sustainable Development Agenda and the Agenda 2063. The MoFEA is preparing the NDP in close coordination with the Department of Strategy, Policy and Delivery and The Gambia Bureau of Statistics. Efforts are also being made to involve other stakeholders, including MDAs, the private sector, women, civil society organisations, trade unions, and development partners.

The Strategic Electricity Roadmap outlines a policy coordination mechanism. It establishes a high-level Task Force chaired by the MoPE for its implementation, which was inaugurated on 6 July 2022. The Task Force comprises the Office of the President, the MoFEA, the Ministry of Justice, the Ministry of Local Government and Lands, NAWEC, the Public Utilities Regulatory Agency (PURA), the National Environment Agency (NEA) and The Gambia Investment and Export Promotion Agency (GIEPA). The Department of Energy of MoPE, with a dedicated Roadmap Implementation Coordinator, will support the Task Force in its activities, including organising meetings, taking minutes, providing briefing notes, and following up on its decisions.

In September 2021, the Government launched the National Platform for Energy Nexus that will support over 20 projects to integrate renewable energy and energy efficiency technologies in peer sectors. The Platform will help project developers avail incentives for targeted renewable energy and energy efficiency solutions. Gender mainstreaming will be ensured through at least 40% women representation within the Platform.

MDAs are taking steps to enhance their human and institutional capacities. In 2020, PURA organised training programmes for its staff, including the Internal Audit Unit, the Directorate of Economic Regulation, the Directorate of Consumer Affairs, and the Directorate of Human Resources and Corporate Affairs. Similarly, from 27 to 30 July 2021, the MoFEA organised a training workshop for the Directorate of Public Procurement officials. Its objective was to identify the gaps in implementing the Public Procurement Authority Act 2014 (GPPA Act 2014) and the GPPA Regulations 2019 by the invited officials in their capacity as public servants.

The new Access to Information Act 2021 offers greater transparency and accountability in public administration. It facilitates and empowers the media, journalists, and civil society in accessing government data. The Act establishes an Information Commission to promote, monitor, and protect the right of access to information.

MDAs regularly engage with stakeholders on policy and legislative initiatives to encourage participatory decision-making. For instance, on 24 June 2021, the MoFEA invited MDAs to a consultative workshop on the State budget's preparation for 2022. It also released the Public Financial Management (PFM) Annual Progress Report for 2021, describing the progress made in strengthening PFM reforms. To ensure an open and transparent policy on budgetary expenditures, the Government published the Budget Appropriation Report for 2021, which contains financial information on appropriation for 50 State institutions, including the ones regulating the energy sector, and their revenues, grants, financing, expenditures, lending, and loans.

In February 2022, the National Assembly approved the Anti-Corruption Bill 2022. The Bill aims to prevent and curb corrupt practices by fining and convicting public officials who benefit financially from such practices. It also foresees the establishment of The Gambia Anti-Corruption Commission, whose members will be appointed by the President in consultation with the Public Service Commission of The Gambia. Some progress was also made in enhancing transparency in the public procurement processes. Since 2020, the MoFEA, in cooperation with the Accountant General's Department (AGD), has ensured that all government payments to suppliers, contractors, and civil servants are cashless. This transition aims to mitigate the risk associated with cash handling and reduce transactional costs for the Government. Moreover, in 2022, the MoFEA published online the decisions of the recently established Public Procurements Complaints Review Board on alleged infringement of the GPPA Act 2014 and the GPPA Regulations 2019.

AREAS FOR IMPROVEMENT

The Government should adopt the Anti-Corruption Bill as soon as possible and set up the independent Anti-Corruption Commission that is empowered and equipped with sufficient financial and human resources to investigate and prosecute corruption cases and confiscate public officials' assets if needed.

The Gambia must establish a legislative framework to collect and monitor beneficial ownership information of companies operating in the country. Such legislation will prevent beneficiaries from remaining anonymous and concealing their financial activity to evade taxes. Moreover, it will help the State authorities to discover and deter financial and economic crimes, terrorism financing, and money laundering.

Rule of law

QUICK FACTS

- | The Gambia signed the International Energy Charter political declaration on 11 August 2017.
- | Arbitration in The Gambia is governed by the Alternative Dispute Resolution Act 2005.
- | Intellectual property rights are guaranteed by the Industrial Property Act 2007.

STRENGTHS

The Government is making efforts to settle disputes with foreign investors amicably and, in turn, give an impetus to resource exploration. In September 2020, it reached an agreement with the Norwegian-based oil and gas company, PetroNor, to settle its arbitration related to the A1 and A4 offshore licences. Per the settlement agreement, PetroNor has regained the A4 licence and signed a 30-year lease under new terms. At the same time, it has relinquished its claim to the A1 block. Notably, national laws do not oblige investors to exhaust local judicial remedies before recourse to international arbitration. Similarly, IIAs do not impose such conditions on investors.

The Government is working with donor agencies and specialised institutions to improve the judiciary's performance. In 2021, the American Bar Association and the Freedom House started implementing the Promoting Rights and Justice in The Gambia Project. The USD 7.9 million project is funded by United States Agency for International Development (USAID) and will run for five years. Its objective is to provide technical support to the justice sector reform process and the modernisation of the State institutions in charge of justice policies and their implementation. In addition, support will be extended to civil society organisations and media to equip them with the know-how to initiate legal reform proposals.

The Constitution guarantees private property rights. Expropriation for reasons of public interest is only possible with prompt payment of adequate compensation determined by the domestic courts or another independent authority. In March 2021, the MoPE published Resettlement Action Plans (RAP) for two sub-projects under The Gambia Electricity Restoration and Modernization Project (GERMP). One sub-project is to modernise the transmission and distribution infrastructure of the Greater Banjul Area, and the other is for the Laminkoto-Diabugu Electricity Transmission Corridor. The RAPs aim to minimise the adverse economic, social, and environmental impact of involuntary resettlement. They require that all persons affected by the project activities receive compensation calculated from a specific date. The RAPs establish the eligibility for compensation and the procedure for valuation and payment of compensation for losses and resettlement measures. Each RAP also sets up a project-level grievance mechanism to address complaints and concerns raised during the RAP's implementation.

In the international context, The Gambia has signed 16 BITs, of which six are in force. These IIAs protect the Contracting Parties and investors by granting them access to alternative dispute resolution mechanisms and recourse to international arbitration. Moreover, The Gambia is a party to the Cotonou Agreement 2000, which encourages

trade and investment partnerships among the EU and African, Caribbean and Pacific countries and contains investor-State dispute provisions. Some IIAs signed by The Gambia explicitly mention the energy sector. For instance, the BIT signed with Türkiye in 2013 refers to investment protection in exploring and exploiting natural resources in the energy sector.

The IIAs signed by The Gambia guarantee the right of investors to receive compensation in the event of expropriation. According to its BIT with Morocco, the compensation shall amount to the fair market value of the expropriated investment immediately before expropriation has taken place or before impending expropriation become public knowledge, whichever is earlier. The compensation must be paid without undue delay. In case of delay, the investor is entitled to interest at a normal commercial rate calculated until the payment date.

Most BITs, such as the one with Türkiye, consider intellectual property an 'investment' and protect such rights against expropriation and through the unqualified operation of Most-Favoured-Nation and National Treatment obligations.

AREAS FOR IMPROVEMENT

To prevent and manage investor grievances – and avoid costly judicial or arbitration proceedings – the Government should establish an investment ombudsperson or similar institution to handle the complaints of foreign investors against public authorities during the licensing procedures. It can utilise Nigeria's example to modernise its six BITs and structure the new ones to include provisions on dispute mitigation, promoting sustainable investment and environmental protection considerations. It could also draw inspiration from the Energy Charter Model Instrument on Management of Investment Disputes which aims to assist States in handling investment disputes while keeping in mind their particular needs and circumstances.

The Government and the National Assembly should take coordinated action to update the Alternative Dispute Resolution Act of The Gambia 2005 to allow recourse to mediation in investor-State conflicts.

In addition to project-specific tools, such as RAPs, acts of expropriation should be underpinned by law and conducted following due process. Therefore, the Government could enact a law on the expropriation of private property that includes detailed provisions on determining compensation and establishes a timeframe for its payment. The law may also define 'public interest' to ensure the legitimacy of expropriation decisions.

Regulatory environment and investment conditions

QUICK FACTS

- | In 2021, the National Assembly of The Gambia enacted the Petroleum Commission Act (PCA).
- | PURA regulates, among other sectors, the electricity and downstream petroleum sub-sectors.
- | GIEPA is responsible for facilitating private investments in the country.

STRENGTHS

The PCA aims to ensure independent regulation of the oil and gas sector. To this end, it establishes the Petroleum Commission as a body corporate with perpetual succession and a common seal. The Commission's non-ex officio board members are elected for three years, and their tenure is renewable only once. The Commission's funds are composed of monies allocated by the National Assembly, payment of signature bonuses and surface rentals from licences, monies accrued from its activities, and data sale and licensing. The Commission must prepare an annual statement of its accounts and submit it to the Auditor General of The Gambia. Moreover, within three months of the end of each financial year, the Commission must submit an annual report on its business and operations during the preceding year to the National Assembly.

Positive developments were observed in the electricity sector's regulation. PURA is revising the electricity tariff methodology to ensure maximum cost recovery for NAWEC and improve its bankability. In 2021, to inform the public of the electricity sector's performance, PURA published energy statistics on customer numbers, sales of MWh, revenue collection, system losses, power and energy demand, and energy demand growth rate. Moreover, given the substantial increase in international fuel prices and supply chain disruptions, the MoPE is regularly monitoring fluctuations in global prices and trying to introduce mechanisms that ensure long-term price stability while giving citizens access to cost-effective fuel. It also periodically updates the public on the retail pump fuel prices and any revisions.

According to the MoPE, FDI increased from USD 20 million in the late 1990s to USD 80 million in 2006. In 2016, the stock of FDI was 33% of GDP, above ECOWAS's average of 29%. Compared to 2019, NAWEC's revenue increased by 6% (reaching 2.86 billion Gambian dalasi (GMD)) in 2020 despite reduced consumption from critical consumers, such as hotels and banking institutions, due to the COVID-19 pandemic.

The Gambia is looking to attract funding from international donors and private investors in its power sector. Particular attention is being given to scaling up renewable electricity projects. In November 2021, the Government signed a USD 25 million investment programme with the Millennium Challenge Corporation as a grant donor. The grant, which focuses exclusively on deploying renewable electricity, will support The Gambia's efforts to achieve the universal energy access targets by 2025 and mitigate GHG emissions in the energy sector.

In 2022, GIEPA published the Solar Energy in The Gambia report to provide investors with information on investment opportunities in solar installation technologies,

the governmental and legal support offered, and the availability of a skilled and cost-effective workforce. The Government has also established The Gambia Renewable Energy Centre to increase the share of renewables in electricity generation. As envisaged in the Renewable Energy Law, investments in renewables are backed by a feed-in tariff scheme and are integrated on-grid and coupled with a net-metering option.

The OMVG project, which is key to The Gambia's integration into the West Africa Power Pool, is progressing at an acceptable rate and will be critical for ensuring universal energy access by 2025. In September 2021, the MoPE announced the launch of the Transmission and Distribution Modernisation Project of the Greater Banjul Area (TDMP) as part of the USD 164 million multi-donor-funded GERMP. The TDMP involves designing and installing a 225 kV high-voltage 17 km transmission line from Brikama to Jabang, accompanied by a 33 kV substation in Kotu. It is financially supported by the World Bank, which will contribute by providing a fund of GMD 131 million to compensate the affected property and land owners where the infrastructure is being built. This project also receives support from the European Investment Bank and the EU.

Some progress has also been made in attracting investments in upstream oil and gas activities. In November 2021, the MoPE published the Block A1 Opportunity Report to inform bidders of the licensing round for the newly available A1 block and assist them in evaluating the opportunity of exploring, developing, and producing petroleum in this block. In February 2022, the MoPE launched the bid for the Licensing Round of Block A1. The Request for Proposal invited potential bidders to present their offers until 6 June 2022 through the Government's e-bid platform. In 2022, the MoPE also developed the Model Petroleum, Exploration, Development and Production License, which will allocate risks and benefits and define the rights of ownership relating to the exploration, development, production, and disposal of petroleum in the A1 and other blocks in The Gambia.

AREAS FOR IMPROVEMENT

Although the purpose of the single-buyer model is to facilitate private investment by ensuring financial guarantees by the off-taker, the approach may prove counterintuitive in The Gambia's case as the off-taker – NAWEC – may be unable to guarantee the purchase of electricity. Therefore, the Government should liberalise the wholesale electricity market so investors can participate in it without needing government-backed guarantees, and at the same time, NAWEC can also earn more from cost-reflective electricity prices.

INDICATOR 1

Improvements proposed in 2022

Increase the share of solar photovoltaic and battery storage energy systems in the country's long-term generation mix as set out in the Strategic Electricity Roadmap 2021-2040; set long-term measures to incentivise investment in on-grid and off-grid renewable electricity.

Improvement suggested in 2022. Status will be updated in 2023.

Prepare an agricultural adaptation strategy to climate change and an action plan to implement climate-smart agricultural practices and ensure sustainable land use.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2018

Update the NEP 2015-2020 in line with the recent developments and needs of the country.

Work ongoing. The MoPE recently published its draft Strategic Plan 2021-2025 (Strategic Plan). One of the targets for 2021 under the Strategic Plan is adopting an updated national energy policy.

Create ex-ante and ex-post policy evaluation and review mechanisms.

Work ongoing. The MoPE's Strategic Plan contains a results-based monitoring and evaluation framework to track its implementation.

Improvements proposed in 2021

Integrate ultimate outcomes and a long-term vision (until 2050) in the upcoming NEP; update the national renewable energy and energy efficiency action plans.

Work ongoing. In 2021, the Government adopted the Strategic Electricity Roadmap 2021-2040 and The Gambia 2050 Climate Vision. It is currently revising the country's NDP with a vision for 2050.

Grant public access to the performance evaluation reports and budget execution reports of MDAs.

Work ongoing. In 2021, the MoFEA published the final Mid-Term Evaluation Report of the NDP 2018-2021, the Medium-Term Debt Management Strategy 2021-2025 and the 2021 Debt Sustainability Analysis. The National Audit Office published an audit performance report on the NAWEC for electricity distribution in the Greater Banjul Area.

INDICATOR 3

Improvements proposed in 2018

Adopt a law facilitating public access to information held by State authorities.

Fully implemented. In July 2021, the National Assembly enacted the Access to Information Act.

Establish the Competitiveness Improvement Forum as required in the Gambia Investment and Export Promotion Agency Act of 2015.

Pending

Improvements proposed in 2020

Give public access to the extractive industry contracts and consider joining the EITI.

Work ongoing. The MoPE's Strategic Plan aims to ensure the rate of adherence to the standards of EITI increases from 0% in 2020 (baseline) to 50% by 2021, 80% by 2023 and 100% by 2025.

Improvements proposed in 2021

Develop institutional tools to coordinate fuelwood monitoring and regulation decisions between the MoPE and the MECCNAR.

Pending

Adopt the Anti-Corruption Bill and set up the independent Anti-Corruption Commission with sufficient financial and human resources.

Work ongoing. The Gambia's National Assembly approved the Anti-corruption Act on 3 February 2022.

Improvements proposed in 2022

Establish a beneficial ownership register for companies operating in The Gambia.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2018

Set definitive timelines for domestic courts to deliver judgments in commercial disputes.

Work ongoing. Constitutional, institutional, and legal reforms are underway in line with the NDP 2018-2021.

Adopt dispute prevention policies to assist investors in addressing potential grievances against public authorities.

Pending

Enact a law protecting investors against the expropriation of property defining the conditions of 'public interest' that can prompt an act of expropriation, the procedure to determine the compensation, and the timeframe for its payment.

Work ongoing. In March 2021, the MoPE published RAPs for two sub-projects under the GERMP. Each RAP also sets up a project-level grievance mechanism to address complaints and concerns raised during the RAP's implementation.

INDICATOR 5

Improvements proposed in 2018

Increase PURA's institutional capacity and streamline its operations so that it may effectively perform its functions.

Pending

Ease access to land and provide certainty on land titles by creating registry mechanisms and comprehensive records.

Pending

Limit the Government's right to own some, or the majority, of shares in strategic industries, such as mining, and petroleum exploration and refining activities.

Pending

Improvements proposed in 2020

Liberalise the energy market and limit the State's involvement in NAWEC.

Pending

Improvements proposed in 2021

Establish without delay the legal and regulatory framework for private investment in transmission and distribution.

Pending



Turkmenistan

Population ¹	6,117,933
Area (km ²) ¹	488,100
GDP per capita (USD) ¹	N/A
TES/GDP (GJ/thousand 2015) ²	26.00
Net Energy Imports (TJ) ²	-2,185.93
RE share in Final Energy Consumption (%) ²	0.1
Total CO ₂ emissions (MtCO ₂) ²	69.21

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
N/A	N/A	N/A

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.

Turkmenistan’s overall risk level against the assessed areas is **moderate**.

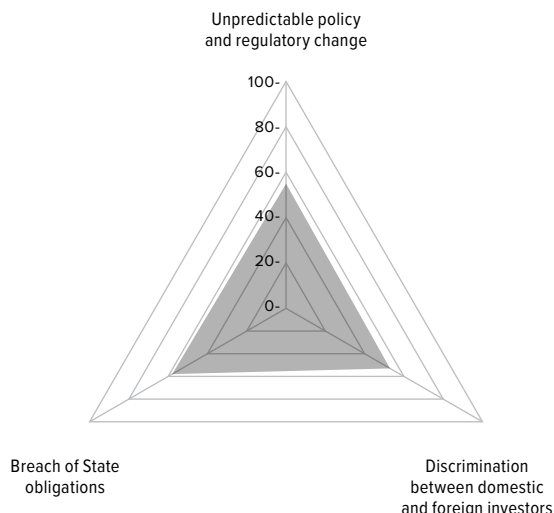
Among the three EIRA risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *unpredictable policy and regulatory change* and *breach of State obligations*.

Turkmenistan’s performance is moderate on all five EIRA indicators. The highest-scoring indicator is *management of decision-making processes* at 57. The country has a score of 45 on the indicator *rule of law* and 43 on *foresight of policy and regulatory change*. The indicators *framework for a sustainable energy system* and *regulatory environment and investment conditions* both score 41.

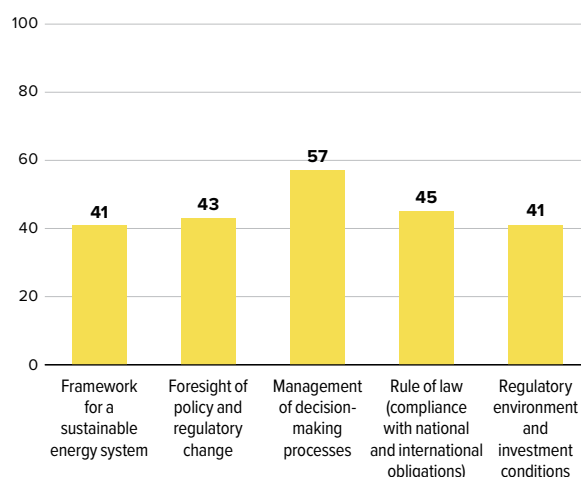
On a more detailed level, Turkmenistan’s overall sub-indicator performance is moderate. The highest-scoring sub-indicator is *institutional governance* at 67, followed by *respect for property rights* at 56, and *communication of vision and policies* at 55. Turkmenistan’s score on *policy planning on clean energy transition* stands at 50, *transparency and anti-corruption measures* at 47, *restrictions on FDI* at 44, *energy resilience* at 43 and *regulatory independence* at 42. The lowest-scoring sub-indicators are *environmental protection, human rights and gender* at 39, *electricity industry market structure and competition* at 36, *management and settlement of investor-State disputes* at 34, *robustness of policy goals and commitments* at 32 and *enabling measures to support clean energy transition* at 30.

Turkmenistan must reduce legal and regulatory risks to energy investments by increasing the robustness of policy goals and commitments and implementing measures to support the clean energy transition.

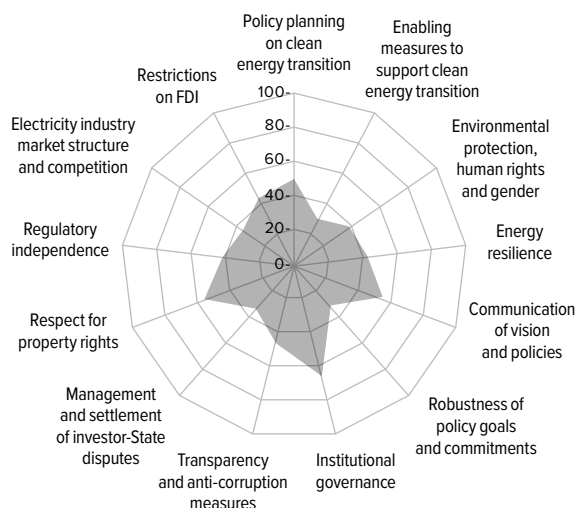
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

Turkmenistan ratified the Paris Agreement and submitted its NDC in October 2016.

In 2021, the Government adopted the National Strategy for the Development of Renewable Energy in Turkmenistan until 2030 (NSDRE 2030) and the Law on Renewable Energy Sources.

The National Strategy of Climate Change (NSCC), last amended in 2019, guides the national policy on climate change.

STRENGTHS

Turkmenistan's first NDC includes GHG inventory results in the energy, industrial processes, agriculture and waste sectors. It envisages a reduction in energy and carbon intensity as well as in the intensity of GHG emissions, taking 2020 as the baseline. More specifically, the per capita emissions are expected to decrease from 22.8 tCO₂eq/cap in 2015 to 19 tCO₂eq/cap by 2030, while the country's share of global emissions will drop from 0.3% to 0.2% within the same timeframe.

On 16 May 2022, the President of Turkmenistan approved by Decree the updated NDC, which sets ambitious goals to reduce GHG emissions. The updated NDC, developed in close collaboration with the United Nations Development Programme (UNDP), contains a plan to prevent climate change in the national context. It builds on the State Program for Energy Saving for 2018-2024, the NSDRE 2030 and the NSCC. The NSCC aims to ensure the country's sustainable development through innovative technologies and scientific progress. Priority sectors for climate change adaptation efforts include public health, agriculture and water management, the Caspian coastal zone, and the natural ecosystems. Measures to limit GHG emissions are being adopted in priority areas such as energy efficiency and resource savings, alternative energy resources, and energy security.

In the transport sector, the NSCC, the NSDRE 2030 and the Law on the Protection of Atmospheric Air of 2016 outline measures to minimise adverse impacts on air quality. The policies prioritise the development of public transport, deployment of electric vehicles, and transition to cleaner and more economical fuels like compressed natural gas or liquefied petroleum gas.

The State Programme for Energy Saving for 2018-2024 aims to promote the rational use of the country's natural resources, increase the national economy's efficiency and competitiveness, and ensure favourable living conditions. It introduces measures for energy-efficient lighting systems in buildings and streets, efficiency in urban heating systems, installation of modern electricity, heat, gas and water meters in buildings, and preparing a national action plan for the rational use of energy resources in the housing stock. Within the framework of the UNDP and the Ministry of Agriculture and Environmental Protection's joint project, Sustainable Cities in Turkmenistan: Integrated Green Urban Development in Ashgabat and Awaza, energy-efficient public lighting and sustainable urban transport solutions have been implemented in Ashgabat. Practices to reduce energy consumption, water use, and waste have been adopted by hotels. At the same time, managerial and technical capacity training of planners, officials, and facility managers is being conducted in Awaza.

The National Action Plan for Gender Equality (NAPGE) for 2021-2025, adopted in 2021, identifies actions to achieve gender equality at national and local levels. It builds on the Concluding Observations of the UN Committee on the Elimination of Discrimination Against Women, the assessment results of the first NAPGE for 2016-2020, and relevant SDGs linked to the Government's gender equality commitment. The strategic areas of the new NAPGE include enhancement of the relevant legislation, fostering equal access to education, and economic empowerment of women and girls.

The Government is taking measures to ensure its economic development in an environmentally sustainable manner. Energy projects undergo an environmental impact assessment (EIA) per the Law on Ecological Expertise (2014) and the Law on Nature Protection (amended in 2017). An EIA must meet the technical standards stipulated in the GOST TDS-579-2001 'Assessment of the environmental impact of planned economic and other activities in Turkmenistan' and the 'Regulation on the procedure for conducting the State Environmental Expertise' No. 2864 of 1996.

The National Forestry Programme of Turkmenistan (2021-2025) and its action plan outline actions on environmental protection, afforestation and reforestation, and increasing the resilience of forestry to climate change. Moreover, in 2021, Turkmenistan published the Action Plan on Preparation for Developing and Implementing the National System of Strategic Environmental Assessment.

The Government is exploring options for transitioning to a circular economy. Currently, the European Bank for Reconstruction and Development (EBRD) technical cooperation project, Capacity Building in Turkmenistan: Circular Economy and Waste Management, aims to build the capacity of State and municipal authorities, industrial organisations and companies responsible for controlling waste management, as well as enterprises involved in the collection, transportation, processing and disposal of waste. It also envisages the introduction of modern technologies and waste management approaches aligned with the EU's environmental standards.

AREAS FOR IMPROVEMENT

It is commendable that the Government has approved the updated NDC. As a next step, it should submit the updated NDC to the UNFCCC Secretariat along with the country's LT-LEDS which must contain absolute targets for emissions reduction. The Government should also set concrete measures to scale up domestic renewable electricity and energy efficiency on the supply and demand side.

Foresight of policy and regulatory change

QUICK FACTS

The National Program for the Social and Economic Development of Turkmenistan for the period 2011-2030 sets the country's macroeconomic development strategy. An updated National Programme of Social and Economic Development of Turkmenistan in 2022-2052 (NPSED) was adopted in February 2022.

On 4 December 2020, the Programme for the Development of Energy Diplomacy of Turkmenistan for 2021-2025 was approved by Presidential Decree No. 2007.

STRENGTHS

According to the Turkmenistan Oil and Gas Industry Development Programme Until 2030 (OaGIDP 2030), the country's main energy priorities are developing production capacities, diversifying and re-equipping production facilities, and attracting large-scale investments.

Ongoing energy infrastructure projects, mainly in pipelines and cross-border electricity transmission, will provide electricity to local consumers and allow the country to better access export markets. To this end, the Concept of Electricity Sector Development of Turkmenistan for 2013-2020 envisages high-voltage electricity transmission connections unifying the Turkmen electricity grid and the construction of high-voltage connections with Iran (MarySarakhs-Meshkhed, Balkanabat-Gonbad). The completion of Turkmenistan's ring energy system in 2023 is expected to boost electricity production, increase energy savings and harness the industry's export potential, allowing for the exchange of electricity surplus between the 'velayats' (regions) and Ashgabat.

In 2020, Turkmenistan increased the electricity supply to Uzbekistan through the 500 kV Serdar-Karakul power transmission line. Electricity trading with the Kyrgyz Republic began in 2021 at 500 million kWh. In October 2021, the countries extended the electricity supply agreement for another year. In 2022, the volume of exported electricity is expected to reach 1.5 billion kWh. Another high-impact project is the Turkmenistan-Afghanistan-Pakistan (TAP) power transmission line linking Turkmenistan to the Afghani and Pakistani grids, connecting 4,000 MW of power to regional export markets.

The State Programme on the integrated development of the chemical system and technologies 2021-2025 introduces modern and environmentally-friendly gas compressor units in industrial facilities, including in the petrochemical, gas chemical, and chemical industries. Projects operated by foreign companies, such as the Seydi Oil Refinery, are already integrating resource-saving green technologies into the total cost of risk.

Under the NSDRE and the Law on Renewable Energy Sources, the country aims to diversify fuel and energy resources and provide remote areas with affordable and clean energy. The Government has committed to promoting the construction of mini- and micro-solar and wind installations in households and small businesses by guaranteeing their connection to the State grid. It is also drafting bylaws to simplify the process of obtaining construction permits for such installations, expedite land allocation for power transmission lines, and determine tax incentives and subsidies for purchasing electricity from renewable energy facilities.

Turkmenistan is trying to improve public financial management and accountability practices. The Ministry of Finance and Economy of Turkmenistan (MFET) guides State agencies in formulating, implementing and overseeing the expenditures covered by the State budget and from extra-budgetary funds. The Budget Code of Turkmenistan, amended in 2022, mandates the systematic collection of budgetary information to monitor of its execution, make forecasts, and identify loopholes. The MFET carries out the budget monitoring in cooperation with local financial authorities and other State authorities. Based on the results of budget monitoring, the MFET and the local authorities send quarterly information to ministries and departments. The evaluation reports analyse the progress made towards the medium-term plans of State bodies, assess compliance with the strategic directions in the medium-term plan, and make recommendations to improve the activities of the State bodies and the administration of budget programmes. Notably, in March 2021, the President approved Decree No. 2185, authorising the Supreme Control Chamber to control the implementation of State and national programmes and the execution of capital investment plans.

The Government has gradually improved the quality of information provided by the State Statistics Committee of Turkmenistan (Turkmenstat). Turkmenstat publishes annual data on energy and fuel balance, power production and consumption, and electricity export volumes. It prepares reports on the socio-economic development of the country and the implementation of State programmes based on data collected from the relevant State agencies.

AREAS FOR IMPROVEMENT

Newly adopted strategic documents such as the NPSED 2022-2052, the NSDRE 2030 and the NSCC highlight the need to reduce reliance on natural gas and increase renewable energy production. At the same time, the OaGIDP 2030 aims to boost gas production up to 250 billion m³ and oil production to 110 million tonnes by 2030. To ensure consistency in policy planning, the Government should set quantitative targets and step-by-step approaches to increase the utilisation of small and medium-sized renewable electricity systems in remote areas by 2030. It must also develop a long-term framework for deploying renewables based on thorough production cost modelling studies.

The Government should develop a National Energy Efficiency Action Plan until 2030, setting actionable goals and identifying the State agencies responsible for their implementation.

Management of decision-making processes

QUICK FACTS

- | Turkmenistan has a presidential system of Government. The President is the Head of the Government.
- | The Ministry of Energy of Turkmenistan (MET) defines and implements electric energy policies and programmes.
- | The MFET is responsible for developing and implementing investment policies.

STRENGTHS

Turkmenistan is undertaking political reforms to improve the functioning of the Government's legislative and executive branches. On 29 September 2020, the President of Turkmenistan signed the Constitutional amendments that entered into force on 1 January 2021. The new bicameral Parliament (Milli Geňeş), has been established through these amendments.

The Sustainable Development Cooperation Framework 2021-2025 was launched in 2020 to guide the partnership between the Government of Turkmenistan and the United Nations agencies. It reflects the country's commitment to achieving the national priorities framed by the United Nations SDGs. The Cooperation Framework spans policy areas such as good governance, strategic planning and budgeting and producing high-quality statistics on the public administration's performance. It also focuses on sustainable economic diversification and environmental management. The desired outcomes include people-centred governance premised on the rule of law and human rights, sustainable economic growth, and inclusive and affordable health, education, and social protection systems.

The Government has set up Outcome Results Groups (ORG) to coordinate the delivery and monitoring of the Cooperation Framework, including through joint work plans. The ORGs are co-chaired by the representatives of the lead ministries at the Head of Department level and the Head of a United Nations agency to effectively implement and monitor the joint work plans. Moreover, in March 2022, the UNDP, with support from the United Nations Environment Programme (UNEP), organised a webinar on the preparation status of the Fourth National Communication on Climate Change and the First Biennial Update Report of Turkmenistan under the UNFCCC. The meeting's purpose was also to inform the relevant stakeholders about the updated NDC.

The Law on Information and its Protection of 2014 establishes citizens' right to obtain non-confidential information from State authorities. It also regulates the process of collecting, storing and distributing information. In December 2021, the Milli Geňeş introduced amendments to the Law on Information and its Protection, redefining the term 'information' to include all data in paper and electronic form.

The above-mentioned legislative initiatives have already resulted in the increased dissemination of information and the broader participation of stakeholders in public dialogue. For instance, the MFET regularly publishes adopted laws on the annual State budget on its website. On an institutional level, the Government has established the SDG Training and Methodology Centre at the Institute

of International Relations of the Ministry of Foreign Affairs as a forum for learning and increasing awareness of the 2030 Agenda among students, civil servants and the private sector. Additionally, the National SDG Working Group, chaired by the MFET, brings together the representatives of Milli Geňeş, the Ombudsperson, deputy ministers and heads of more than 60 Government institutions and the private sector to align the national and sectoral programmes with the SDG monitoring framework.

The adoption of new digital technologies features among the country's priorities, as evidenced in the Concept for the Development of the Digital Economy in Turkmenistan, developed for the period up to 2025. The overall objective is to ensure efficiency and transparency in State bodies' activities by strengthening their performance discipline and creating new mechanisms for receiving feedback from citizens and business entities. To further this objective, in 2022, the Government approved the Law on E-government, which establishes the Unified Portal of Public Services and the Unified State Register of Electronic Public Services, to streamline the collection and exchange of information among State institutions. The Law also foresees a 'single window' service for interactions between business entities and public authorities on licencing, customs clearance and issuance of permits and certificates.

In 2022, the Government amended the Law on Combatting Corruption to instruct that judicial institutions, prosecutor's offices, ministries and local self-government bodies must carry out anti-corruption expert analysis of draft legal acts. Moreover, the Law on Ethics and Official Conduct of Public Servants has been enacted to foster morality and professionalism in civil servants.

AREAS FOR IMPROVEMENT

Turkmenistan's legislative reforms in public administration signal its intention to achieve efficient, responsive and participatory decision-making. To render these reforms meaningful, the Government should now focus on training civil servants to help them gain skills for evidence-based policy formulation based on effective policy monitoring and evaluation, cross-sector collaboration, and public consultation.

The Government must create a beneficial ownership register to establish a direct link between a company and a specific individual to determine the company's ownership structure. Collecting data on beneficial ownership of companies will help to minimise the risk of money laundering and terrorist financing, as well as improve tax administration of companies' commercial activities.

Rule of law

QUICK FACTS

- | Turkmenistan ratified the ECT on 10 July 1997.
- | The legal system of Turkmenistan is civil law-based, and the laws are hierarchically organised, with the Constitution at the highest level.
- | Turkmenistan's revised Arbitration Procedure Code (APC) was adopted in 2021.
- | Turkmenistan ratified the Convention on the Settlement of Investment Disputes between States and Nationals of Other States in 1992.
- | As a member of the World Intellectual Property Organization (WIPO), the Government has enacted several intellectual property rights-related laws, including laws on copyright, trademarks, and industrial designs.

STRENGTHS

National legislation recognises and promotes arbitration as an effective means for resolving disputes between an investor and the State. The APC allows both nationals as well as foreign natural and juridical persons to bring their claims before the arbitration tribunal of the country. The latter acts as the first-instance venue for settling commercial disputes while the Arbitration Committee of the Supreme Court hears appeals. At the same time, the Arbitration Court of the City of Ashgabat has jurisdiction over pre-contractual and post-contractual corporate disputes.

The International Commercial Arbitration Law (ICA), which came into force in 2016, is greatly influenced by the UNCITRAL Model Law. Hence, it incorporates the kompetenz-kompetenz doctrine in the domestic legal order and grants the parties the right to opt for ad hoc arbitration and select the arbitrators for their disputes. National courts recognise and enforce foreign arbitral awards provided they meet the requirements stipulated in the ICA and the Code of Civil Procedure. On 17 April 2022, the Law on the Accession to the UN Convention on the Recognition and Enforcement of Foreign Arbitral Awards New York Convention (New York Convention) was enacted. This Law is expected to streamline further the process of recognition and enforcement of arbitral awards rendered abroad. International institutions such as the Organisation for Economic Co-operation and Development and the European Commission have been providing the Government with technical support through capacity-building seminars on contract enforcement and dispute resolution to improve the legal environment for business in Central Asia.

The Government is committed to protecting the property rights of foreign investors operating in the country. The Law on Investment Activity (LIA) guarantees equal treatment of all investors. It prohibits discriminatory measures that impede the management of investments, their use, and the conditions and procedure for exporting investment proceeds. Direct expropriation, or measures having an equivalent effect, may be permitted only if based on a legislative act and upon compensation for the damage caused.

Turkmenistan has BITs with 19 countries. Bilateral relations between the EU and Turkmenistan are governed by an

Interim Agreement on trade and trade-related matters, which entered into force in August 2010. The Trade and Investment Framework Agreement, signed in 2004 with the United States, Kazakhstan, Tajikistan, the Kyrgyz Republic, and Uzbekistan, has established a regional forum to discuss ways to improve investment climates and expand trade within Central Asia.

The BITs signed by Turkmenistan protect all forms of investments against expropriation and grant them National Treatment and Most-Favoured-Nation Treatment. For instance, its BITs with Switzerland, the United Arab Emirates, and Türkiye extend the term 'investment' to include intellectual property rights. Some BITs, such as those with Egypt and Türkiye, make reference to business concessions, including those for exploring and exploiting natural resources, in the definition of 'investment'.

Under the BITs mentioned above, the compensation due in case of expropriation shall amount to the genuine value of the investment expropriated immediately before the act of expropriation or before the impending expropriation became public knowledge. The compensation must include interest at a normal commercial rate until the date of payment. Moreover, the compensation must be paid without delay, be effectively realisable, and freely transferable.

AREAS FOR IMPROVEMENT

The Government may consider updating the LIA to include a list of State activities for which compulsory expropriation of private property can occur. In addition, it should outline a time-bound process for paying compensation or identify payment stages to this effect.

The Government has taken positive measures to improve the dispute settlement system, the most recent being the ratification of the New York Convention. Further initiatives may include establishing an ombudsperson to resolve grievances of foreign investors to prevent them from precipitating into investor-State disputes. It may draw inspiration from the Energy Charter Model Instrument on Management of Investment Disputes which aims to assist States in handling investment disputes in keeping with their particular needs.

Regulatory environment and investment conditions

QUICK FACTS

The MET is responsible for regulating the power industry.

The Cabinet of Ministers determines the strategy and conditions for the use of hydrocarbon resources, establishes rules for their protection and may impose restrictions on oil operations to preserve religious, historical and cultural monuments.

The State-owned Turkmengaz is responsible for developing gas fields and engaging in gas production and processing throughout the country. It also transports and exports gas.

The State-owned Turkmenneft is responsible for developing oil fields and producing gas in the Western part of the country. It manages the Korpedzhe – Kurt-Kui gas pipeline.

STRENGTHS

The Law on Foreign Investment, as amended in 2019 and the LIA, as amended in 2015, guarantee equal treatment for domestic and foreign investors and prohibit discriminatory measures that could impede the management of investments, their use, and liquidation. The Law on Enterprises of 2000 defines the legal forms in which private entities, including foreign companies, can engage in business activities (sole proprietorships, cooperatives, partnerships, corporations, and enterprises of non-government organisations).

The Law on Hydrocarbon Resources of 2012, which applies equally to domestic and foreign oil and gas companies, sets out a licence-contract system granting contractors access to subsoil areas for exploration and production of hydrocarbons. A licence certifies the right to conduct oil operations, including all forms of exploration and production activities. Licences are issued following either a tender or through non-exclusive direct negotiations. Tenders may be open to all interested parties or closed. In June 2021, Turkmenistan approved the Law on Public-Private Partnership (PPP) to regulate relations arising during the preparation and implementation of PPP projects. The Law sets forth the legal conditions for securing the financial, scientific-technical and other resources necessary for developing infrastructure projects and ensuring the balance of interests and risks between the investor and the State.

Turkmenistan ranks among the world's leading countries in terms of oil and gas reserves. In 2021, its gas reserves increased by 126 billion m³ due to the development of recently discovered gas fields. Consequently, the Government of Turkmenistan has intensified its efforts to attract foreign investment in this sector. Further expansion of the country's gas pipeline network is planned under the Programme for the Development of Energy Diplomacy, including through the Turkmenistan-Afghanistan-Pakistan-India (TAPI) Gas Pipeline. Although the project has been ongoing for a substantial time, once completed, TAPI will carry 33 billion m³ of gas from the Turkmen Galkynysh field to India. With estimated costs exceeding USD 7 billion, the project has secured international funding from Turkmengaz, Afghan Gas, Gail India, Inter State Gas Systems Pakistan, the Asian Development Bank, and the Islamic Development Bank.

In March 2022, in the context of the TAPI project, the Turkmen energy construction company, Türkmenenergogurluşyk, signed a contract with Afghanistan's State electricity company, Da Afghanistan

Breshna Sherkat, for the design, supply, construction, installation, testing and commissioning of switchgear units at the Nur el-Jihad substation. The agreement's objective is to increase the power transmission capacity for the Nur el-Jihad substation from 110 kV to 220 kV allowing Turkmenistan to increase electricity exports to neighbouring Afghanistan. The Nur-el-Jihad substation constitutes the TAPI power supply network's first leg of the Herat-Farah-Kandahar route.

Besides the TAPI project, the Government has also signed a contract with the Japanese company Mitsubishi Corporation to prepare a preliminary technical design for producing 10 billion m³ of commercial gas annually. The project is part of the Government's plan to develop the Galkynysh field, which is considered of utmost importance under the OaGIDP 2030, along with the Yashlar-Minara and Bagtyarlik fields. Engineering, procurement, and construction contracts have been signed with Petrofac, LG International, and Hyundai Engineering and Construction Co. The State has also entered into a Production Sharing Agreement (PSA) with the China National Petroleum Corporation for a specific timeframe.

In 2020, Turkmengaz concluded a contract with Turkmen Petroleum Products Trade DMCC, registered in the United Arab Emirates, to increase the level of natural gas production at 30 wells in the Dovletabat gas field. It also organised tenders for the supply of equipment and the modernisation of the Bagadzha gas processing complex. A thermal power plant with a capacity of 432 MW was commissioned on 3 September 2021 in the Charjew District of the Lebap region. The Japanese Sumitomo Corporation implemented the project with the participation of Mitsubishi Hitachi Power Systems and Turkey-based Rönesans Holding Companies.

The Government has entered into PSAs with eight foreign energy companies, of which five are offshore and three onshore. The duration of the agreements ranges from 20 to 25 years. One of these is the Petronas Carigali (Turkmenistan and Malaysia) to conduct hydrocarbon exploration and production activities in the Block-I contract area in the Turkmen sector of the Caspian Sea. Intensive oil and gas production is also underway at the Makhtumkuli and Diyarbekir fields.

In 2022, the national oil production company Türkmennebit signed a contract to extend the existing PSA with the Emirati-owned Dragon Oil Ltd company, currently operating in the Caspian Sea. The renewed

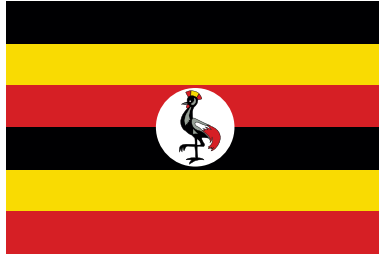
contract extends the PSA from 2025 until 2035. A similar extension was granted in 2020 by Türkmennebit to the Russian PJSC Tatneft to provide services for the overhaul of 250 wells and enhanced oil recovery from the Goturdepe field.

Although the country's hydrocarbons sector takes the lion's share of private investment, some positive developments have been noted in the field of renewables. In July 2022, the State Power Corporation, Türkmenenergo, of the MET concluded an agreement with the Turkish Çalık Enerji Sanayi ve Ticaret A.Ş. company for the design and construction of a solar and wind power plant with a total capacity of 10 MW in Serdar Etrap in the Balkan Velayat. More specifically, the photovoltaic solar station will have an installed capacity of 7 MW and generate an average of 1,371,784.12 kWh of electricity per year. The wind farm will be of 3 MW installed capacity at an average wind speed of 7.05 m/s generating 835 kWh of electricity. The construction of these plants is expected to begin in July 2022, and the plants will start operating by January 2024.

AREAS FOR IMPROVEMENT

The Government should take proactive measures to incentivise foreign investment outside the hydrocarbons industry. To increase the inflow of private funding in renewables, it should develop a comprehensive regulatory framework to implement financing and guarantee mechanisms, certification and normalisation, and prepare standardised power purchase agreements to improve the bankability of new renewable projects.

The Government must introduce measures that will render the business registration process less cumbersome and time-consuming. Currently, all local and foreign entities operating in Turkmenistan are required to register with the Registration Department under the MFET. Before the registration is granted, an inter-ministerial commission that includes the Ministry of Foreign Affairs, the Agency for Protection from Economic Risks, law enforcement agencies, and industry-specific ministries must approve it.



Uganda

Population ¹	47,123,533
Area (km ²) ¹	241,550
GDP per capita (USD) ¹	858.06
TES/GDP (GJ/thousand 2015) ²	N/A
Net Energy Imports (TJ) ²	N/A
RE share in Final Energy Consumption (%) ²	90.2
Total CO ₂ emissions (MtCO ₂) ²	N/A

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	1 minority stake deal 1 acquisition deal	Kenya: 1 RE deal of 35.2 mEU Value of 1 RE deal (Mauritius) is n.a

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022.
For more information see Annex III of this report.
RE: Renewable energy based electricity production

Uganda’s overall risk level against the assessed areas is **low**.

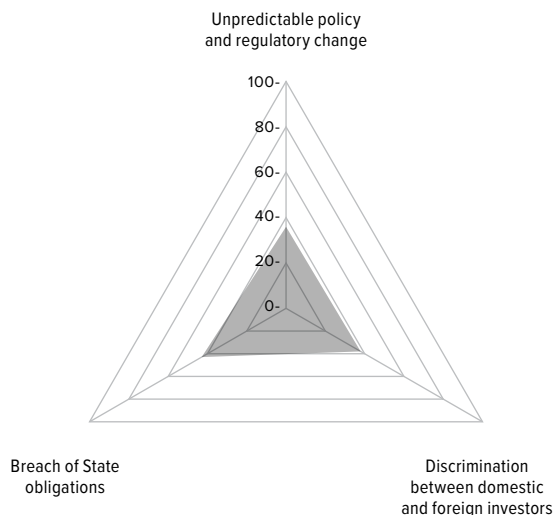
Among the three risk areas, the risk of *unpredictable policy and regulatory change* and *discrimination between foreign and domestic investors* is lower compared to *breach of State obligations*.

Uganda has a good performance on three EIRA indicators and a moderate performance on two indicators. *Management of decision-making processes* is the highest-scoring indicator at 73, followed by *foresight of policy and regulatory change* at 67. Its score on the indicator *rule of law* is 61, and on *framework for a sustainable energy system*, it is 58. *Regulatory environment and investment conditions* is the lowest-scoring indicator at 53.

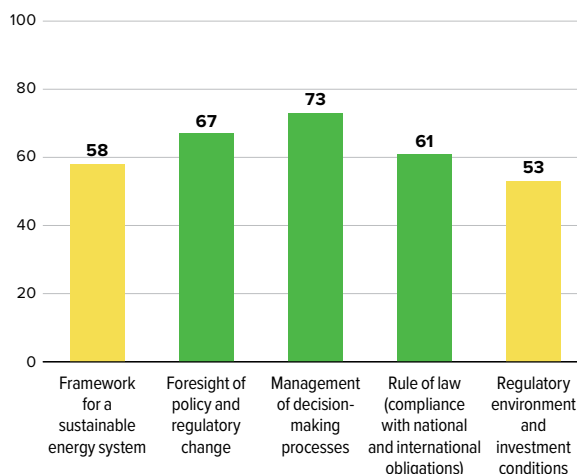
On a more detailed level, Uganda’s overall sub-indicator performance is good. The highest-scoring sub-indicator is *robustness of policy goals and commitments* at 78, followed by *institutional governance* at 75, *respect for property rights* at 74, and *transparency and anti-corruption measures* at 71. Its score on the sub-indicator *environmental protection, human rights and gender* is 67, followed by *policy planning on clean energy transition* and *electricity industry market structure and competition*, both at 58. On the sub-indicators *enabling measures to support clean energy transition* and *communication of vision and policies*, it has a score of 57, and on *regulatory independence*, its score is 52. The lowest-scoring sub-indicators are *energy resilience* (50), *restrictions on FDI* (50), and *management and settlement of investor-State disputes* (47).

While Uganda is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to reduce restrictions on FDI, increase the resilience of its energy system and implement investor-State dispute prevention policies and mechanisms.

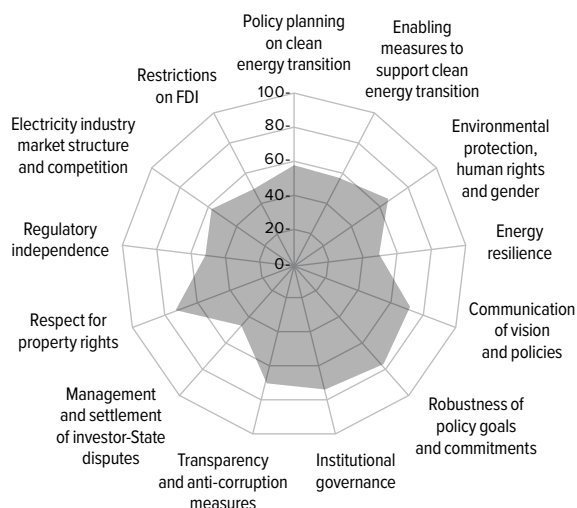
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

Uganda submitted its interim NDC to the UNFCCC Secretariat in October 2021.

Uganda's Green Growth Development Strategy, spanning 2017/28-2030/31, aims to ensure the country's social and economic development based on equity, inclusivity, environmental sustainability, and resource efficiency.

Uganda Vision 2040 highlights the need for green energy to meet the country's growing energy demand.

STRENGTHS

Uganda's interim NDC outlines more realistic GHG emission estimates than its predecessor. It forecasts GHG emissions to reach 143 MtCO₂e by 2030, up by 75.7 MtCO₂e compared to the target outlined in the previous NDC. Given the substantial increase in GHG emissions by 2030, the interim NDC has a broad coverage of 14 sectors and suggests non-market approaches, such as adaptation benefit mechanisms to address climate issues. The final updated NDC, which Uganda will submit to the UNFCCC Secretariat within 2022, will prioritise adaptation as the primary response to climate change and contain cross-sectoral emission reduction targets.

Uganda is implementing sustainable programmes and projects to reduce the country's GHGs emissions. For instance, the Nationally Appropriate Mitigation Actions developed by the Climate Change Secretariat (CCS) under the Ministry of Water and Environment (MWE) aims to substitute traditional cooking stoves with energy-efficient ones. The Government has estimated that this project would help to reduce 17.4 MtCO₂e in 24 years. Since 2006, the German-Swiss First Climate has implemented a project to commercialise cooking stoves. Between 2006 and 2022, 520,000 improved cookstoves were installed in Kampala through this project. Moreover, from 2022 onwards, the Electricity Regulatory Authority (ERA) is implementing the Charcoal to Power Project to replace biomass as the primary source of electricity in 50,000 households and 500 public institutions.

The new Climate Change Act of 2022 (CCA), which came into force on 3 January 2022, introduces monitoring and evaluation mechanisms for Government-led programmes. It requires the Government to develop climate change action plans at national and district levels and establish the National Climate Change Advisory Committee (NCCAC), comprising technical experts, representatives of the National Planning Authority of Uganda, academia, the private sector, and civil society. The NCCAC will support the MWE by providing independent advice on climate change mitigation and adaptation measures. The Government is also strengthening climate change-related data processing and storage. On 15 April 2021, it inaugurated the NDC Support Center, which will prepare the future NDCs and technical demonstration projects for energy efficiency and renewable energy.

Uganda is promoting alternative fuels and electric vehicles (EVs) to decarbonise its transport sector. The Biofuel Act of 2018 regulates biofuel production, storage, and transportation, issuing production licences across the value chain. To promote e-mobility, the Government intends to circulate at least 250 electric buses and 300,000 motorcycles on the road and install 75 fast

chargers by 2026. It also plans to create a nationwide Electric Vehicle Charging Ecosystem by 2030. Notably, Kiira Motors Corporation (KMC), the State-owned vehicle manufacturing company, has produced, since 2011, several models of fully electric cars and buses. KMC is negotiating with the Government to fast-track the introduction of corresponding e-mobility standards and regulations, which will help to boost the industry.

Uganda is undertaking initiatives to ensure its economic transformation while combatting environmental degradation and enhancing gender equality. In 2017, the Government launched its Forest Investment Program (FIP), worth USD 234 million and spanning ten years. The FIP aims to ensure that local communities and indigenous people directly manage forest resources and improve the enabling environment for the Reduced Emissions from Deforestation and forest Degradation (REDD+) Programme.

In December 2021, Uganda received USD 200 million from the World Bank to implement the Investment for Industrial Transformation and Employment (INVITE) project, which aims to mitigate the consequences of the COVID-19 pandemic and ease liquidity constraints for 260,000 micro, small, and medium enterprises (MSMEs), including 40,000 led by women. Moreover, in August 2022, the Government launched the three-year Sustainable Energy Response Plan (SERP) for refugees and refugee-hosting communities. The 876 billion Ugandan shillings (UGX) project, funded by the German Agency for International Cooperation (GIZ), will provide access to clean energy and cooking fuel for displaced persons and promote on-grid and off-grid lighting.

AREAS FOR IMPROVEMENT

The Government must adopt, at the earliest, its Automotive Industry Development Policy. It should offer incentives for EV manufacturers, sellers, and rental companies, introduce financial and policy measures to utilise EVs for public transport and mobilise private financing for developing the charging infrastructure.

Since a large percentage of the rural population is not connected to the primary grid, the deployment of mini-grids, fed mainly by solar photovoltaic generators, offers a medium-term solution to increase energy access. Solar panels with battery storage systems should be installed based on a robust legal and regulatory framework.

The Government should launch public awareness campaigns to promote efficient heating and cooking appliances and discourage rural households from using polluting fuels such as paraffin, firewood, kerosene, charcoal, cow dung, and grass.

Foresight of policy and regulatory change

QUICK FACTS

In 2020, the Parliament of Uganda approved the Third National Development Plan (NDP III), which guides programmes and activities for achieving Uganda Vision 2040.

On 20 May 2022, the Parliament of Uganda approved the National Budget for Fiscal Year (FY) 2022/23, which is aligned to NDP III.

STRENGTHS

The Government is committed to securing access to affordable and reliable energy for Ugandan citizens. NDP III and Uganda Vision 2040 seek to ensure an electricity access rate of 60% by 2025 and 80% by 2040, respectively. NDP III sets ambitious targets for the power sector, such as increasing, between 2020 and 2025, the total electricity generation capacity from 1,252.3 MW to 3,500 MW, the grid reliability from 88% to 90%, per capita electricity consumption from 100 kWh to 578 kWh, the length of high-voltage transmission lines from 2,354 km to 4,354 km, and the distribution network from 45,423.1 km to 70,000 km, respectively. On energy efficiency, NDP III sets a target to reduce biomass in cooking from 85% in 2018 to 50% by 2025. In parallel, the share of clean cooking technologies should increase from 15% in 2018 to 50% by 2025.

The NDP III targets are supported by the Least Cost Electricity Expansion Plan 2020-2030, which aims to mobilise USD 6 billion to increase the country's power generation capacity. At the same time, the Uganda Electricity Distribution Company Limited (UEDCL) intends to upgrade the network to reduce commercial and technical energy losses to 19% by 2025 and connect 50,000 new consumers annually. The National Budget for FY 2022/23 allocates UGX 1.573 trillion toward reducing transmission and distribution losses to 3.6%, finalising feasibility studies for 200 off-grid energy systems, constructing the 400 kV interconnectors between Uganda and Congo, South Sudan and Tanzania, and deploying the Muzizi (48 MW) and Nyagak III (5.5 MW) hydropower plants.

Several projects are underway to increase the country's on-grid power production and rehabilitate the power infrastructure. In April 2022, the Uganda Electricity Generation Company Limited (UEGCL) reported about 99% readiness of the Karuma hydropower plant, which will be fully operational by June 2023 and add 600 MW to the country's generation capacity. To diversify its power generation mix, Uganda is undergoing the International Atomic Energy Agency's three-stage clearance process to construct the first nuclear power plant (NPP) in East Africa. The initial phase's conclusion confirms Uganda's readiness to build an NPP. The Minister of State for Energy, in May 2022, announced the land purchase to construct a 2,000 MW NPP, which will be completed by 2032.

Umeme Limited, the largest Ugandan power distribution company, is undertaking power rehabilitation projects in 6 Eastern districts of Uganda. The company plans to spend UGX 11 billion to overhaul the power infrastructure in Linugazi Town, Jinja–Kamuli, and the Iganga Kibimba. The Uganda Electricity Transmission Company Limited (UETCL) also plans to complete the construction of the Lira-Gulu

Agago 132 kV transmission line connecting unserved communities in the Northern region to the 88 MW Agago-Achwa hydropower plants.

The Rural Electrification Strategy and Plan 2013-2022 indicates the Government's intention to reach 26% electrification of rural areas by 2022. For this purpose, in November 2021, it commenced the deployment of 25 mini-grids of 1 MW in rural communities of the Lamwo district. Once operational, the new mini-grids will electrify 2,300 households, reduce 550 tonnes of CO₂e and meet the NDP III target of 2,700 mini-grids installations by 2030. The Government plans to expand the project by commissioning 15 more mini-grids in Isingiro and Rakai districts. Besides this, the Utilities 2.0 Twaake (U.2.0) pilot project, launched in June 2021, aims to construct a 40 kWp mini-grid to provide electricity to 300 households and 60 local businesses in the Kiwumu district.

Uganda is making efforts to ensure the accountability of State authorities and State-owned enterprises. The Ministry of Energy and Mineral Development (MEMD) has published the Sector Performance Report for 2020, which provides information on the implementation status of the National Budget for FY 2019/2020 by public sector undertakings. In April 2022, the Ministry of Finance, Planning, and Economic Development (MFPED) released the Semi-annual Budget Monitoring Report for the Sustainable Energy Development Programme for FY 2021/22. The report shows that within the second part of 2021, the national installed generation capacities reached 1,325.9 MW, and the transmission network grew from 3,100 km to 3,385.56 km. In December 2021, the Office of the Auditor General presented the Annual Audit Report on the Consolidated Public Accounts of Uganda. It also released a summary statement, for the year ending on 30 June 2021, on the financial performance of public corporations, enterprises, and companies in which the Government has a controlling interest. This report covers 128 MDAs, 107 statutory companies, 145 local governments, and 2,048 communities and highlights improvements in the performance of UETCL and UEGCL. Both companies have demonstrated rapid growth in profits after tax compared to the previous fiscal year (from UGX 54.02 billion to 112.00 billion for UETCL and from UGX 2.80 billion to 91.93 billion for UEGCL).

AREAS FOR IMPROVEMENT

The Government should update the Energy Policy of Uganda, adopted 20 years ago, and the Renewable Energy Policy, which contains outdated targets. The new policies should consider recent developments in the energy sector and be in line with Uganda Vision 2040 and NDP III.

Management of decision-making processes

QUICK FACTS

- | The MEMD is responsible for developing and implementing energy policies.
- | The Ministry of Public Service (MPS) is in charge of human resource management in public administration.
- | The MFPED formulates economic and fiscal policies and mobilises resources for implementing government programmes.

STRENGTHS

Uganda is improving the public sector's performance, particularly in energy services. The MPS is undertaking a rationalisation process through which it will merge 33 out of 69 State entities under its supervision to optimise their roles and functions. At the same time, the portfolio of the remaining 36 will be integrated into higher-level institutions. In November 2021, an inter-agency operation was established comprising State institutions responsible for the energy sector, the power generation, transmission and distribution companies, and security forces to address the growing number of energy infrastructure vandalism cases.

Uganda is taking measures to strengthen the mining sector's legislative and institutional framework. On 17 February 2022, the Parliament of Uganda approved the new Mining and Minerals Act of 2021 (MMA), which replaces the Mining Act of 2003. The MMA abolishes the Mineral Protection Unit and establishes the National Mining Company, primarily funded by the Consolidated Fund of Uganda. It introduces a competitive licencing regime for brownfield projects, retains the 'first come, first serve' approach for greenfield projects, and replaces location licences with small-scale and artisanal mining licences. A mineral cadastre department has been established under the Directorate of Geological Survey and Mines to issue licences for physical and electronic applications.

The MMA defines the term 'beneficial ownership' and stipulates that companies applying for prospecting and exploration licences must reveal the names and nationalities of directors and the names of beneficial owners possessing 5% or more of a company's share capital. It also requires the MEMD to publish data on beneficial owners of mining businesses. The Tax Procedures (Amendment) Code of 2022 mandates that companies operating in Uganda must disclose to the Uganda Revenue Authority (URA) the names of all the persons contracted and engaged in a construction or extractive project. The penalty for not complying with this provision is UGX 20 million.

In May 2022, Uganda published its first EITI report for FY 2019/2020. The report contains data on the extractive industry's production, revenue, economic contribution, unilateral disclosure for oil and gas and mining sectors, and cash flow reconciliation. It also has recommendations for the Uganda Extractive Industries Transparency Initiative (UGEITI) multi-stakeholder group and Uganda Registration Services Bureau to develop roadmaps for publishing all contracts in the extractive industry and disclosing data on beneficial ownership.

The amended Public Procurement and Disposal of Public Assets Act of 2003 came into force on 1 July 2021. The amended Act allows public agencies to conduct public procurement electronically. It introduces a bid

securing declaration as an alternative to a bid security for procuring consulting services, revises the bidding periods depending on the procurement methods, and describes the conditions for returning the bid security or the bid securing declaration. It also allows the Public Procurement and Disposal of Public Assets Authority of Uganda to suspend a bidder for three years if it breaches the terms of its bid securing declaration.

As part of its efforts to ensure transparency and accountability, the MFPED, in October 2021, released the Annual Performance Report for FY 2020/21 for the Development Plan Implementation (DPI) Programme. The report analyses the progress toward financial and non-financial performance indicators outlined in the DPI Programme. In November 2021, the MFPED published the Private Sector Development Programme annual performance report for FY 2020/21. Moreover, Umeme Limited published its annual report in April 2022 with a performance analysis and its audited financial statements.

ERA determines the electricity rate for various services and categories of consumers based on the quarterly tariff adjustment methodology. Information on updated tariffs (the most recent is for the second quarter of 2022) and the updated methodology are regularly published on ERA's website to maintain transparency. On 9 December 2021, ERA held a public hearing to consider the applications for an annual review of the tariffs submitted by Umeme Limited, Eskom Limited, UEGCL, UETCL and UEDCL and engage with all stakeholders in assessing the tariffs and their implications on the State budget for 2022. The notice for the public hearing was published on 30 November 2021, and the first-ever hybrid hearing took place on 10 December 2021.

The Government is collaborating with various international organisations to strengthen climate change-related data processing, storage and availability. In 2022, with support from the United States Agency for International Development and Power Africa, the Government launched the Uganda Electricity Connections Database Portal to support the monitoring, reporting and disbursement functions outlined in the Electricity Connection Policy: Financing and Implementation for Connections 2018-2027 and help stakeholders plan future electrification projects better.

AREAS FOR IMPROVEMENT

The Government may consider setting up a dedicated online platform to receive feedback on draft legislation from citizens and other stakeholders. Additionally, it may enact in law the modalities and timeframe of public participation and organise public hearings to ensure the participation of persons living in rural and remote areas.

Rule of law

QUICK FACTS

- | Uganda signed the European Energy Charter on 6 December 2019 and the International Energy Charter political declaration on 20 May 2015.
- | Uganda ratified the Convention on the Settlement of Investment Disputes between States and Nationals of Other States on 7 June 1996.
- | Uganda is a member of MIGA.

STRENGTHS

Uganda's legal and regulatory framework promotes alternative dispute resolution mechanisms. The Arbitration and Conciliation Act of 2000 regulates domestic arbitration, international commercial arbitration, and the recognition and enforcement of the Convention on the Recognition and Enforcement of Foreign Arbitral Awards. The Act also establishes the Centre for Arbitration and Dispute Resolution and endorses it as the primary corporate institution for arbitration and conciliation. Besides this, the local private and financial sector representatives have established the International Centre for Arbitration and Mediation in Kampala, which has been functional since 2018. On 5 November 2021, a new centre for alternative dispute resolution called the Praxis Conflict Centre was commissioned. The Centre offers mediation, arbitration, negotiation, and conflict management advice to all citizens and private entities.

Uganda is committed to optimising its judicial institutions, undertaking reforms to streamline case management mechanisms and offering high-quality judicial services. In June 2021, the Judiciary of Uganda published the Judiciary Strategic Plan V for FY 2020/21-2024/25 (JSPV), aligned with the National Budget for FY 2021/22 and NDP III. The JSPV's projected outcomes are 1) expanding the scope of judicial services, 2) increasing the productivity of judicial officers, 3) accelerating case disposal, 4) reducing lead times in the disposal of cases, 5) lowering case backlog in the court system, and 6) maximising the satisfaction of citizens. Each outcome has a specific indicator, a baseline as of FY 2020/21 and a target for FY 2024/25. The JSPV lists the interventions needed to achieve these objectives and information on outputs, actions and the responsible person(s).

In October 2021, Uganda commissioned the Electronic Court Case Management Information System (ECCMIS) to improve the efficiency of domestic courts. By the end of March 2022, the ECCMIS was installed in the Supreme Court, the Court of Appeal and Jinja High Court Circuit and all the High Court Divisions. The system anticipates the complete digitalisation of case management, including registration, case assignment, hearing and judgment. When fully operational, ECCMIS will replace the Court Case Administration System, which is currently available

only to court officials and will provide a full range of analytical features and online services to a wider set of stakeholders. In parallel, the Judiciary of Uganda plans to launch an open data portal and a one-stop data centre within FY 2021/22 and FY 2022/23, respectively.

The Government of Uganda is committed to upholding the property right of foreign investors. The Investment Code Act of 2019 stipulates that in the case of compulsory acquisition, prompt payment of fair and adequate compensation shall be made before taking possession of a property. It also grants a person with interest or right over the property access to the national courts for grievance redressal. Similar provisions are outlined in the IIAs signed by the country. For example, the BIT between Uganda and the Netherlands includes provisions on compensation in the case of expropriation of an investment. It stipulates that compensation must represent the genuine value of the affected investment, including interest at a commercial rate, on the date the expropriation measure was taken. The MMA establishes a framework for compulsory acquisition of private land where an exploration or mining operation is significant to the Government. It defines mechanisms for amicable settlement of disputes concerning land valuation and compensation. Per its provisions, affected landowners can apply to the Minerals Disputes Tribunal if they are dissatisfied with the decisions of the Petroleum Authority of Uganda (PAU) or the Minister of the MEMD.

AREAS FOR IMPROVEMENT

The national legislation may be updated to give a more detailed definition of the term 'public purpose' in expropriation. The revised acts should also contain a list of activities that constitute public purpose/public interest in the case of expropriation.

Uganda could consider establishing an investment ombudsperson to settle conflicts between MDAs and investors. The Government may seek guidance from the Energy Charter Model Instrument on Management of Investment Disputes which aims to assist States in handling investment disputes as per their needs and circumstances.

Regulatory environment and investment conditions

QUICK FACTS

- | ERA regulates electricity generation, transmission, distribution, sale, export, import and distribution in Uganda.
- | The PAU regulates the petroleum sub-sector.
- | The Investment Code Act of 2019 lays down conditions for local and foreign investment in the country.

STRENGTHS

Uganda is progressing with its power sector reforms. In May 2022, it enacted the Electricity (Amendment) Act of 2022 (EAA), which increases ERA's funding from 0.3% to 0.7% of the total revenue from domestic power generation. Moreover, ERA can now determine the minimum generating capacity for which a licence is required, classify licences based on the size, technology or market segment, and impose fines on defaulting licensees. The EAA also establishes a fair, open and competitive basis for new companies to obtain electricity distribution licences. Generation licence holders can sell electricity in bulk to distribution or transmission licensees or directly to some categories of customers (except industrial parks) at a tariff to be determined by the Government.

In December 2021, ERA approved a revised electricity tariff structure, effective from January 2022, for customers of Umeme Limited. A new 'cooking' tariff of UGX 412 per kWh aims to reduce the use of biomass and charcoal in food preparation. The tariff applies to end-users who consume between 81 kWh and 150 kWh monthly. Households consuming less than 100 kWh per month will pay a 'lifeline tariff' of UGX 250 per kWh for the first 15 kWh. Customers with a monthly consumption exceeding 100 kWh will pay UGX 747.5 per kWh for the first 80 kWh and the 'cooking' tariff beyond that volume. ERA has also introduced an experimental tariff of USD 0.05 per kWh for two industrial parks in the Buikwe and Kapeeka districts to boost industrial production.

The Government is taking steps to attract investment in renewable power generation. The URA recently published guidelines on tax incentives for potential investors applicable from 2022 to 2023, indicating that specialised equipment for solar and wind energy facilities is tax-exempt under the Fifth Schedule of the East African Community Customs Management Act of 2004.

Since 2013, ERA and the German development bank KfW have been implementing the Global Energy Transfer Feed-in Tariff (GET FiT) programme to attract foreign investment in renewables. The Programme aims to fast-track 17 small-scale renewable energy projects with a total installed capacity of 158 MW by 2023. These new capacities can increase the annual power production by 760 GWh (20% more than the 2013 production levels) and provide electricity to approximately 200,000 households. GET FiT's 2020 annual report informs that 14 out of 17 planned projects with a cumulative generating capacity of 122 MW are operational. In 2020, 35MW of new installed capacity was added under GET FiT contributing to an annual generation of 162 GWh.

In April 2021, ERA approved Phase V of the Renewable Energy Feed-in Tariff (REFIT) Guidelines to encourage further development of renewable energy facilities.

The tariffs for hydropower and bagasse co-generation technologies will be paid for each kWh. The tariffs for biogas, landfill gas, waste to energy/biomass, wind power and solar photovoltaic have ceiling prices and maximum returns on equity levels.

Uganda recognises that developing the petroleum sector will help to mobilise financing for the clean energy transition. According to the PAU, direct investment in the petroleum sector grew from USD 180 million in 2020 to USD 500 million in 2021 and is expected to reach USD 3 billion and USD 4 billion in 2022 and 2023, respectively. Meanwhile, the Uganda Investment Authority (UIA) estimated that 256 newly licenced projects with a total value of USD 830.6 million created 25,762 jobs in 2019-2020. Four projects were in the electricity, gas, steam and air conditioning supply (EGSAC) sector, generating 386 new jobs. The EGSAC sector attracted USD 25.54 million, or 3.08% of the total planned investment.

The Government is actively promoting investment opportunities in Uganda. In June 2021, the MEMD announced the companies shortlisted for the country's second licensing round for five oil production blocks: French TotalEnergies E&P, Australian DGR Global, Nigerian PetrolAfrik Energy Resources, and Ugandan National Oil Company (UNOC). In July 2022, a consortium led by TotalEnergies applied for a licence to construct the 1,443 km East African Crude Oil Pipeline between Uganda and Tanzania. The estimated cost of the pipeline, with a daily capacity of 216,000 barrels, is USD 5 billion.

In 2022, UIA published the Viable Investment Opportunities in Uganda 2022-2023 brochure, which provides information on investment opportunities in ten sectors, including energy and petroleum. Some of the projects mentioned in the brochure are the Buranga Prospect (100 MW) geothermal power plant, Bisaya (190 KW) mini hydropower plant, the Kabale Petrol-based Industrial Park and the oil jetty and pipeline in the Jinja storage terminal.

AREAS FOR IMPROVEMENT

The Government may consider amending the Electricity Act of 1999 to state that the board of ERA should be approved by the Parliament instead of the MEMD. Additionally, the legislation could be amended to lift the requirement for ERA and the PAU to submit the annual estimates of income and expenditures to the MEMD for approval.

The Government should expedite the adoption of the Competition Bill pending since 2004 and establish an independent competition commission as envisioned in the Bill.

INDICATOR 1

Improvements proposed in 2022

Adopt the Automotive Industry Development Policy and introduce a regulatory framework for e-mobility.

Improvement suggested in 2022. Status will be updated in 2023.

Develop a legal and regulatory framework to accelerate the deployment of solar panels with battery storage systems.

Improvement suggested in 2022. Status will be updated in 2023.

Introduce financial incentives and public awareness campaigns to promote efficient heating and cooking appliances.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2018

Update the Energy Policy of Uganda of 2002.

Work ongoing. The draft energy policy has been prepared and is currently awaiting approval of the Cabinet of Ministers.

Update the Renewable Energy Policy 2007-2017.

Work ongoing. The updated energy policy of Uganda will cover issues concerning renewable energy and replace the Renewable Energy Policy 2007-2017.

Update the Mineral Policy of 2001.

Fully implemented. In 2018, the MEMD adopted the new Mining and Mineral Policy for Uganda.

Design energy delivery systems that are compatible with the local conditions.

Work ongoing and partially implemented. The MEDM has submitted the final draft of the Energy Efficiency and Conservation Bill to the Cabinet of Ministers for approval. NDP III targets the installation of 2,700 mini-grids by 2030. The National Budget for FY 2022/23 includes targets to reduce the share of biomass energy from 86% to 50% and increase clean energy from 15% to 50%. In March 2022, the Government secured financing of USD 638 million for the Electricity Access Scale-up Project from the World Bank. This five-year project will offer more than 940,000 households (235,000 headed by women) electricity through mini-grids and 667,400 households (333,700 females) through off-grid solutions.

Improvements proposed in 2019

Implement the Electricity Connections Policy 2018-2027.

Work ongoing. According to the MEDM, 57% of Uganda's population has access to electricity. Of this, 19% of consumers are connected to the national grid, and 38% use off-grid solutions. About 364,428 households are connected to the grid under the Electricity Connections Policy 2018-2027. The UEDCL plans to upgrade the network to reduce the grid's commercial and technical energy losses to 19% by 2025 and connect 50,000 new consumers annually.

Improvements proposed in 2020

Increase investments in the transmission and distribution infrastructure to balance grid supply and demand at the least cost.

Work ongoing. According to the MFPED's Semi-Annual Budget Monitoring Report for the Sustainable Energy Development Programme for FY 2021/22, within the second part of 2021, the national installed generation capacities reached 1,325.9 MW, and the transmission network grew from 3,100 km to 3,385.56 km. By December 2021, the Karuma-Kawanda (400 kV) and the Karuma-Olwiyo (132 kV) transmission lines were completed. This investment secured the connection of all district headquarters to the national grid, except the Buvuma district. Umeme Limited was recently involved in the power rehabilitation project in six Eastern districts of Uganda. The company plans to spend UGX 11 billion to overhaul the power infrastructure in Linugazi Town, Jinja-Kamuli and the Iganga-Kibimba. The UETCL also plans to complete the construction of the Lira-Gulu-Agago (132 kV) transmission line connecting the Agago-Achwa (88 MW) hydropower plants with unserved communities in the Northern Region.

INDICATOR 3

Improvements proposed in 2018

Consider publishing the extractive industry contracts in line with international best practices.

Work ongoing. In May 2022, Uganda published its first EITI report for FY 2019/2020, which includes a recommendation for the UGEITI Multi-Stakeholder Group to develop a roadmap for publishing all agreements in the extractive industry.

Improvements proposed in 2020

Make it legally mandatory for public authorities to consult the public on draft laws and regulatory decisions.

Pending

Improvements proposed in 2022

Consider setting up a dedicated online platform to receive feedback on draft legislation from citizens and other stakeholders.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2018

Consider establishing a foreign investment ombudsperson to settle conflicts arising in the course of projects.

Pending

Update national legislation to define 'public purpose' in the case of expropriation.

Work ongoing. The Land Acquisition Bill of 2019 has been drafted to streamline provisions on the compulsory acquisition of property by the Government. The MMA of 2021 provides for compulsory acquisition of private land where an exploration or mining operation is significant to the Government.

INDICATOR 5

Improvements proposed in 2018

Limit the Government's role in ERA's decision-making process.

Work ongoing and partially implemented. The EEA of 2022 empowers ERA to determine the minimum generating capacity for which a licence is required, classify licences based on the size, technology or market segment, and impose fines on licensees in case of breach of the terms by a licensee.

Remove the need for Government approval in setting the salaries of the PAU's board members.

Pending

Adopt the Competition Bill pending since 2004.

Pending

Set the same eligibility requirements for registering and issuing investment licences to domestic and foreign companies; streamline the land tenure system to ensure the realisation of planned projects.

Work ongoing and partially implemented. The Investment Code of 2019 imposes the minimum investment capital requirement on both domestic and foreign investors to qualify for the registration and issuance of an investment licence.



Uzbekistan

Population ¹	34,915,100
Area (km ²) ¹	448,924
GDP per capita (USD) ¹	1,983.06
TES/GDP (GJ/thousand 2015) ²	19.52
Net Energy Imports (TJ) ²	-352.57
RE share in Final Energy Consumption (%) ²	1.6
Total CO ₂ emissions (MtCO ₂) ²	111.81

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Extraction of crude petroleum & natural gas	2 co-location projects	Russian Federation: 2 projects of 2,000 mEUR
Support activities for petroleum and natural gas extraction	1 joint venture deal	Value of 1 deal (Uzbekistan) is n.a
Transport via pipeline	1 co-location project	Russian Federation: 1 project of 40 mEUR

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022. For more information see Annex III of this report.

Uzbekistan’s overall risk level against the assessed areas is **low**.

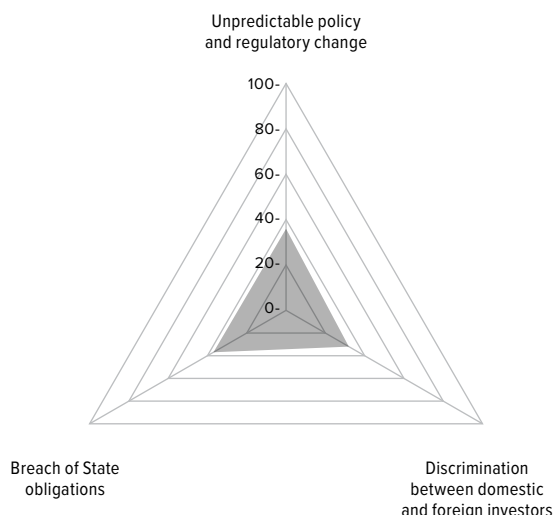
Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *unpredictable policy and regulatory change* and *breach of State obligations*.

Uzbekistan has a good performance on two EIRA indicators and a moderate performance on three indicators. *Rule of law* is the highest-scoring indicator at 80, followed by the indicator *management of decision-making processes* at 73 and *framework for a sustainable energy system* at 58. On the indicator *foresight of policy and regulatory change*, it has a score of 56. The lowest-scoring indicator is *regulatory environment and investment conditions* at 52.

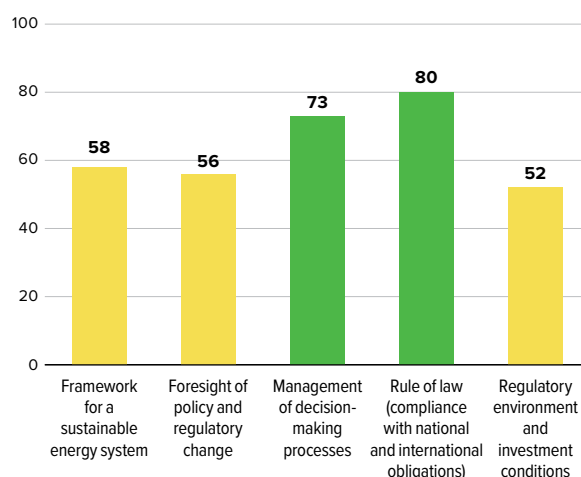
On a more detailed level, Uzbekistan’s overall sub-indicator performance is good. *Respect for property rights* is the highest-scoring sub-indicator at 85, followed by *institutional governance* at 83. Its performance on the sub-indicators *management and settlement of investor-State disputes* (75), *communication of vision and policies* (72), *restrictions on FDI* (69), *policy planning on clean energy transition* (68), *transparency and anti-corruption measures* (64), and *energy resilience* (63) is good. It has received a score of 54 on the sub-indicator *electricity industry market structure and competition* and 52 on the sub-indicator *environmental protection, human rights and gender*. Its score on *enabling measures to support clean energy transition* is 49, while *robustness of policy goals and commitments* stands at 40. *Regulatory independence* is the lowest-scoring sub-indicator at 33.

While Uzbekistan is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to increase the robustness of its policy goals and commitments and ensure independent regulation of the energy sector.

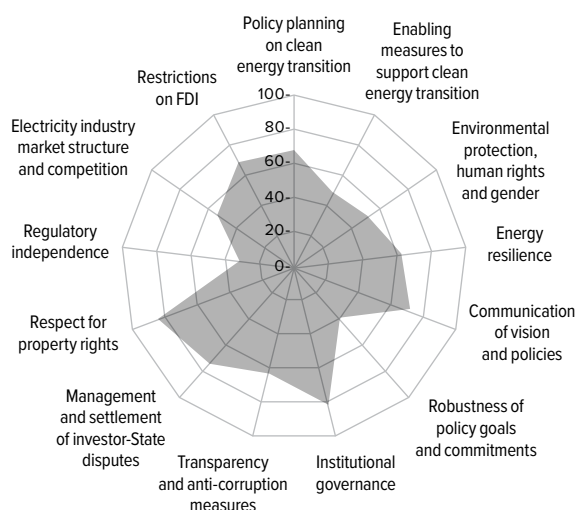
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

On 30 October 2021, Uzbekistan submitted its updated NDC to the UNFCCC Secretariat.

In 2019, Uzbekistan approved the Strategy for the Transition of the Republic of Uzbekistan to a Green Economy for 2019-2030 (STRUGE 2030).

In 2019, the Environmental Protection Concept Note until 2030 was adopted through Presidential Decree no. PD-5863/2019 (EPCN).

STRENGTHS

Uzbekistan's updated NDC aims to reduce 35% the national GHG emissions per unit of GDP by 2030 compared to the 2010 levels (25% more than the target stated in the previous NDC). The updated NDC identifies adaptation as the primary method for increasing the country's resilience to climate change. It includes a list of adaptation measures for the agricultural, water, and manufacturing sectors and major infrastructure activities. The measures focus on combatting desertification, reforestation, and restoring the country's biodiversity and ecological balance. The updated NDC also calls for immediate actions to address the Aral Sea's desiccation, which has lost 57% of its surface and 80% of volume in the last 40 years. Additionally, it recognises the need to improve scientific and research capacities and establish a comprehensive GHG measurement, reporting and verification system (MRV).

In 2021, Uzbekistan submitted its First Biennial Update Report under the UNFCCC, which indicates a slight decline, between 2013 and 2017, in the total GHG emissions (-0.6%), including in the energy sector (-17.6%). The Report highlights the progress made in improving the supporting legislative and regulatory frameworks. It presents a matrix of climate change mitigation measures and lists the corresponding goals, targets, priority directions, indicators, and development programmes. It also mentions actions implemented or currently under implementation in various areas, including power production and consumption.

The Government is promoting clean energy consumption in the transport sector by setting incentives to popularise electric vehicles (EVs). At the 2021 United Nations Climate Change Conference, the Government of Uzbekistan declared its plan to ensure that 20% of the country's overall car fleet comprises EVs. Following the approval of Presidential Decree no. PD-111/2022, the Government plans, from 2022 to 2025, to purchase 1,063 electric buses and bring the share of EVs in the capital's bus fleet to 49% by 2025. In March 2022, the Ministry of Transport circulated the draft Strategy and Programme for the Development of EVs Production until 2030, which foresees that the share of EV in the country's total vehicle sales will reach 15% by 2030 and suggests various tax incentives for EV manufacturers.

Uzbekistan has a policy framework for sustainable water resources, green growth and environmental protection. STRUGE 2030 outlines measures to improve energy efficiency practices in the main sectors of the economy, increase the efficiency of natural resources utilisation, and diversify energy supplies. It promotes renewable energy,

proposes climate change adaptation and mitigation measures, and calls for preserving natural ecosystems. The Strategy for the Development of New Uzbekistan 2022-2026 (SDNU) includes 100 goals, of which four directly address climate change, environmental protection and energy transition. Between 2022 and 2026, the SDNU envisions increasing the economy's energy efficiency by 20% and reducing 20% of ambient emissions by intensive application of 'green' technologies in all economic sectors.

The EPCN sets measures to address issues of ecological security, toxic chemicals and radioactive substances, increase transparency of State institutions responsible for environmental protection and raise the civil society's role in this field. It envisions that by 2030, the country will reduce polluting emissions by 10% (from 2.5 to 2.2 million tonnes), increase the share of cars using natural gas and electric public transportation to 80%, and expand the forest area from 3.2 to 4.5 million hectares.

In 2021, the Government approved the Strategy for Water Resources Management and the Development of the Irrigation Sector in Uzbekistan 2021-2023. This Strategy focuses on the efficient management and rational use of water resources, the improvement of the irrigation system, and ensuring water security in the context of growing water demand and global climate change.

To ensure gender mainstreaming in the energy sector, the Ministry of Energy (MoE) developed and approved its Gender Action Plan in 2020. Its ultimate goal is to raise female employment in the energy sector to at least 5% and guarantee equal job rights and opportunities for men and women. The Action Plan outlines steps to mainstream gender by developing an equal opportunity policy and reducing gender-related issues while implementing energy and infrastructure projects.

AREAS FOR IMPROVEMENT

Considering Uzbekistan's rapid industrial growth, the Government should introduce fiscal mechanisms to accelerate the use of clean technologies in the sector. Additionally, it should develop a carbon pricing mechanism for carbon-intensive sectors and set up a robust MRV system to assess actual emissions volumes.

Uzbekistan has a mature automotive manufacturing sector. The government should take advantage of this by introducing tax incentives for manufacturing, obtaining and utilising EVs. It must also allocate adequate funding for the rapid development of the e-mobility infrastructure.

Foresight of policy and regulatory change

QUICK FACTS

In 2019, the Government adopted the Concept Note for Ensuring Electricity Supply in Uzbekistan in 2020-2030 (ESCN).

The Strategy for the Further Development and Reform of the Electric Power Industry of the Republic of Uzbekistan was adopted in 2019 through Presidential Decree no. PD-4249/2019.

On 7 February 2010, the Concept Note for the Development of the Atomic Energy Sector in the Republic of Uzbekistan 2019-2029 was adopted by Presidential Decree no. PD-4165/2019.

STRENGTHS

The SDNU sets short-term targets for the energy sector. It aims to reach 100 GWh of annual power generation by 2026, an increase of 30 GWh from the 2022 levels. The share of renewable electricity in power generation is expected to be 25% by 2026, with a simultaneous GHG emissions reduction of 10% compared to 2022 and a decline in the annual natural gas consumption by 3 billion m³. It complements the goals of the ESCN, which envisages a sharp growth in the country's installed power generation capacity, from 12.9 GW in 2019 to 29.3 GW in 2030. More than 25% (8 GW) of this capacity is expected to be provided by renewable energy facilities, including 3 GW from wind and 5 GW from solar power.

The Government has introduced action plans to achieve the above-mentioned targets. In 2021, it released the Roadmap for the Transition to Low-Carbon Energy for Electrical Power of Uzbekistan (Low-carbon Electricity Roadmap), which examines the technical and economic feasibility of achieving carbon neutrality by 2050. It outlines a three-stage approach toward reaching this goal. During the first stage, to be implemented by 2030, it plans to replace outdated and inefficient thermal power plants, expand hydropower generating capacities, and save around 54 billion m³ of natural gas. From 2030 to 2040, the second stage foresees (1) the installation of 22 GW of variable renewables and 15 GW of total battery energy storage system (BESS), providing 1.3 TWh of power per year, and (2) the operation of modern and efficient thermal power plants as complementary sources. At the end of the third stage (2040-2050), the country's energy system will be based on a combination of solar, wind, nuclear and hydropower plants, and decarbonised fuels. According to the Roadmap, 39 GW of BESS will supply 44 TWh of electricity annually, and the excess renewable energy might be used for producing green hydrogen.

To strengthen energy security, the Government intends to build a 2.4 GW Generation III+ nuclear power plant. It also plans to introduce national safety regulations and establish a nuclear fuel management system, as outlined in Presidential Decree no. PD-4165/2019.

The need to improve grid reliability and expand the power transmission and distribution system is recognised in several regulatory frameworks. For instance, Presidential Decree no. PD-3981/2018 aims to ensure the annual refurbishment of the existing transmission and distribution lines and construct new ones (cumulatively 7,100 km of the network). It also envisages installing and modernising 2,500 transformers and installing automated control and metering systems for 7 million customers. Presidential Decree no. PD-113/2022 was

recently approved for the reconstruction of the power sector. It requires the installation of the Supervisory Control and Data Acquisition System, the construction of a new 500 kV substation and aerial 500/220 kV power lines, and the construction of the 130 km 500 kV Sarymay-Djangeldy transmission lines. The Decree also endorses the installation of 20 new power transformers and autotransformers at ten substations, the construction of 177 km 500/220 kV power lines from Navoi TPP to switching point Bespopan, the construction of the 500/220 kV Muruntau substation, the reconstruction of the high-voltage 500 kV Guzar-Regar power line, the 220 kV aerial line in Syrdarya thermal power plant, the 220 kV Zafarobod substation, and the modernisation of 22 substations of 220 and 500 kV.

The Government is creating a regulatory framework to enhance public entities' accountability and transparency. Presidential Decree no. PD-6247/2021 requires that information with a socio-economic impact be made publicly available by all State institutions, including the Accounts Chamber and the Central Bank. Moreover, Presidential Decree no. PD-6300/2021 expands the mandate and powers of the Accounts Chamber by introducing new types of audits to be conducted, such as financial compliance and efficiency audits. Notably, in June 2021, the Accounts Chamber published an assessment report on the State Budget's implementation and the budgets of the State trust funds for 2020.

AREAS FOR IMPROVEMENT

Uzbekistan should establish an institutional framework to monitor and evaluate the progress of each strategy and action plan. It should ensure that development partners, the private sector, civil society organisations, professional associations, and neighbouring countries are actively engaged in the framework. The Government may also introduce financial and performance-based evaluation procedures and define the follow-up actions for the measures not implemented. It should also make the annual performance evaluation and financial reports of State-owned energy companies publicly available.

The first stage of the Low-carbon Electricity Roadmap envisages the construction of thermal power plants, with the lifetime of these plants being longer than ten years. The further operation of gas-fired plants may also create challenges in reducing the electricity sector's carbon intensity. To address this issue, the Government must adjust its plans to accelerate the deployment of renewable energy sources during the first stage of the Roadmap and develop a set-by-step action plan to mobilise investment in the renewables sector.

Management of decision-making processes

QUICK FACTS

- | In 2014, Uzbekistan enacted Law no. LRU-369/2014 'On the Openness of the Activities of Public Authorities and Management'.
- | Law no. LRU-443/2017 'On the Dissemination and Use of Legal Information' entered into force in 2017.
- | The MoE leads the policy-making process for the energy sector.
- | The Ministry of Investments and Foreign Trade develops and implements the country's investment policy.

STRENGTHS

Uzbekistan has initiated reforms to adopt its amended Constitution before the end of 2022. In May 2022, the National Commission for Constitutional Reforms (NCCR), comprising 46 members of the Parliament, was established to accelerate the reform process. Following nationwide discussions, the NCCR has started drafting the amendments, which will accommodate nearly 200 proposals affecting 128 articles of the current Constitution. The proposals aim to strengthen the mandate of the country's bicameral Parliament by increasing its oversight of the State budget's implementation. The proposed amendments will also increase the public administration's efficiency and grant greater independence to the local governments.

Presidential Resolution no. PR-113/2022, which entered into force on 21 April 2022, establishes a regulatory framework to modernise the National Government Services System by streamlining business processes based on a 'citizen-centric service' principle. It calls for expanding the digitalisation of public services, reducing paperwork, and implementing a single window approach for public services. The Resolution also introduces the National Strategy for Modernisation and Accelerated Development of State Services Provision System for 2022-2026 and its implementation roadmap.

State agencies are taking steps to facilitate the ease of doing business for potential and existing investors. The Foreign Investors Council (FIC), an advisory board under the President of Uzbekistan, was established in 2019 to communicate the expectations and needs of the private sector to the Government and help build a non-discriminatory and competitive business environment. The FIC, comprising representatives from investment companies, private banks, and international financial institutions, identifies barriers to investment inflow and reviews the relevant laws and regulations.

In 2021, the Strategic Development Agency (SDA) was established by Presidential Decree no. PD-6264/2021 to determine the priority sectors for investment and provide post-establishment support to strategic projects. The SDA will coordinate the work of the FIC Secretariat and the Project Office of the Advisor to the President of Uzbekistan on economic development management and international cooperation.

The Government is taking measures to ensure stakeholder consultations on critical laws, regulations, and policies. The SDNU envisions implementing various reforms to institutionalise stakeholders' participation further and decentralise the decision-making processes. It

recognises the need for a more compact and fair public administration, public accountability in implementing Government decisions and tracking the deliverables of State agencies through key performance indicators. The SDNU also refers to optimising the public administration by reducing the number of State agencies and ministries by transferring some of their functions to the private sector and public-private partnership (PPP)-based entities.

Uzbekistan is progressively strengthening its legal framework to fight corruption. In 2021, the Parliament enacted Law no. LRU-729/2021, which redefines the powers of the Anti-Corruption Agency of Uzbekistan (ACAU) and establishes national and regional anti-corruption councils to coordinate the activities of State institutions and organisations. The Law requires the ACAU to develop annual national anti-corruption reports and submit these to the Parliament for consideration and adoption. Moreover, the Government is currently developing the draft Law on Asset Declaration, which will require Government officials to submit income and asset declarations starting in 2023 and 2024, respectively.

In February 2022, the MoE published the annual report on activities implemented in the fuel and energy sector during 2021. The report, covering the electricity, natural gas, liquified gas and coal sub-sectors, indicates that, as of 1 June 2021, 7.4 and 3.8 million consumers have been connected to the country's power and gas grids, respectively. During the same period, 53 billion m³ of natural gas was produced. About 42 billion m³ of natural gas and 60.5 billion kWh of electricity were supplied to consumers, and 11 projects worth USD 1.143 billion were implemented. Sixty-six investment projects worth USD 3.27 billion were successfully implemented, of which USD 1.283 billion was FDI. The MoE also reported that in 2021, it developed the draft Law on Electrical Energy and the Power Grid Code.

AREAS FOR IMPROVEMENT

State agencies and State-owned enterprises should publish annual reports containing all the major activities and key financial indicators to increase transparency and public accountability. In line with Presidential Decrees no. PD-6300/2021 and no. PD-6247/2021, the Accounts Chamber should make the financial and compliance audits of State institutions and State-owned entities accessible to the public.

The Government may consider defining the modalities and timeframe of public participation in the country's legal framework.

Rule of law

QUICK FACTS

- | Uzbekistan has been a Contracting Party of the ECT since 1995.
- | The Convention on the Settlement of Investment Disputes between States and Nationals of Other States entered into force in Uzbekistan on 25 August 1995.
- | On 7 February 1996, Uzbekistan acceded to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards.
- | Uzbekistan joined MIGA on 4 November 1993.

STRENGTHS

Uzbekistan has established a comprehensive legal framework to promote alternative dispute resolution. Law no. LRU-674/2021 'On International Commercial Arbitration' entered into force on 16 August 2021, and several legal acts were amended to comply with its provisions. In particular, Law no. LRU-769/2022 amends the Economic Procedure Code (EPC) to include a comprehensive list of arbitration proceedings and the arbitration cases to be processed by Economic Courts. The EPC also has a new chapter on general rules that the Economic Courts must apply during arbitration proceedings. The new chapter defines the procedure for appealing an arbitral award before an Economic Court and the procedure and grounds on which an Economic Court can annul an arbitral award.

Law no. LRU-769/2022 introduces procedures for applying interim measures during arbitration proceedings and clarifies that the decisions of economic courts on the recognition and enforcement of foreign arbitral awards shall be executed immediately. Consequently, the Rules of the Tashkent International Arbitration Centre at the Chamber of Commerce and Industry of Uzbekistan have been updated and were published in October 2021.

On 29 July 2021, Law no. LRU-703/2021 'On Courts' entered into force. The new legislation aims to guarantee the justice system's fairness and independence, in line with the Constitution and international commitments. It identifies the composition of the country's judicial system, such as the types of courts, and defines the requirements and procedures for the selection and appointment of judges, Chairs and Vice-chairs of the courts. It also mentions that the court proceedings shall be public except in extraordinary and special cases.

The judiciary is taking steps to ensure public access to judicial information. Since 2021, it has provided regularly updated information on the status of pending judicial cases, the hearing schedules of the cases, orders and judgments, the names of the appellants, and dates of the decisions through the Supreme Court's interactive services portal.

Land reform is high on the Government's agenda. The Presidential Decree no. PD-6243/2021 'On Measures to Ensure Equality and Transparency in Land Tenure Arrangements, Reliable Protection of Land Rights and their Transformation into a Market Asset' now allows for

the permanent allocation of land plots to State authorities for implementing PPP-based projects. Private partners are allowed to lease the land for the duration of the PPP. The Decree makes land plots available for investment projects exceeding USD 10 million from 1 August 2021 onwards. It requires that all land auctions and tenders be carried out through an electronic system and that all decisions on land allocation are recorded in an integrated cadastre information system.

On 16 November 2021, Law no. LRU-728/2021 'On Privatisation of Non-agricultural Land Plots' entered into force. It defines the types of land that can be privatised and the categories of persons and entities restricted from privatising land in Uzbekistan. Its purpose is to strengthen protection offered to private property owners by defining their rights and providing a definitive set of circumstances in which the privatised land may be seized.

Uzbekistan has signed 49 BITs, of which 45 are in force. Some of these BITs refer to the energy and fuels sectors. For instance, the BIT with the United Arab Emirates specifies that the National Treatment principle applies to purchasing raw and auxiliary materials, energies, and fuels. Moreover, most of the IIAs signed by Uzbekistan recognise intellectual property rights, and some agreements, such as those with Spain and Türkiye, also consider industrial property rights as 'investment'.

The majority of BITs, including those between Uzbekistan and Switzerland and Uzbekistan and the United Kingdom, extend protection against expropriation and nationalisation to all forms of investment. BITs, including the ones between Uzbekistan and Austria and Uzbekistan and the Belgo-Luxembourg Economic Union, specify that compensation in the case of expropriation shall be paid to a foreign investor in the national currency or any other currency requested by the affected foreign investor. According to the BITs, payments must be made without delay, be freely transferable and include interest at the normal commercial rate calculated from the date of expropriation.

AREAS FOR IMPROVEMENT

The Government may consider updating Law no. LRU-598/2019 'On Investment and Investment Activities' to determine the compensation amount and the time of payment in case of expropriation.

Regulatory environment and investment conditions

QUICK FACTS

The MoE regulates the energy sector. The Inspectorate for Control over Use of Oil Products and Gas under the MoE issues licences for oil, gas and gas condensate exploration, processing and sales.

The Interagency Tariff Commission (ITF), under the supervision of the Cabinet of Ministers, regulates electricity, heating, and gas tariffs.

Law no. LRU-598/2019 defines the conditions for conducting investment activities.

STRENGTHS

Uzbekistan is taking steps to strengthen its regulatory framework in the electricity sector and mobilise international financing for the power sector reforms. The SDNU seeks to liberalise the energy market further while shielding vulnerable consumers from price hikes.

In June 2021, Uzbekistan received USD 427 million from the World Bank to implement the Electricity Sector Transformation and Resilient Transmission Project (ESTART) spanning 2021-2028. The Project aims to develop a regulatory framework for the wholesale power market and establish an independent regulatory authority and a central electricity buyer. ESTART also seeks to integrate 1.5 GW of renewable energy into the power grid, increase the institutional capacity of the Joint Stock Company National Electricity Grid of Uzbekistan, and improve its fiscal performance. The Project will also enhance the regional energy interconnections between Uzbekistan, Afghanistan, Kazakhstan and Tajikistan through rehabilitation and expansion of their respective transmission networks.

The Government has initiated the energy tariffs restructuring process. On 2 August 2021, the ITF decided to reduce the cross-sectoral tariffs for natural gas by 21% and electricity transmission tariffs by 5.9%. It also increased the domestic tariffs for electricity generation by about 21% and for distribution and retail by approximately 4.5%. In June 2022, the Cabinet of Ministers circulated a draft decision to increase electricity and natural gas tariffs for the Navoi and Almalyk mining and smelting plants and other organisations financed through the State budget. The draft decision also assumes further tariff increases in 2023, 2024, and 2025.

The Government is making efforts to attract investments in the country and the energy sector in particular. The SDA announced that in 2021, investments in Uzbekistan reached USD 11.1 billion, including USD 9.8 billion of FDI. On 31 December 2021, the Government approved Uzbekistan's Investment Programme for 2022-2026 and Introduction of New Approaches and Mechanisms of Investment Project Management. The Programme foresees the establishment of a digital database, 'Control and Monitoring of the Implementation of Investment Projects', that will allow State authorities to oversee investment projects more effectively. The Programme targets attracting capital investment projects of over 2,000 trillion Uzbek sum (UZS) in five years, including UZS 13,554 billion as FDI injection into projects to be implemented by the MoE.

Several renewable energy projects are currently being implemented or will be launched soon. The UAE-based Masdar commissioned its first 100 MW solar photovoltaic

station in Navoi in 2021, while the French company, Total Eren, commissioned a 100 MW solar photovoltaic station in Samarkand in 2022.

In 2021, Masdar was selected, through competitive bidding, to deploy one 457 MW and two 220 MW photovoltaic stations in Samarkand, Jizzakh, and Surkhandarya regions. The projects are being undertaken as a part of the World Bank's Scaling Solar and the ADB's Solar Public-Private Partnership Investment Program. The price of electricity produced at these stations will be as low as US 1.8 cents for the next 25 years. Moreover, in August 2022, Masdar launched the construction of a 500 MW utility-scale wind farm in Zarafshan.

Besides the projects mentioned above, the Saudi-based ACWA Power is investing over USD 1.5 billion in two wind power facilities of 500 MW in Dzhankeldy and Bash and a third 100 MW wind power facility in the Republic of Karakalpakstan. It will implement the projects on a Build-Own-Operate-Transfer basis. The Government has also announced its plans to install 21 hydropower plants with a total generation capacity of 740 MW and 22 mini hydropower plants (each with less than 5 MW generating capacity). At the same time, ACWA Power plans to commission, by 2024, its USD 1.2 billion Sirdarya combined cycle gas turbine (CCGT) of 1.5 GW.

The Government is encouraging PPP-based projects in the energy sector. In March 2022, it signed an agreement with the consortium of the French EDF, the Qatari Nebras Power, the Japanese Sojitz Corporation, and Kyuden International to develop an additional 1.6 GW CCGT in the Sirdarya region. The construction works are planned to start by the end of 2022.

AREAS FOR IMPROVEMENT

In line with the SDNU's intention to increase the financial control of public assets and institutionalise public engagement in the oversight process, Uzbekistan might consider joining the EITI. This action will be perceived as a commendable step towards improving transparency in petroleum and mining industries and fostering greater public accountability.

Uzbekistan must update and amend Law no. LRU-225/2009 'On Electricity' to liberalise its energy market. Moreover, while the electricity market restructuring process has already commenced with the implementation of the ESTART project, it is necessary to roll out the gas market liberalisation process. As a result, the Government should intensify its efforts to adopt the draft Law on Natural Gas Supply and the draft Grid Code.

INDICATOR 1

Improvements proposed in 2022

Introduce fiscal mechanisms to accelerate the use of clean technologies in the industrial sector and develop a carbon pricing mechanism.

Improvement suggested in 2022. Status will be updated in 2023.

Establish a robust MRV system to assess actual GHG emissions volume and comply with the commitments of the updated NDC.

Improvement suggested in 2022. Status will be updated in 2023.

Introduce tax incentives for manufacturing and purchasing EVs, and allocate public funding for the rapid development of the e-mobility infrastructure.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2019

Adopt a national energy strategy that will set the overarching framework for future actions.

Fully implemented. On 30 January 2021, the MoE published the Roadmap for the Transition to Low-Carbon Energy for Electrical Power of Uzbekistan.

Ensure that the authorities implementing the national energy policies are different from those evaluating the progress made towards achieving these policies.

Work ongoing. The SDNU assumes the establishment of a public system for monitoring the decision-making process by the Government entities, including through publication in mass media. It also envisions modern methods of conducting public oversight and introducing quality control over regional, sectoral, and national programmes.

Improvements proposed in 2022

Introduce financial and performance-based policy evaluation procedures and define the follow-up actions for the policy measures not implemented.

Improvement suggested in 2022. Status will be updated in 2023.

Make the annual performance evaluation and financial reports of State-owned energy companies publicly available.

Improvement suggested in 2022. Status will be updated in 2023.

Adjust the existing policy plans to accelerate the deployment of renewable energy sources during the first stage of the Low-carbon Electricity Roadmap (until 2030).

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 3

Improvements proposed in 2019

Develop institutional mechanisms and a legal framework to integrate stakeholder participation in regulatory decision-making.

Work ongoing. The SDNU envisions the implementation of various reforms aimed at further institutionalising stakeholder engagement and decentralising the decision-making processes.

Improvements proposed in 2022

Mandate the Accounts Chamber of Uzbekistan to publish annual performance and financial compliance reports of State agencies and State-owned enterprises.

Improvement suggested in 2022. Status will be updated in 2023.

Define the modalities and timeframe of public participation in the country's legal framework to modernise the decision-making process and intensify consultations with civil society institutions, as outlined in the SDNU.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2019

Consider setting a legally binding timeframe to pay compensation in the case of expropriation.

Pending

Improvements proposed in 2022

Consider updating Law no. LRU-598/2019 'On Investment and Investment Activities' to determine the compensation amount and the time of payment in the case of expropriation.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 5

Improvements proposed in 2019

Establish an independent energy regulator that has institutional, functional, and financial autonomy.

Work ongoing. In June 2021, Uzbekistan received USD 427 million from the World Bank to implement the ESTART Project spanning 2021-2028. The Project aims to develop a regulatory framework for the wholesale power market and establish an independent regulatory authority for the energy sector.

Improvements proposed in 2020

Approve the subsidiary rules on market operations and licencing of its participants, models of the wholesale electricity market, and the electricity balancing model.

Work ongoing. In June 2021, the MoE concluded the process of drafting a concept note on a three-stage transition to a competitive wholesale electricity market from 2021 to 2025. With technical support from the World Bank, the Government is currently drafting the Grid Code.

Improvements proposed in 2022

Consider joining the EITI, in line with the SDNU's intention to increase transparency and public accountability.

Improvement suggested in 2022. Status will be updated in 2023.

Amend Law no. LRU-225/2009 'On Electricity' to liberalise the energy market and intensify efforts to adopt the draft Law on Natural Gas Supply and the draft Grid Code.

Improvement suggested in 2022. Status will be updated in 2023.

Roll out the gas market liberalisation process to promote transparency in transmission tariffs, gas trade, and exchange and enable competition in gas exports and non-discriminatory third-party access.

Improvement suggested in 2022. Status will be updated in 2023.



Viet Nam

Population ¹	98,168,829
Area (km ²) ¹	331,340
GDP per capita (USD) ¹	3,694.02
TES/GDP (GJ/thousand 2015) ²	15.20
Net Energy Imports (TJ) ²	1,484.22
RE share in Final Energy Consumption (%) ²	18.7
Total CO ₂ emissions (MtCO ₂) ²	282.28

Data by Orbis Crossborder Investment on completed energy projects and deals from 2015-2022³

Target industry	Number of projects and deals	Project CapEx and deal value (million EUR) by source country
Electric power generation, transmission and distribution	12 new projects 1 co-location project 6 acquisition deals 4 minority stake deals	Republic of Korea: 3 RE projects of 1,146.07 mEUR 1 FF deal of 7.04 mEUR
		Japan: 2 RE projects of 435.4 mEUR 1 RE co-location project 4 mEUR 2 RE deal of 17.73 mEUR
		Taiwan: 1 RE project of 384.96 mEUR
		Thailand: 2 RE projects of 102.02 mEUR 1 RE deal of 39.77 mEUR
		Philippines: 3 RE projects of 459.31 mEUR
		Saudi Arabia: 1 RE project of 51.39 mEUR
		Singapore: 1 FF deal of 44.58 mEUR 2 RE deals of 1.25 mEUR
		Malaysia: 1 RE deal of 0.13 mEUR
		Value of 1 deal (Spain) is N/A
		Extraction of crude petroleum
Extraction of natural gas	1 new project	Japan: 1 project of 1,000 mEUR
Support activities for petroleum and natural gas extraction	1 new project	Denmark: 1 project of 4 mEUR
Transport via pipeline	1 joint venture deal	Value of 1 deal (United Arab Emirates) is N/A

Sources:

1. The World Bank 2020 (area) and 2021 (population and GDP per capita).
2. ©IEA (2022), World Energy Balances (<https://www.iea.org/data-and-statistics>). All rights reserved.
3. Orbis Crossborder Investment (2022), Bureau Van Dijk. Data represents the period 1 April 2015 - 1 April 2022.

For more information see Annex III of this report.

RE: Renewable energy based electricity production

FF: Fossil fuel based electricity production

Viet Nam’s overall risk level against the assessed areas is **low**.

Among the three risk areas, the risk of *discrimination between foreign and domestic investors* is lower than the risks of *breach of State obligations* and *unpredictable policy and regulatory change*.

Viet Nam has a good performance on three EIRA indicators and a moderate performance on two indicators. *Rule of law* is the highest-scoring indicator with 79 points followed by *management of decision-making processes* and *framework for a sustainable energy system*, at 67 and 62 points respectively. It has a score of 58 on the indicator *regulatory environment and investment conditions*. Its lowest-scoring indicator is *foresight of policy and regulatory change* at 55.

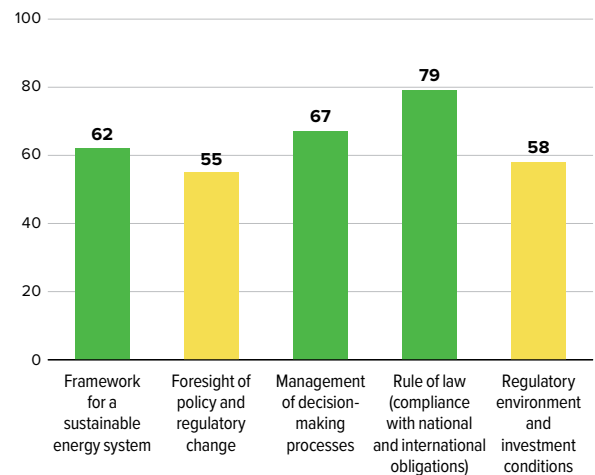
Viet Nam’s overall sub-indicator performance is good. The highest scoring sub-indicators are *policy planning on clean energy transition* at 85, *respect for property rights* at 83, and *management and settlement of investor-State disputes* at 75. A good score of 67 has been obtained on three sub-indicators, namely *energy resilience*, *institutional governance*, and *transparency and anti-corruption measures*, followed by *communication of vision and policies* at 66. *Regulatory independence* stands at 64, *restrictions on FDI* at 61, and *environment protection, human rights and gender* at 52. The lowest-scoring sub-indicators are *electricity industry market structure and competition* at 49, and *enabling measures to support clean energy transition* and *robustness of policy goals and commitments*, both at 44.

While Viet Nam is progressively reducing legal and regulatory risks associated with energy investments, it must make more efforts to increase the robustness of policy goals and commitments and implement measures to achieve a clean energy transition.

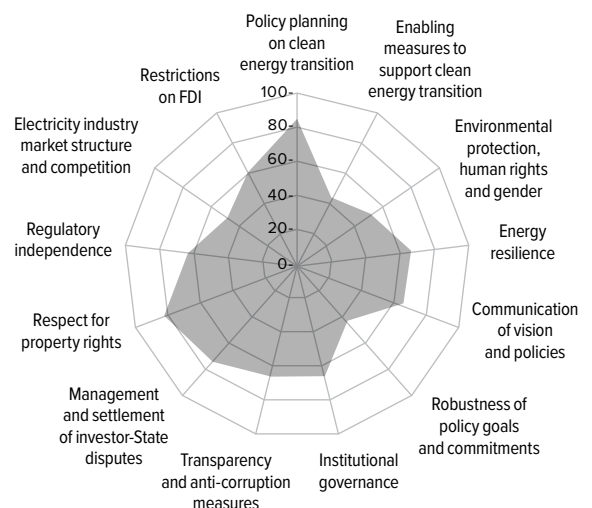
RISK LEVEL



INDICATOR PERFORMANCE



SUB-INDICATOR PERFORMANCE



Framework for a sustainable energy system

QUICK FACTS

- | Viet Nam submitted its updated NDC to the UNFCCC Secretariat in 2020.
- | The amended Law on Environmental Protection No. 72/2020/QH14 and its implementing Decree No. 08/2022/ND-CP took effect in January 2022.
- | The National Green Growth Strategy (NGGS) 2021-2030 was approved by the Deputy Prime Minister in October 2021.

STRENGTHS

Viet Nam's updated NDC identifies economy-wide mitigation measures covering the energy, agriculture, waste, Land Use, Land-Use Change and Forestry (LULUCF), and industrial sectors. The country has increased its unconditional GHG emissions reduction target to 9% by 2030 and included industrial processes within the NDC's scope. The updated NDC's implementation is expected to reduce GHG emissions to a total of 83.9 MtCO₂eq which constitutes a 34% additional reduction (21.2 MtCO₂eq) compared to the initial NDC. Following COP26, the Government has pledged to lower methane emissions by 30% by 2030, phase out coal-fuelled power generation by 2040, and achieve net-zero carbon emissions by 2050.

Viet Nam's Renewable Energy Development Strategy up to 2020 with an outlook to 2050 (RE Strategy) aims to ensure that approximately 32% of the total primary supply and electricity generation by 2030 is from renewable energy sources. GHG emissions from energy activities are expected to reduce by 25% in 2030 and around 45% in 2050 compared with the business-as-usual (BAU) scenario. The NGGS 2021-2030 reflects the Government's aspiration to ensure economic prosperity and environmental sustainability. It contains more advanced targets than its predecessor to reduce the intensity of GHG emission per unit of GDP by at least 15% by 2030 and 30% by 2050, compared to 2014.

The Government is looking to expand the energy infrastructure and grid connectivity. To this end, it is funding the grid-connected electrification of the Con Dao district partly through the State budget and partly by Vietnam Electricity (EVN), which is also carrying out work on nearly 540 km of distribution lines and electrical substations (approximately 900 MVA). Once the Con Dao electrification project is completed, a total of 630 MW of renewable energy will be connected to the distribution network, replacing part of the fossil generation (estimated at 1 TWh) and resulting in a CO₂ emissions reduction of 68 ktCO₂e per year.

Viet Nam is taking measures beyond the power sector to reduce its GHG emissions and step up the use of energy-efficient technologies. For instance, the Nationally Appropriate Mitigation Actions (NAMA) targets to replace 50% of existing air conditioning and heating systems in residential and commercial buildings with high-performance ones by 2025. Moreover, 50% of refrigerants from replaced air conditioners must be captured and destroyed. All obsolete air conditioning and heating systems must be retired by 2030. Similarly, the NGGS 2021-2030 defines measures to develop environmentally friendly means of transport, establish green logistics centres and green ports, and convert freight transport

by road to waterways and railways. Financing for these measures is supported through the Medium-term Public Investment Plan for 2021-2025, which allocates around 40% of the total investment capital (1,233,000 billion Vietnamese dong (VMD)) to transport.

Mitigating the impact of economic activities on the environment is a key priority of the Government. The new legislation on environmental protection now requires a preliminary environmental impact assessment for projects previously exempted under the Law on Investment No. 67/2014/QH13, as amended. Depending on the nature of the project, investors must obtain an environmental licence before commissioning waste treatment facilities or exploiting natural resources or hydrocarbons. Environmental protection fees apply to parties that discharge waste, exploit minerals, or otherwise undertake activities that negatively impact the environment. An environmental protection deposit is required to cover future costs for recovery and restoration or remedying pollution caused by certain business activities.

Further positive developments include regulatory tools for promoting a circular economy based on the principle of recycling and recovering energy from waste. Accordingly, importers and producers of certain recyclable goods and packaging products must recycle a minimum percentage of their produced or imported goods at the end of their use term. Alternatively, they can make a monetary contribution to the Viet Nam Environmental Protection Fund. To comply with the new legal requirements, manufacturers and producers must register recycling plans and report the results annually to the Ministry of Natural Resources and Environment (MONRE).

AREAS FOR IMPROVEMENT

Current efforts, such as the NDC Transport Initiative for Asia-Viet Nam for measurement, reporting and verification of transport emissions mitigation, should be replicated in other sectors, such as energy and agriculture. Ultimately, the country should develop the national GHG inventory implementation plan to meet the requirements of the Enhanced Transparency Framework under the Paris Agreement.

Although Viet Nam's updated NDC refers to the impacts of climate change on women, the Government needs to develop a comprehensive national strategy to ensure gender equality and inclusion across the different economic sectors, including energy. To mainstream gender in climate and energy policies, the Government should invest in awareness-raising, capacity-building, and training women in adopting new climate-related technologies.

Foresight of policy and regulatory change

QUICK FACTS

The National Energy Development Strategy to 2030 with a Vision to 2045 (NEDS), approved in 2007, aims to ensure national energy security as a foundation for growth.

In February 2020, Politburo Resolution No. 55- NQ/TW On the orientation of the National Energy Development Strategy of Viet Nam to 2030 with a vision to 2045 (Resolution 55) and Resolution No. 140/NQ-CP1 (Resolution 140) promulgating the Government's Action Programme to implement Resolution 55 were issued.

National Power Development Plans (PDPs), drafted every five years, provide detailed planning and provisional forecast of sectoral development for ten years.

STRENGTHS

Resolution 55 sets the pathway to building a competitive and transparent energy market with different ownership and business models, securing a diversified energy supply, exploiting renewable and clean energy sources, and increasing energy efficiency. According to Resolution 55, Viet Nam's total primary energy supply must reach 175-195 Mtoe by 2030 and 320-350 Mtoe by 2045. The total installed power generation capacity must amount to 125-130 GW. Furthermore, renewable energy must account for 15-20% of the primary energy in 2030 and 25-30% in 2045. The energy efficiency ratio on total final energy consumption compared to the BAU scenario is expected to reach approximately 7% in 2030 and 14% by 2045. CO₂ emissions from energy activities will decrease by 15% in 2030 and 20% in 2045 compared to the BAU scenario.

In 2022, the Government made progress on the adoption of the PDP for 2021-2030, with a vision to 2045 (PDP VIII). Once approved, PDP VIII will set the immediate and long-term priorities for the energy sector and inform investors of its future development trajectory. In line with the targets set by Resolution 55, the PDP VIII proposes increasing electricity capacity to 146,000 MW by 2030 from diverse energy sources, including fuel hydrogen and ammonia. The share of renewable energy, particularly wind, is expected to increase in the power mix. By 2030, the total capacity of renewable sources (excluding hydropower) must reach 38 GW from 21 MW at the end of 2021, thus contributing 24% in the energy mix. The total power generation capacity from renewables is expected to rise to about 56 GW by 2045.

The Government is already taking measures to implement its ambitious renewable electricity targets while ensuring the security of the energy supply. By the end of September 2021, more than 100,000 rooftop solar systems were installed with a total capacity approximating 10 GW, accounting for more than 10% of the total installed capacity of the national power system. In parallel, supporting infrastructure for liquified natural gas imports is being developed. The first facility – the Thi Vai complex, with a one million metric tonne capacity – will be completed in the first half of 2022. The Quang Ninh LNG plant also recently received an investment registration certificate. The project includes a 1,500 MW power plant, gas storage, and an LNG port with an annual capacity of 2.4 million tonnes. Similar certificates were granted in May 2022 to PetroVietnam Gas JSC and AES Corporation for the Son My LNG terminal project. Moreover, in January 2022, work started on the USD 2.37 billion Hai Lang LNG

power centre in Quang Tri. The project, funded by private investors, will have a capacity of 1,500 MW and be able to supply 8.25 billion kWh to the national grid each year.

Resolution 140 outlines specific tasks and responsibilities of State agencies in implementing Resolution 55. Monitoring and reporting mechanisms are stipulated in various strategic documents, such as the National Energy Efficiency Program (VNEEP) 2019-2030 and the Law on Energy Efficiency and Conservation. A Steering Committee comprising representatives of relevant ministries and local authorities monitors the implementation of the VNEEP. It communicates the results to the Prime Minister, while the Ministry of Industry and Trade (MOIT) oversees renewables deployment across the country. In March 2022, the Government announced that the State Inspectorate would conduct a comprehensive inspection of power projects developed in 2011-2021 under the national PDP VII. The purpose of this exercise is to determine legal compliance in the implementation of the investments. The inspection outcome will be considered in the finalisation of the PDP VIII. Similar tasks have been assigned to the MOIT, which is expected to review the conclusions in Circular No. 92/TB-VPCP of 31 March 2022, stipulating clear criteria for critical projects in light of the needs of each region and locality. At the same time, the MOIT must review power plants and power transmission grids under development and define the list of projects to be prioritised in each period (2021-2025 and 2026-2030) following the criteria proposed in PDP VIII. In doing so, the MOIT must receive feedback from relevant ministries and agencies and the opinion of the localities on the problems and inadequacies of the PDP VII.

AREAS FOR IMPROVEMENT

The Government is commended for prioritising clean energy development and becoming a regional renewable energy market in just a few years. To achieve continuous and sustainable growth, it must resolve some critical challenges. First, it should ensure that the national grid can uptake higher shares of variable generation and add responsive transmission lines. Moreover, the Government should maintain a stable investment climate while transitioning away from feed-in tariffs. In addition to the Direct Power Purchase Agreement (DPPA) pilot programme, auctions and self-consumption schemes could be considered an alternative for all parties' long-term benefit.

Management of decision-making processes

QUICK FACTS

The MOIT is responsible for the overall energy policy development.

In July 2020, the Prime Minister of Viet Nam approved the National Climate Change Adaptation Plan (NAP) for the period 2021-2030, with a vision to 2050.

Consultation on draft laws and public interest issues is regulated by Law No. 80/2015/QH13 On the Promulgation of Legal Documents.

The amended Anti-Corruption Law No. 36/2018/QH14 came into force in 2019.

STRENGTHS

The Government continues to adopt reforms to reinforce public administration capacities and create a favourable administrative environment for citizens and investors. The Satisfaction Index of Public Administrative Services (SIPAS), in place since 2018, measures people's satisfaction with administrative services, while the Provincial Competitive Index (PCI) reflects changes in the business and regulatory environment. Starting in 2022, the PCI will also evaluate provincial performance in administrative reform, per Prime Minister Decision No. 288/GQ-TTg. Other initiatives include the consolidation of the Steering Committees of the VNEEP and the Electricity Development. The two Committees are obliged to advise the Prime Minister on inter-sectoral matters regarding energy efficiency and PDP projects, respectively. Moreover, the revised Law on Environmental Protection has simplified the licensing process by introducing a single comprehensive licence. At the same time, EVN plans to integrate more of its services into the National Public Service Portal, including business data from the National Database on Business Registration, to better perform power supply services for enterprises.

There is a general obligation for all public authorities to publish legal acts in the Official Gazette. All draft legislation must undergo public consultation. As such, MONRE organised, in 2021, a public consultation on the National Climate Change Adaptation Plan for the period 2021-2030, with a vision to 2050, with the participation of international interlocutors. The MOIT has already released several versions of the PDP VIII to the public to gather input from the private sector. Public consultations were also held for, among others, the proposed amendments to the Electricity Law, the Law on Water Resources, and the Decree detailing the Law on Environmental Protection provisions.

The MOIT's official website offers energy-related information, such as the method for determining electricity generation prices and the implementation status of the electricity selling price regulations. Similar information is available on the Electricity Regulatory Authority of Vietnam's (ERAV) website, including Decision No. 96/QD-DTDL of 6 January 2022, approving the demand for ancillary services in 2022.

The Law on Bidding No. 43/2013/QH13 is compatible with the commitments in the EU-Viet Nam Free Trade Agreement (EVFTA) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) regarding government procurement. These commitments refer, among others, to transparency and competition in the tendering process. The national

e-Procurement Centre, operating under the Ministry of Planning and Investment (MPI), ensures unified information management on bidding. According to the 2022 amendments to the Law on Bidding, project owners must introduce requirements on the procurement of eco-friendly, low-emission, and energy-efficient products and services. In addition, project owners can approve bidding and requirements dossiers and select contractors before their projects are approved, thus helping reduce project implementation time and speed up capital disbursement.

The Law on State Budget No. 83/2015/QH13 requires public authorities to disclose their budget estimates, information on its utilisation, and final accounts to improve public oversight. In 2021, the Ministry of Finance released the State and local budget estimates, the executive budget proposal and the enacted budget. Annual reports on State budget implementation are disclosed after the Government submits them to the National Assembly at the mid-year session of the following year. Following the adoption of Decree No. 47/2021/ND-CP detailing regulations of the Law on Enterprises No. 59/2020/QH14, as amended in 2022, entities in which the State holds 50% of charter capital or voting shares also have to disclose their financial statements twice a year.

The Anti-Corruption Law has introduced the concept of 'accountability' of State agencies and individuals for decisions and acts performed in the context of their assigned duties. Any violations and feedback on issues related to the performance of public duties must be disclosed. The Government Inspectorate (GI) is responsible for conducting an inspection, settling complaints, and combatting corruption. Moreover, the GI determines whether a ministry or local government has responded to the complaints of citizens.

AREAS FOR IMPROVEMENT

The Government should carry on with the positive reforms in public administration. Further initiatives to improve the quality of services may include enhancing the cooperation between the one-stop shops operating at various levels of public administration with the National Single Window.

The Government should introduce a legal framework that requires companies operating in the oil, gas and mining industry to report on their legal and beneficial owners when registering in the country. Subsequently, the Government should collect, maintain, and publish a beneficial ownership register that records this data in a comprehensive and accessible manner.

Rule of law

QUICK FACTS

- | Viet Nam signed the International Energy Charter political declaration on 13 November 2018.
- | Viet Nam became a signatory to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards in 1995.
- | The MPI maintains statistics on domestic investment, foreign investment, and Viet Nam's investment abroad.
- | Viet Nam has officially been a MIGA member since 1994.

STRENGTHS

Over the last years, Viet Nam has promoted alternative dispute resolution methods to save costs and time and resolve disputes between investors and State agencies more flexibly and efficiently. The Law On Investment, as amended in 2020, provides that disputes arising from investment activities between domestic and foreign investors, between domestic investors, or between foreign investors and State agencies can be settled by Vietnamese courts or by arbitration.

Various State agencies and authorities have implemented online dispute settlement processes. Decree No. 22/2017/ND-CP On Commercial Mediation provides for online dispute mediation. In April 2021, the Mediation Centre, a Viet Nam International Arbitration Centre division, launched the Med(iation)Up(load) online platform. In addition to conventional commercial disputes, MedUp will provide technology solutions to resolve business-to-consumer disputes, including credit disputes. Resolution No. 04/2016/NQ-HDTP of 2016 guides the application of the Civil Procedure Code and Administrative Procedure Law provisions regarding sending and receiving petitions, evidence, and documents, and issuing, serving, and notifying court documents by electronic means. Similarly, the Supreme People's Court's judgments and decisions must appear on the Court's web portal within 30 days from the date they take effect.

Investor-State Dispute Settlement (ISDS) mechanisms are envisaged in the Free Trade Agreements (FTA) Viet Nam has concluded, such as the CPTPP, the Association of South-East Asian Nations (ASEAN)-Australia-New Zealand FTA, and the EVFTA. The latter, in particular, will set up a permanent and fully independent two-tiered investment tribunal system under which disputes on investment protection provisions included in the FTA can be heard. The final settlement will be binding and enforceable by local courts.

Property lawfully acquired by individuals and entities cannot be nationalised under national legislation. The CPTPP and the EVFTA outlaw direct and indirect expropriation. The EVFTA contains provisions to decide

whether or not a Government measure constitutes indirect expropriation. At the same time, it clearly states that investors cannot challenge legitimate public policy measures. Whether an action or series of actions constitutes an indirect expropriation requires a case-by-case, fact-based inquiry that considers, among other factors, the character and economic impact of the Government action and the extent to which it interferes with reasonable investment-backed expectations.

National Treatment and Most-Favoured-Nation principles are enshrined in all FTAs and BITs to which Viet Nam is a party and extend to real and intellectual property rights. Exemptions from this obligation must be per the provisions of the TRIPS Agreement, in particular Articles 4 and 5. The National Office of Intellectual Property, under the aegis of the Ministry of Science and Technology, administers the registration of industrial designs, trademarks, brand names, and other industrial property rights and conducts legal appraisals to settle IP disputes. In March 2021, the ASEAN Intellectual Property Office urged members to accelerate the completion of the remaining deliverables under the ASEAN Intellectual Property Rights Action Plan 2016-2025. This requires that members devote more significant resources to renovating their patent systems to meet investors' expectations and gain global innovation arbiters' approval. In April 2022, the Minister of Industry and Trade announced that Viet Nam would set up stable dialogue mechanisms with Australia to receive sustainable coal mining and processing technology.

AREAS FOR IMPROVEMENT

The term 'public interest' as grounds for legitimate expropriation should be defined in domestic law to offer investors more legal certainty.

The Government has taken positive measures to address challenges related to domestic courts' enforcement of foreign arbitral awards. Future initiatives should reduce the number of procedural steps required to recognise and enforce foreign arbitral awards. The Government may also consider becoming a member of the International Center for Investment Dispute Settlement.

Regulatory environment and investment conditions

QUICK FACTS

The MOIT regulates energy sector activities and energy use. The ERAV has been established under the MOIT to promote a competitive power market, handle inspections and resolve disputes in electricity activities.

In January 2022, the National Assembly passed amendments to the Law on Excise Tax, Law on Bidding, Law on Electricity, Law on Public Investment, and Law on PPP Investment (Law No. 03/2022/QH15). The amendments took effect on 1 March 2022.

STRENGTHS

Resolution 55 reinforces Viet Nam's plans to attract foreign investment on a large scale and ensure the progress of power projects. Viet Nam has already implemented several stages of its electricity market reforms. The most recent one concerns the amendments to the Electricity Law that allow private investors to operate transmission grids they have invested in and built themselves.

In March 2022, the Prime Minister of Viet Nam issued Decision No. 360/QĐ-TTg approving the restructuring of State-owned enterprises and corporations between 2021 and 2025, including the National Oil and Gas Group, Vietnam Electricity (EVN), the Coal-Mineral Industry Group, and the Chemical Group. Following suit, EVN published Directive No. 991/CT-EVN on 22 March 2022 to implement its business reorganisation, innovation, and development. Under the Directive, EVN will continue restructuring into separate entities to enhance operational independence and divestment from non-strategic power generation activities.

The Government is taking measures to ensure the supply of affordable and reliable power while ensuring its energy security. In March 2022, the MOIT instructed EVN to develop a retail tariff for average electricity rates applicable during the year. The tariff should be based on EVN's business results from last year, the estimated electricity generation, transmission and distribution costs, and other expenses from retail and ancillary services. To meet higher electricity demand, EVN plans to increase by 8% the electricity produced and imported from 253 billion kWh in 2021 to 275.5 in 2022. For this purpose, it is now constructing the Vietnamese section of a 220 kV transmission line between Nam Mo, Laos, and Tuong Duong in the central province of Nghe An.

Viet Nam has committed to increasing generation from renewables by facilitating trade and investment through the EVFTA's Chapter 7. More specifically, the EVFTA requires the Government to refrain from adopting local content requirements or requiring foreign investors to form a partnership with local companies. Moreover, the Government must ensure that any investment authorisation, certification and licensing requirements are applied in an objective, transparent and non-arbitrary manner among applicants from the contracting parties. ERAV has also been collaborating with United States Agency for International Development (USAID) since 2020 on the Viet Nam Low Emission Energy Program (V-LEEP II). This pilot Program will allow the Government to enter into DPPAs with renewable electricity producers and commercial and industrial consumers. With Draft Decision No. 544 of 2021, the MOIT has proposed a synthetic

DPPA mechanism for off-site renewable electricity projects to be developed between 2020 and June 2022. Subsequently, the DPPA pilot is proposed to be limited to power consumers for industrial manufacturing. The generation would come from grid-connected solar and wind generators over 30 MW, already approved under the PDP VII.

In 2021, Viet Nam absorbed USD 31.1 billion of FDI, representing a year-on-year increase of 9.2%. Notably, a significant portion of this foreign investment was channelled into renewable projects. These developments align with the surge of private investment in wind and solar under Independent Power Producer (IPP) arrangements. From 2018 to 2020, the share of capacity owned by IPPs jumped from 21% to 31% of total installed capacity. As Viet Nam transitions from the feed-in tariff regime, the PPP law provides an adequate legal framework for large-scale renewable projects, allowing more flexibility to negotiate contract terms. At the same time, PDP VIII offers incentives to investors in renewables, including preferential land rental, exemption from import taxes and low-rate corporate income tax. There are 70 wind-to-power projects with a total capacity of 3,987 MW, while more are in the pipeline. For instance, Intracom is planning an offshore 1,000 MW wind farm with a total investment of USD 3.1 billion in the Quang Tri province. In November 2021, the B&T wind power farm with a capacity of 252 MW was inaugurated in Quang Ninh and Le Thuy districts. Overall, the MOIT estimates that 5,000 MW of offshore wind power will be developed by 2030, increasing to around 40,000 MW by 2045. Offshore wind will account for 12% of the system source structure by 2045, with a planned building capacity of 41 GW.

AREAS FOR IMPROVEMENT

EVN's tariff reform should be carried out progressively so that the higher electricity prices resulting from cost-reflective tariffs do not disproportionately affect vulnerable households. Moreover, cross-subsidies imposed on industrial consumers must be eliminated to reduce costs for operating businesses in Viet Nam and render the electricity sector viable.

The Electricity Law amendments securing private investors' involvement in transmission operations is a positive development in upgrading the transmission system to keep up with current needs. The Government should now focus on developing a framework that allows for bankable concessions agreements that support new transmission investments.

INDICATOR 1

Improvements proposed in 2022

Develop a measurement, reporting and verification system to evaluate the implementation of GHG emission reduction measures.

Improvement suggested in 2022. Status will be updated in 2023.

Develop a comprehensive national strategy to ensure gender equality and inclusion across the different economic sectors, including energy.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 2

Improvements proposed in 2019

Adopt a long-term strategy for renewable energy and revisit incentive schemes (FIT).

Work ongoing. Since 2019, the Government has revised the incentive schemes (FIT2, FIT3) and is currently working on developing a Direct Power Purchase Agreement pilot programme, auctions and self-consumption scheme. Moreover, the PDP VIII, once adopted, will offer incentives to investors in renewables, including preferential land rental, exemption from import taxes and low-rate corporate income tax.

Ensure that the policy implementation authorities differ from those evaluating the progress made towards achieving the policy.

Work ongoing. A steering committee comprising representatives of relevant ministries and local authorities monitors the implementation of the National Energy Efficiency Program 2019-2030 and communicates the results to the Prime Minister of Viet Nam.

Improvements proposed in 2021

Promote balanced growth between solar and wind power generation by providing the necessary incentives to investors in the wind sector.

Work ongoing. There are 70 ongoing wind-to-power projects with a total capacity of 3,987 MW.

INDICATOR 3

Improvements proposed in 2019

Introduce a one-stop shop at national level and streamline administrative procedures.

Partially implemented. One-stop shops operate at regional level. The National Single Window is fully operational with 200 administrative procedures of 13 ministries and sectors connected to it by the end of 2020. Moreover, the country is now connected to nine ASEAN countries through the ASEAN Single Window.

Improvements proposed in 2022

Introduce a legal framework for the oil, gas and mining industries to report on their legal and beneficial owners when registering in the country and collect data on beneficial ownership.

Improvement suggested in 2022. Status will be updated in 2023.

INDICATOR 4

Improvements proposed in 2019

Provide a definition of the term 'public interest' in relation to forceful purchase or requisition of property.

Pending

Improvements proposed in 2021

Introduce measures to expedite recognition of foreign arbitral awards and ensure their enforcement and consider membership to the International Center for Investment Dispute Settlement.

Work ongoing. Since 2020, the Supreme People's Court and the Supreme People's Procuracy have been working on a resolution that will provide guidance to national courts on the procedural and documentary requirements concerning the recognition of foreign arbitral awards.

INDICATOR 5

Improvements proposed in 2019

Reinforce ERAV's institutional independence and create a similar regulatory authority for the oil and gas sub-sectors.

Pending

Improvements proposed in 2021

Liberalise the energy sector and reduce the role of State entities, including Petrovietnam and Electricity Vietnam.

Work ongoing. In 2022, the Prime Minister of Viet Nam issued Decision No. 360/QĐ-TTg approving the restructuring of State-owned enterprises and corporations between 2021 and 2025, including the National Oil and Gas Group, Electricity Vietnam, the Coal-Mineral Industry Group, and the Chemical Group.

Define the term 'national defence and security' in the Law on Investment of 2020 as an additional market condition and grounds for the termination or suspension of investment activities.

Pending

Improvements proposed in 2022

Introduce cost-reflective tariffs in the electricity sector and eliminate cross-subsidisation.

Improvement suggested in 2022. Status will be updated in 2023.

Develop a framework for bankable concessions agreements that support new transmission investments.

Improvement suggested in 2022. Status will be updated in 2023.

ANNEX I: EIRA QUESTIONNAIRE



Indicator 1: Framework for a sustainable energy system

QUESTIONS	SCORING
Sub-indicator 1.1: Policy planning on clean energy transition	
1.1.1 Has your country:	
a. become a party to the UNFCCC Paris Agreement [Y/N]	Yes- 33.33, No-0
b. communicated to the UNFCCC Secretariat the long-term low GHG emissions development strategy per the Paris Agreement [Y/N]	Yes- 33.33, No-0
c. submitted an updated NDC to the UNFCCC Secretariat [Y/N]	Yes- 33.33, No-0
1.1.2 Has your country:	
a. specified the energy sector CO ₂ contribution in its NDC [Y/N]	Yes- 33.33, No-0
b. set an action plan to implement its NDC target [Y/N]	Yes- 33.33, No-0
c. appointed a national lead authority to implement the NDC [Y/N]	Yes- 33.33, No-0
1.1.3 Do national policies and plans include emissions reduction actions/measures for the energy sector? [Y/N]	Yes-100, No-0
1.1.4 Has your country committed to a date by which it will achieve net-zero emissions? [Y/N]	Yes-100, No-0
1.1.5 Has your country developed:	
a. policies and/or strategies to expand the use of electric power transport [Y/N]	Yes- 33.33, No-0
b. policies and/or strategies to promote sustainable renewable fuels in transport [Y/N]	Yes- 33.33, No-0
c. an action plan for the use of electric power transport [Y/N]	Yes- 33.33, No-0
1.1.6 Has your country developed:	
a. policies and/or strategies for renewable and energy-efficient technologies in heating and cooling [Y/N]	Yes-50, No-0
b. an action plan for renewable and energy-efficient technologies in heating and cooling [Y/N]	Yes-50, No-0
1.1.7 Has your country developed:	
a. policies and/or strategies on large-scale energy storage [Y/N]	Yes-50, No-0
b. an action plan for large-scale energy storage deployment [Y/N]	Yes-50, No-0
1.1.8 Is there a policy framework to monitor the implementation of renewable energy	
a. targets [Y/N]	Yes-50, No-0
b. programmes [Y/N]	Yes-50, No-0
1.1.9 Is there a policy framework to monitor the implementation of energy efficiency and energy use	
a. targets [Y/N]	Yes-50, No-0
b. programmes [Y/N]	Yes-50, No-0
1.1.10 Has your country developed:	
a. policies/strategies/action plans to increase energy security [Y/N]	Yes-50, No-0
b. policies/strategies/action plans to promote climate-neutral energy transition and ensure energy security [Y/N]	Yes-50, No-0
1.1.11 Is there a policy framework in place for tracking:	
a. the implementation of the country's NDC [Y/N]	Yes-50, No-0
b. progress towards the CO ₂ emissions reduction targets [Y/N]	Yes-50, No-0
Sub-indicator 1.2: Enabling measures to support clean energy transition	
1.2.1 Has your country set a:	
a. carbon pricing mechanism (e.g. through a carbon tax, emissions trading scheme, etc.) covering its GHG emissions [Y/N]	Yes-50, No-0
b. measurement, reporting and verification system for GHG emissions [Y/N]	Yes-50, No-0
1.2.2 Has the government:	
a. set policy targets that are legally binding for renewable energy [Y/N]	Yes-25, No-0
b. set penalties for not meeting policy targets for renewables [Y/N]	Yes-25, No-0
c. set policy targets that are legally binding for energy efficiency and/or energy use [Y/N]	Yes-25, No-0
d. designated a body responsible for enforcing penalties in case policy targets are not met [Y/N]	Yes-25, No-0
1.2.3 Does your country offer instruments of at least ten years duration for renewable electricity production (e.g. via feed-in-tariffs, Power Purchase Agreements (PPAs) awarded through auctions, etc.) to:	
a. small-scale producers (10 MW or less) [Y/N]	Yes-50, No-0
b. large-scale producers (more than 10 MW) [Y/N]	Yes-50, No-0
1.2.4 Has the government taken measures to coordinate clean energy generation with the grid infrastructure development? [Y/N]	Yes-100, No-0
If yes, please provide some examples of these measures.	

QUESTIONS	SCORING
1.2.5 Has the government set a legally binding:	
a. date to retire domestic thermal power plants [Y/N]	Yes-50, No-0
b. date to phase out the domestic consumption of coal [Y/N]	Yes-50, No-0
c. the country does not have thermal power generation, coal mining operations, or use of coal [Y/N]	Yes-100, No-0
1.2.6 Has the government set a legally binding:	
a. requirement on public banks and national development agencies to divest from fossil-based investments [Y/N]	Yes-50, No-0
b. deadline for phasing out public spending on fossil fuels (such as fossil fuel subsidies/preferential programmes) [Y/N]	Yes-50, No-0
c. the country does not finance fossil operations or give fossil fuel subsidies [Y/N]	Yes-100, No-0
1.2.7 Has your country set short-/mid-term targets (or other policy measures) for the:	
a. integration of variable renewable energy in power generation [Y/N]	Yes-20, No-0
b. electrification of new end uses (such as transport and heating) [Y/N]	Yes-20, No-0
c. development of energy storage [Y/N]	Yes-20, No-0
d. setting of incentives to increase energy efficiency or to reduce energy consumption to energy producers and users [Y/N]	Yes-20, No-0
e. adaptation to climate-neutral energy systems in power generation and ensuring energy security [Y/N]	Yes-20, No-0
1.2.8 Has your country set long-term targets (or other policy measures) for the:	
a. integration of variable renewable energy in power generation [Y/N]	Yes-20, No-0
b. electrification of new end uses (such as transport and heating) [Y/N]	Yes-20, No-0
c. development of energy storage [Y/N]	Yes-20, No-0
d. setting of incentives to increase energy efficiency or to reduce energy consumption to energy producers and users [Y/N]	Yes-20, No-0
e. adaptation to climate-neutral energy systems in power generation and ensuring energy security [Y/N]	Yes-20, No-0
1.2.9 Has the government developed for facilitating clean energy transition as well as ensuring energy security:	
a. measures/plans for energy transition with a step-by-step approach [Y/N]	Yes-50, No-0
b. measures/mechanisms to phase out the operation of energy generators with fossil fuels [Y/N]	Yes-50, No-0
Sub-indicator 1.3: Environmental protection, human rights and gender	
1.3.1 Has your country developed national policies and/or strategies on:	
a. reducing methane emissions [Y/N]	Yes- 33.33, No-0
b. sustainable land use [Y/N]	Yes- 33.33, No-0
c. forestry [Y/N]	Yes- 33.33, No-0
1.3.2 Does your country have a legal or regulatory framework on:	
a. reducing methane emissions [Y/N]	Yes- 33.33, No-0
b. sustainable land use [Y/N]	Yes- 33.33, No-0
c. forestry [Y/N]	Yes- 33.33, No-0
1.3.3 Is your country a party to the Geneva Convention on Long-range Transboundary Air Pollution? [Y/N]	Yes-100, No-0
1.3.4 Is your country a party to:	Not scored
a. the Convention on Biological Diversity [Y/N]	
b. the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters [Y/N]	
c. any other environment-related international conventions [Y/N]	
1.3.5.a Are energy projects, plans and programmes legally required to undergo an environmental impact assessment? [Y/N]	Yes-50, No-0
1.3.5.b If yes, are the findings consulted with stakeholders and made publicly available? [Y/N]	Yes-50, No-0
1.3.6 Does your country have a legal framework and reporting on corporate social responsibility? [Y/N]	Yes-100, No-0
1.3.7 Has the industry in your country created a framework for reporting on corporate social responsibility? [Y/N]	Yes-100, No-0
1.3.8 Does your country have a legal framework on:	
a. labour rights [Y/N]	Yes- 33.33, No-0
b. health and safety [Y/N]	Yes- 33.33, No-0
c. environmental protection [Y/N]	Yes- 33.33, No-0
1.3.9 Has your government created a policy framework for gender equality in energy and climate change? [Y/N]	Yes-100, No-0
1.3.10 Does the government collect disaggregated sex and gender data on energy jobs? [Y/N]	Yes-100, No-0
1.3.11 Is your government running capacity-building programmes/projects to increase the number of women employed in the renewable energy sector and programmes to promote gender equality in energy and climate? [Y/N]	Yes-100, No-0

QUESTIONS	SCORING
1.3.12 Does your country reflect gender dimensions and data in its most recent NDC? [Y/N]	Yes-100, No-0
Sub-indicator 1.4: Energy resilience	
1.4.1 Does your country have an energy security strategy to:	
a. diversify sources of energy supply [Y/N]	Yes-50, No-0
b. scale-up domestic energy production in terms of energy efficiency measures and investments in renewable energy [Y/N]	Yes-50, No-0
1.4.2 Has the government identified reforms and activities to support circular economy activities in the energy sector? [Y/N]	Yes-100, No-0
1.4.3.a Does your country have an industrial strategy in place? [Y/N]	Yes-50, No-0
1.4.3.b If yes, does it cover measures to ensure a sustainable supply of raw materials in the energy sector? [Y/N]	Yes-50, No-0
1.4.4 Has the government introduced policies/plans/programmes to address the impact of mining activities on:	
a. biodiversity [Y/N]	Yes- 33.33, No-0
b. displacement of communities [Y/N]	Yes- 33.33, No-0
c. water resources [Y/N]	Yes- 33.33, No-0
1.4.5 Does the relevant ministry/State agency conduct:	
a. periodic water stress tests [Y/N]	Yes-50, No-0
b. emergency response exercises for water management in mining and mineral operations [Y/N]	Yes-50, No-0

Indicator 2: Foresight of policy and regulatory change

QUESTIONS	SCORING
Sub-indicator 2.1: Communication of vision and policies	
2.1.1 What are the key energy priorities of your country?	
a. Energy security [Y/N]	
b. Power reliability [Y/N]	
c. Affordability – energy poverty – the alleviation of socio-economic costs (e.g. just transition) [Y/N]	
d. Access to energy [Y/N]	
e. Development of energy infrastructure [Y/N]	
f. Interconnection with neighbouring countries [Y/N]	
g. Research and innovation in the energy sector [Y/N]	
h. CO ₂ reduction [Y/N]	
i. Digitalisation, cybersecurity [Y/N]	
j. Reduction of environmental impacts [Y/N]	
k. Other issues related to the energy sector. Please specify:	
2.1.2 Does your country have energy policies/roadmap/vision documents to address the priorities selected above? [Y/N]	Proportionate scores are allocated based on the priorities identified.
2.1.3 Has your country set measurable short-term or mid-term targets for the priorities selected above? [Y/N]	Proportionate scores are allocated based on the priorities identified.
2.1.4 Has your country set ultimate outcomes for the priority areas selected above? [Y/N]	Proportionate scores are allocated based on the priorities identified.
<i>Note: This may include final outcomes such as net-zero GHG emissions by 2050, universal energy access by a specific date, etc.</i>	
2.1.5 Has your government:	
a. set policy targets that are legally binding for the priorities selected above [Y/N]	Yes- 33.33, No-0
b. set penalties for not meeting policy targets [Y/N]	Yes- 33.33, No-0
c. designated a body responsible for enforcing penalties in case policy targets are not met [Y/N]	Yes- 33.33, No-0
2.1.6 Does your country have a legally binding national action plan[s] to implement the energy policies? [Y/N]	Proportionate scores are allocated based on the priorities identified.
1.1.7 Is there a detailed list of measures defined (either in the action plan or elsewhere) to achieve the policy targets set for the energy sector? [Y/N]	Proportionate scores are allocated based on the priorities identified.

QUESTIONS	SCORING
Sub-indicator 2.2: Robustness of policy goals and commitments	
2.2.1 Is it a legal obligation for the government to conduct a: a. cost-benefit analysis of the energy policies [Y/N] b. cost-benefit analysis of energy projects and programmes [Y/N] c. policy implementation cost analysis [Y/N]	Yes-33.33, No-0 Yes-33.33, No-0 Yes-33.33, No-0
2.2.2 Is the legal framework for policy monitoring and evaluation set in the following: a. Primary laws (these are laws enacted by the Parliament) [Y/N] b. Subsidiary laws (these are regulations that can be approved by the head of government, by an individual Minister or by the Cabinet) [Y/N] c. There is no legal framework for policy monitoring and evaluation [Y/N]	Yes-100 Yes-50 Yes-0
2.2.3 Which of the following institutions, apart from the central government, have competencies in the budget implementation of policy evaluation? Please select the relevant options. a. Supreme audit institutions/State control office or similar [Y/N] b. Budget offices of the legislature (or similar offices) [Y/N] c. None [Y/N]	Yes-100 Yes-100 Yes-0
2.2.4 Does your country's policy monitoring and evaluation process require the participation of the following: a. Civil society [Y/N] b. Local governments [Y/N] c. International organisations (such as IEA, IRENA, OECD) and environmental organisations [Y/N] d. Existing energy investors [Y/N] e. Energy industry associations [Y/N] f. Neighbouring countries [Y/N]	Yes- 16.67, No-0 Yes- 16.67, No-0 Yes- 16.67, No-0 Yes- 16.67, No-0 Yes-16.67, No-0 Yes-16.67, No-0
2.2.5 Does the country make available in the public domain: a. performance evaluation reports of its ministries [Y/N] b. performance evaluation reports of utilities [Y/N] c. performance evaluation reports of State agencies and State-owned utilities [Y/N]	Yes-33.33, No-0 Yes-33.33, No-0 Yes-33.33, No-0
2.2.6 How does your country make available in the public domain policy monitoring and evaluation reports: a. By default [Y/N] b. Upon request [Y/N] c. On an ad hoc basis for each evaluation [Y/N] d. Only across government [Y/N] e. Only for selected public officials [Y/N] f. Not available in the public domain [Y/N]	Yes-100 Yes-50 Yes-50 Yes-25 Yes-25 Yes-0

Indicator 3: Management of decision-making processes

QUESTIONS	SCORING
Sub-indicator 3.1: Institutional governance	
3.1.1.a Is there a central-level government authority that leads policy-making on energy and natural resources? [Y/N]	Yes-50, No-0
3.1.1.b Is the mandate of this central-level government authority stated in a law? [Y/N]	Yes-50, No-0
3.1.2.a Is there a central-level government authority that leads policy-making on environmental protection and climate change issues? [Y/N]	Yes-50, No-0
3.1.2.b Is the mandate of this authority stated in a law? [Y/N]	Yes-50, No-0
3.1.3.a Is there a central-level government authority that leads policy-making on economy, trade and investment? [Y/N]	Yes-50, No-0
3.1.3.b Is the mandate of this authority stated in a law? [Y/N]	Yes-50, No-0
3.1.4 Do the energy and investment authorities consult each other while formulating policies related to their respective sectors? [Y/N]	Yes-100, No-0
3.1.5 Has your country established an online one-stop-shop authority for registering and approving new energy projects? [Y/N]	Yes-100, No-0
3.1.6.a Is there a single window for all enquiries concerning investment policies and applications? [Y/N]	Yes-50, No-0
3.1.6.b If yes, does it also give information about the energy sector? [Y/N]	Yes-50, No-0

QUESTIONS	SCORING
Sub-indicator 3.2: Transparency and anti-corruption measures	
3.2.1.a Does your country have a law on the right of access to information? [Y/N]	Yes-50, No-0
3.2.1.b Are the exceptions to this right clearly defined in law or regulation? [Y/N]	Yes-50, No-0
3.2.2 How are laws and regulations made accessible to the public? [Please select one option from below]	
a. Both electronically and in print	Yes-100
b. Only electronically	Yes-66.67
c. Only in print	Yes-33.33
d. Available only upon request/payment of a fee	Yes-0
e. Legal and regulatory information is not made available	Yes-0
3.2.3 Does the national energy regulator make the decisions on tariffs and tariff methodology publicly available? [Please select one option from below]	
a. Yes, all the decisions are made available	Yes-100
b. Only some decisions are made available	Yes-50
c. No decisions are made available	Yes-0
3.2.4 Are the following available in any of the UN languages? Please select the relevant options:	
a. Energy policies	Yes-25
b. National action plans	Yes-25
c. Enacted laws	Yes-25
d. Regulatory information (e.g. tariff changes, tariff methodology, price statistics, consumption data, customer database, etc.)	Yes-25
3.2.5 Has the country digitalised public procurement processes in the energy sector? [Y/N]	Yes-100, No-0
3.2.6 Is the standstill period provided during the public procurement process sufficient? [Y/N]	Yes-100, No-0
<i>Note: The standstill period is a short time between the point when the contract award decision is notified to bidders, and the final contract conclusion, during which time competitors can challenge the decision.</i>	
3.2.7 Do State-controlled utilities in the following segments make their financial statements publicly available:	
a. Generation [Y/N]	Yes-25
b. Transmission [Y/N]	Yes-25
c. Distribution [Y/N]	Yes-25
d. Retail [Y/N]	Yes-25
3.2.8 Are the financial statements of State-controlled utilities in the following segments audited by an independent body:	
a. Generation [Y/N]	Yes-25
b. Transmission [Y/N]	Yes-25
c. Distribution [Y/N]	Yes-25
d. Retail [Y/N]	Yes-25
3.2.9 Does your country provide publicly available data on existing investment flows, particularly on clean energy investment (incoming, outgoing, per country of investor/investment, per energy technology/sector) in the energy sector? [Y/N] If yes, please indicate the source.	Yes-100, No-0
3.2.10 What work is the government undertaking to improve the available data on energy investment flows, particularly clean energy investment in the near future?	Not scored
3.2.11 Is legal information centralised? [Please select one option from below]	
a. In a centralised electronic registry of laws and regulations	Yes-100
b. Centralised registry/official gazette in print	Yes-50
c. No centralisation of laws and regulations	Yes-0
3.2.12 Is consultation between the government and the stakeholders required under any law/regulation/rule? [Y/N]	Yes-100, No-0
3.2.13 Is consultation between the energy regulator and the stakeholders required under any law/regulation/rule? [Y/N]	Yes-100, No-0
3.2.14 Are stakeholders notified and consulted in advance when new laws and regulations are enacted? [Please select one option from below]	
a. Notified and consulted in advance	Yes-100
b. Notified but not consulted	Yes-0
c. Not notified or consulted	Yes-0

QUESTIONS	SCORING
3.2.15 Your country's score in the latest edition of the Corruption Perceptions Index lies between: a. 100-90 b. 89-80 c. 79-70 d. 69-60 e. 59-50 f. 49-40 g. 39-30 h. 29-20 i. 19-10 j. 9-0	Yes-100 Yes-88.89 Yes-77.78 Yes-66.67 Yes-55.56 Yes-44.45 Yes-33.34 Yes-22.23 Yes-11.12 Yes-0
3.2.16 Does your country have legislation and/or regulations that mandate the collection of beneficial ownership information? [Y/N]	Yes-100, No-0
3.2.17 Has your country established a beneficial ownership register? [Y/N]	Yes-100, No-0
3.2.18 Is the beneficial ownership register for the energy sector: a. Publicly available online [Y/N] b. Free of charge [Y/N] c. Updated regularly [Y/N]	Yes-33.33, No-0 Yes-33.33, No-0 Yes-33.33, No-0
3.2.19 Has your government established an online platform that makes public procurement contracts in the energy sector available to citizens? [Y/N]	Yes-100, No-0
3.2.20 Has your government established an online platform to make budget allocation and utilisation reports of ministries and State agencies available to citizens? [Y/N]	Yes-100, No-0
3.2.21 Does your country have a law enforcing public accountability and anti-corruption measures? [Y/N]	Yes-100, No-0
Please highlight any important issues related to the country's decision-making process or transparency measures that you consider relevant.	

Indicator 4: Rule of law (compliance with national and international obligations)

QUESTIONS	SCORING
Sub-indicator 4.1: Management and settlement of investor-State disputes	
4.1.1 Does your country have domestic dispute prevention policies that include the following measures: a. Early detection systems [Y/N] b. Training for public servants [Y/N] c. The creation of dedicated institutions in charge of preventing, managing and monitoring disputes [Y/N]	Yes-33.33, No-0 Yes-33.33, No-0 Yes-33.33, No-0
4.1.2 Is there a central government authority (e.g. agency, ministry, etc.) that maintains a database of investment treaties, contracts, and special undertakings with foreign investors? [Y/N]	Yes-100, No-0
4.1.3.a Is there an investment/business ombudsperson to whom foreign investors can refer disputes with the government? [Y/N]	Yes-50, No-0
4.1.3.b Is mediation with the State allowed under the national laws? [Y/N]	Yes-50, No-0
4.1.4.a Do national laws allow the recognition and enforcement of foreign arbitral awards? [Y/N]	Yes-50, No-0
4.1.4.b Do national laws allow the recognition and enforcement of foreign judgements? [Y/N]	Yes-50, No-0
4.1.5 Is the country a Contracting Party to: a. the Convention on the Settlement of Investment Disputes Between States and Nationals of Other States (the Washington Convention)? [Y/N] b. the Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the New York Convention)? [Y/N]	Yes-50, No-0 Yes-50, No-0
4.1.6 Does your country have bilateral investment protection agreements with ISDS, including the energy sector, with other countries? [Y/N] If yes, how many and with which countries?	Not scored
4.1.7 Does your country have regional trade agreements with ISDS, including the energy sector [Y/N]? If yes, which ones?	Not scored

QUESTIONS	SCORING
4.1.8 Are national courts and administrative tribunals required by law to:	
a. fix the first date of hearing within a time limit [Y/N]	Yes-25, No-0
b. deliver the final judgement within a time limit [Y/N]	Yes-25, No-0
c. allow parties to file an appeal within a time limit [Y/N]	Yes-25, No-0
d. fix the number of adjournments in a case [Y/N]	Yes-25, No-0
4.1.9 Is the following information on pending judicial cases available online:	
a. Status of the case [Y/N]	Yes-25, No-0
b. Hearing schedule of the case [Y/N]	Yes-25, No-0
c. All briefs and motions filed in the case [Y/N]	Yes-25, No-0
d. Latest orders and judgements passed in the case [Y/N]	Yes-25, No-0
4.1.10 Do national laws and/or IIAs require the exhaustion of local remedies (e.g. domestic courts) before recourse to international arbitration? [Y/N]	Yes-0, No-100
4.1.11 Has the country made retroactive changes to laws in the past five years? [Y/N]	Yes-0, No-100
Sub-indicator 4.2: Respect for property rights	
4.2.1 Do the national laws contain a list of activities that constitute public purpose/public interest in the case of expropriation? [Y/N]	Yes-100, No-0
4.2.2 Do the IIAs grant protection to activities that have an effect similar to expropriation? [Y/N]	Yes-100, No-0
4.2.3 Does the State provide in its laws and/or IIAs a process to determine compensation in the event of expropriation in the energy sector? [Y/N]	Yes-100, No-0
4.2.4 Does the State provide in its laws and/or IIAs a timeframe within which compensation needs to be paid? [Y/N]	
a. Entire amount is paid before expropriation is effected [Y/N]	Yes-100
b. Amount is paid in stages within defined deadlines [Y/N]	Yes-50
c. There is no definite date/deadline for payment of compensation [Y/N]	Yes-0
4.2.5 Do the national laws/IIAs specify the following in relation to the interest rate (for expropriation):	
a. Type of interest applicable (simple or compound) [Y/N]	Yes-33.33, No-0
b. The annual rate of interest (fixed rate applicable to the host country's sovereign debt or market rates) [Y/N]	Yes-33.33, No-0
c. The reference period for conversion into foreign currency [Y/N]	Yes-33.33, No-0
4.2.6 Are Most-Favoured-Nation and National Treatment obligations extended to intellectual property under the IIAs? [Y/N]	Yes-100, No-0
4.2.7 Are expropriation provisions extended to intellectual property under the IIAs? [Y/N]	Yes-100, No-0
4.2.8 Does the State have in its laws, contracts and/or IIAs any provisions requiring the mandatory transfer of technology in the energy sector? [Y/N]	Yes-0, No-100
4.2.9 Is the country a Member State/Contracting Party to:	
a. WTO [Y/N]	Yes-33.33
b. MIGA [Y/N]	Yes-33.33
c. ECT [Y/N]	Yes-33.33

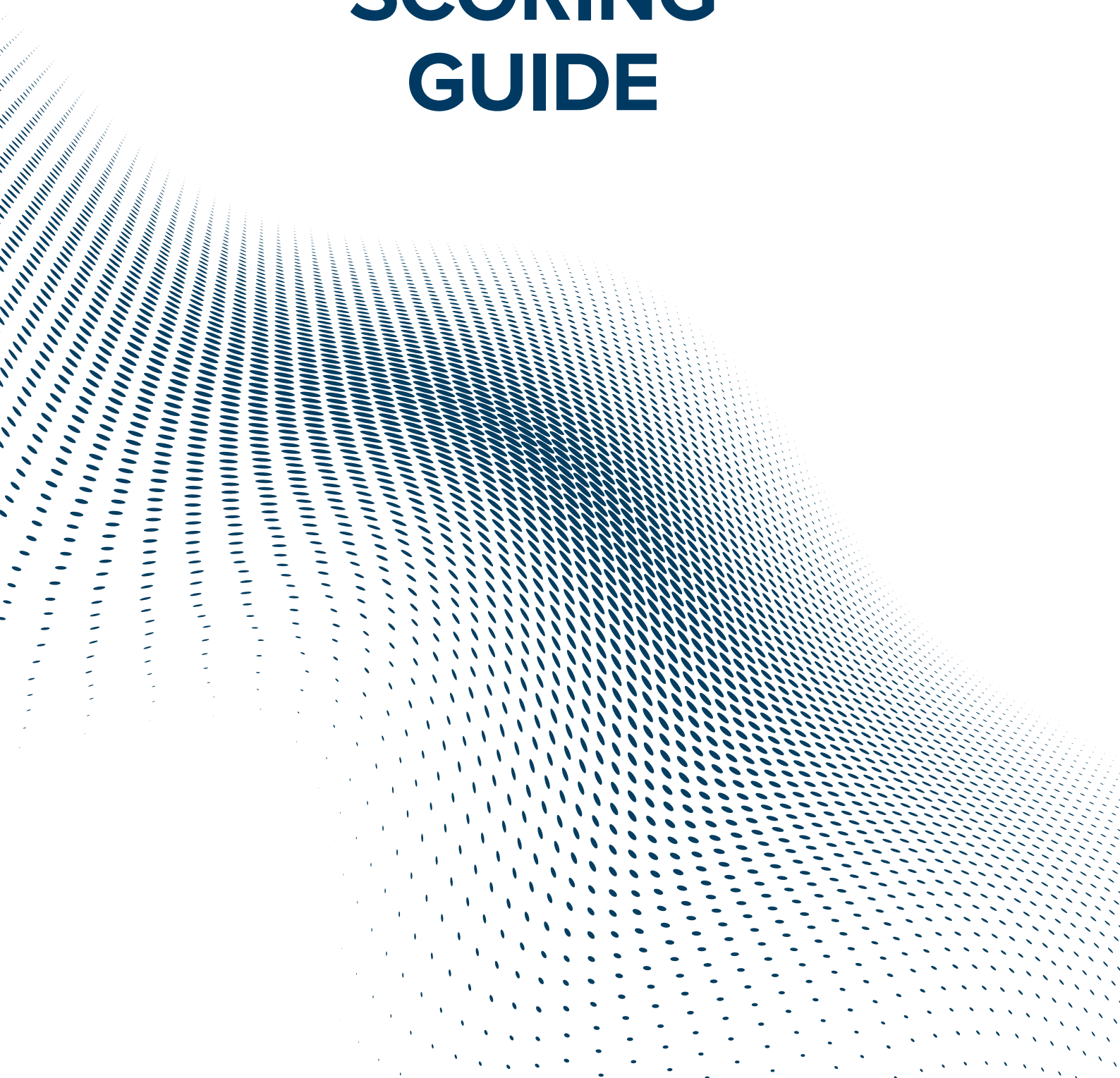
Indicator 5: Regulatory environment and investment conditions

QUESTIONS	SCORING
Sub-indicator 5.1: Regulatory independence	
5.1.1 Which institution is responsible for regulating the energy sector:	
a. An independent energy regulatory body [Y/N]	100
b. An agency under the control of a ministry [Y/N]	50
c. A ministry [Y/N]	25
d. Multiple ministries/agencies regulating sub-sectors separately [Y/N]	0
5.1.2.a Does the energy regulator derive its authority from a law? [Y/N]	Yes-50, No-0
5.1.2.b Are the functions and obligations of the energy regulator stated in a law? [Y/N]	Yes-50, No-0
5.1.3 Is the energy regulatory authority subject to public control conducted by other institutions?	
a. Supreme audit office that is independent of the central government [Y/N]	Yes-100
b. National legislature [Y/N]	Yes-100
c. Central government (e.g. a ministry, the council of ministers or similar executive authority) [Y/N]	Yes-0
d. None of the above [Y/N]	No-0

QUESTIONS	SCORING
5.1.4 How is the energy regulator financed? [Please select one option from below]	
a. Exclusively by its income based on the fees for performing the regulation of energy activities [Y/N]	Yes-100
b. Combined from the government and its income based on the fees for performing the regulation of energy activities [Y/N]	Yes-50
c. Exclusively by the government [Y/N]	Yes-0
5.1.5 Does the energy regulator(s) have the right to allocate its budget? [Please select one option from below]	
a. Yes, it has full right to do so [Y/N]	Yes-100
b. Yes, but it needs approval from the governmental authority/ministry [Y/N]	Yes-50
c. No, it cannot allocate the budget on its own [Y/N]	Yes-0
5.1.6.a Is there a fixed-term appointment for the board of the energy regulator(s)? [Y/N]	Yes-33.33, No-0
5.1.6.b If so, is the fixed term renewable more than once? [Y/N]	Yes-33.33, No-0
5.1.6.c Is the selection procedure of the board and its finalisation publicly announced? [Y/N]	Yes-33.33, No-0
5.1.7 Are the directors/commissioners of the energy regulatory authority allowed to work in the regulated industry (public or private) after their tenure?	
a. They are not allowed to take positions in the regulated industry for at least two years after finishing their term [Y/N]	Yes-100
b. They are not allowed to take positions in the regulated industry for less than two years after finishing their term [Y/N]	Yes-50
c. There is no such requirement [Y/N]	Yes-0
5.1.8 The energy regulator:	
a. is required by law to make reasoned decisions [Y/N]	Yes-50, No-0
b. has the legal right to impose penalties and enforce regulatory obligations?[Y/N]	Yes-50, No-0
5.1.9 Does your country have:	
a. an authority that deals with competition in the energy sector [Y/N]	Yes-50, No-0
b. regulations aimed at protecting energy consumers [Y/N]	Yes-50, No-0
Sub-indicator 5.2: Electricity industry market structure and competition	
5.2.1 Which of the following best describes the power market structure of your country:	
a. Vertical integration – a vertically integrated monopolist [Y/N]	Yes-0
b. Vertical integration with independent power producers – a vertically integrated monopolist with independent power producers that sell power to it [Y/N]	Yes-25
c. Some extent of vertical and horizontal unbundling – a national generation, transmission, or distribution entity; a combined national generation and transmission entity; or a combined transmission and distribution entity acting as the only wholesale power trader (single buyer) with IPPs that sell power to it and regional distribution entities unbundled from the monopolist that buys power from it [Y/N]	Yes-50
d. Extensive vertical and horizontal unbundling – many distribution entities and generation entities and a transmission entity formed from unbundling the monopolist, in which the transmission entity acts as a single buyer of power from the generators and IPPs and sells power to the distribution entities and large users of power [Y/N]	Yes-75
e. Power market – an organised market of generation entities, distribution entities, and large users, in which power is traded competitively, supported by a transmission entity, a power system operator, and a power market administrator [Y/N]	Yes-100
5.2.2 To what degree has your country unbundled the power sector?	
a. Ownership unbundling [Y/N]	Yes-100
b. Legal unbundling [Y/N]	Yes-50
c. Accounting/functional unbundling [Y/N]	Yes-25
d. The power sector is not unbundled [Y/N]	Yes-0
5.2.3 Is your country's network tariff cost-reflective? [Y/N]	Yes-100, No-0
5.2.4 Are the end-user electricity tariffs regulated in your country? [Y/N]	Yes-0, No-100
If yes:	
a. is the regulated end-user tariff lower than wholesale energy prices [Y/N]	Yes-0, No-33.33
b. has the country set a roadmap/plan to phase out non-household regulated prices [Y/N]	Yes-33.33, No-0
c. has your country set a roadmap/plan to phase out household regulated prices (except for vulnerable customers) [Y/N]	Yes-33.33, No-0
5.2.5 Do the laws/regulations of your country require:	
a. licencing for electricity trading (internal or cross-border) [Y/N]	Yes-0, No-33.33
b. local representation for electricity trading (a local branch or a fully registered company is required) [Y/N]	Yes-0, No-33.33
c. licencing for electricity import and export activities [Y/N]	Yes-0, No-33.33
5.2.6 Has the country introduced time-variant pricing for electricity (real-time pricing, variable peak pricing and critical peak pricing or critical peak rebates, etc.)? [Y/N]	Yes-100, No-0
5.2.7 Does the network code (or any other regulation/law) guarantee non-discriminatory access to the electricity grids? [Y/N]	Yes-100, No-0

QUESTIONS	SCORING
Sub-indicator 5.3: Restrictions on FDI	
5.3.1.a Does the country give equal treatment to domestic and foreign investors? [Y/N]	Yes-50, No-0
5.3.1.b If yes, is this equal treatment established in law or IIAs of the country? [Y/N]	Yes-50, No-0
5.3.2.a Are investors in the energy sector allowed to invest in all energy sub-sectors within the country? [Y/N]	Yes-50, No-0
5.3.2.b If no, does this apply equally to domestic and foreign investors? [Y/N]	Yes-50, No-0
5.3.3.a Is there a screening or prior-authorisation requirement for foreign investors in the energy sector? [Y/N]	Yes-50, No-0
5.3.3.b If yes, is it only a notification requirement? [Y/N]	Yes-50, No-0
5.3.4.a Are foreign companies legally allowed to hold a majority stake in energy projects? [Y/N]	Yes-50, No-0
5.3.4.b Are foreign investors required by law to partner with the State/State-owned or local enterprises before undertaking projects in the energy sector? [Y/N]	Yes-0, No-50
5.3.5.a For public procurement, are bidders required to post bid security before the contract is signed? [Y/N]	Yes-50, No-0
5.3.5.b If yes, are the following conditions on bid security stated in the law:	
a. The maximum amount of the security [Y/N]	Yes-16.67, No-0
b. Payment terms [Y/N]	Yes-16.67, No-0
c. Return of security amount to bidders [Y/N]	Yes-16.67, No-0
5.3.6 Is there a limit on the employment of foreign personnel?	Yes-100
a. There are no limitations [Y/N]	Yes-0
b. Limitation by percentage [Y/N]	Yes-0
c. Limitation on the number of times work permit/visa can be renewed [Y/N]	Yes-0
d. Annual quotas of work permits for foreigners [Y/N]	Yes-0
5.3.7 Are foreign investors required to employ specific percentages of the local workforce?	
a. There are no such requirements [Y/N]	Yes-100, No-0
b. Yes, for managerial level (board of directors, etc.) [Y/N]	Yes-40, No-0
c. Yes, for unskilled labour and non/technical administrative staff [Y/N]	Yes-10, No-0
5.3.8 Are foreign investors required to purchase a certain percentage/value/quantity of products or services from local suppliers? [Y/N]	Yes-0, No-100
5.3.9.a Are there any currency restrictions and/or foreign exchange controls applied to foreign investors under a law or regulation? [Y/N]	Yes-0, No-100
5.3.9.b If yes, do these exchange controls include:	
a. banning the use of foreign currency [Y/N]	Yes-0
b. limiting currency exchange to government-approved exchangers [Y/N]	Yes-0
c. fixed exchange rates [Y/N]	Yes-0
5.3.10.a Do restrictions on the transfer of investment-related capital, payments and profits exist? [Y/N]	Yes-0, No-100
5.3.10.b If yes, do they apply equally to foreign and domestic investors? [Y/N]	Yes-50, No-0

ANNEX II: SCORING GUIDE



The score for each indicator is the average of its component sub-indicators. The score of each sub-indicator is the average of its underlying questions. The scoring rules for different types of questions are as follows:

1. Questions with proportionate scores

This category is scored based on the number of energy policy goals set by the country. In the example given below, the first sub-indicator of Indicator 1 allows the respondents to list the energy priorities of the country. Under the first question, there are nine identified options for respondents to select. Additionally, they are given the opportunity to specify other priorities considered relevant to their respective energy sectors. The response to the first question sets the premise on which the following questions will be answered and scored. For example, a country has set 5 goals. As a result, 20 points are attributed to each of the selected goals for the scoring of the next questions. Subsequently, the respondent identifies an energy strategy document for three out of the five selected goals, and the country receives 60 points on that question. The scores for the third and the fourth questions are calculated likewise. The final score of this sub-indicator is the average scores of its component questions, which in this case is 66.7.

Sample Question Type 1

INDICATOR 1: FORESIGHT OF POLICY AND REGULATORY CHANGE	SCORING	RESPONSE	SCORE
Sub-indicator 1: Communication of vision and policies			66.7
1. What are the key priorities or goals of the energy sector policy? a. Energy security [Y/N] b. Power reliability [Y/N] c. Affordability – energy poverty [Y/N] d. Access to energy [Y/N] e. Investment in the energy sector [Y/N] f. CO ₂ reduction [Y/N] g. Renewable energy [Y/N] h. Energy efficiency [Y/N] i. Innovation [Y/N] j. Others issues related to the energy sector (like air quality, water quality job creation etc). Please specify.	Not Scored	5 goals selected: Energy security; power reliability; access to energy; CO ₂ reduction; and Innovation (100/5=20 for each goal in the related questions)	–
2. Does the country have an energy strategy document for the key priority areas selected above (e.g. a Vision document/ Roadmap etc.)? [Y/N]	Based on the number of goals selected in the previous question proportionate scores are allocated	Energy strategy document for 3 goals: Energy security; CO ₂ reduction; and innovation	3x20=60

2. Binary questions

These questions can be answered with a simple ‘yes’ or ‘no’. In the example below, the respondent must answer ‘yes’ to all three questions to obtain the highest score. However, the respondent gives two positive answers and a negative one. As a result, the score for the sub-indicator is 66.7.

Sample Question Type 2a

INDICATOR 3: REGULATORY ENVIRONMENT AND INVESTMENT CONDITIONS	SCORING	RESPONSE	SCORE
Sub-indicator 1: Regulatory effectiveness			66.7
1. Does the energy regulator derive its authority from a law? [Y/N]	Yes-100 No-0	Yes	100
2. Are the functions and obligations of the energy regulator stated in a law? [Y/N]	Yes-100 No-0	No	0
3. Does the energy regulator have a budget that is separate from the government’s budget? [Y/N]	Yes-100 No-0	Yes	100

In some cases, a negative response may yield a high score while a positive answer may be scored 0. In the following example, the respondent must answer 'no' to all the questions to obtain the highest score. However, the respondent gives one negative and one positive answer. As a result, the score for the sub-indicator is 50.

Sample Question Type 2b

INDICATOR 3: REGULATORY ENVIRONMENT AND INVESTMENT CONDITIONS	SCORING	RESPONSE	SCORE
Sub-indicator 2: Restrictions on FDI			50
1. Are foreign investors required by law to partner with State/ State-owned enterprises or local enterprises before undertaking projects in the energy sector? [Y/N]	Yes-0 No-100	No	100
2. Are foreign investors required to purchase a certain percentage/ value/quantity of products or services from local suppliers? [Y/N]	Yes-0 No-100	Yes	0

3. Questions with alternative responses and granulated scores

In some cases, the respondent is asked to select an answer from a group of alternatives. The answer reflecting best practice is scored 100, whereas the score for the rest of the options is granulated. In the table below, the respondent states that only some legal and regulatory information is made available. This alternative is not considered optimal and, thus, yields only 50 points. In the following question, the respondent states that laws and regulations are accessible both electronically and in print. This is considered best practice and gets a score of 100. Similarly, the respondent answers that the energy regulator makes available all its decision to the public, which again is considered best practice and gets 100. The overall score for this sub-indicator is 83.3.

Sample Question Type 3

INDICATOR 2: MANAGEMENT OF DECISION-MAKING PROCESSES	SCORING	RESPONSE	SCORE
Sub-indicator 1: Transparency			83.3
1. Does the country make available legal and regulatory information to the public?		1-b	50
a. Yes, all information is made available	100		
b. Only some information is available	50		
c. No information is available	0		
2. How are laws and regulations made accessible to public?		2-a	100
a. Both electronically and in print	100		
b. Only electronically	66.7		
c. Only in print	33.3		
d. Available only upon request/or payment of fee	0		
3. Does the energy regulator make available its decisions (on tariffs, tariff methodology, market access etc.) to the public?		3-a	100
a. Yes, all decisions are made available	100		
b. Only some decisions are made available	50		
c. No decisions are made available	0		

4. Questions with alternative sub-questions

This type of question provides alternatives to the respondents, in case a negative answer to the main question is compensated by other measures. In the example provided below, the respondent claims that investors need authorisation before investing in the energy sector. Since this imposes a restriction on investors, the answer to the main question gets a 0. Where the prior authorisation requirement results in restrictiveness but is not discriminatory in nature, 50 points are 'recovered' by answering 'yes' to question 1a.

Sample Question Type 4

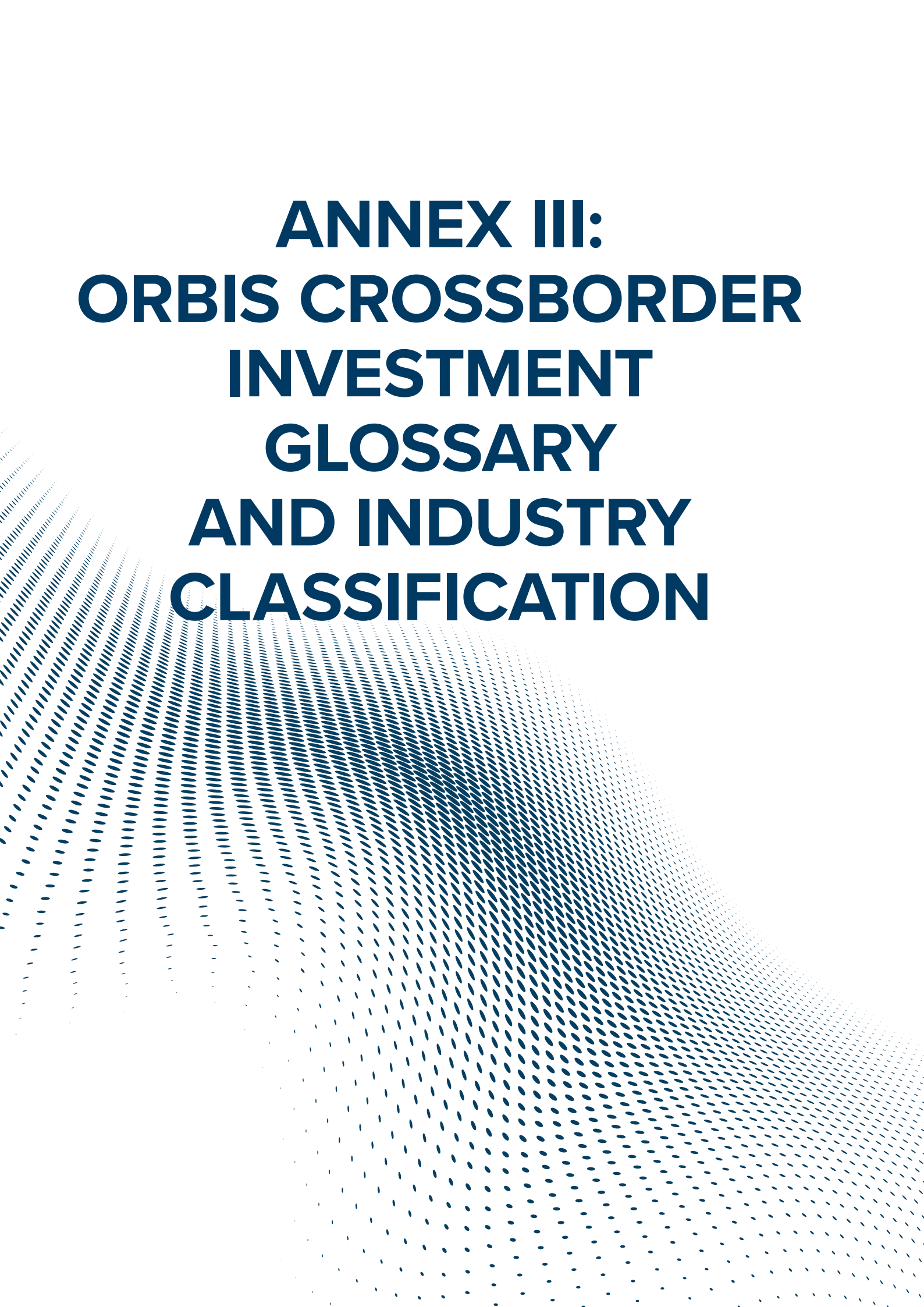
INDICATOR 3: REGULATORY ENVIRONMENT AND INVESTMENT CONDITIONS	SCORING	RESPONSE	SCORE
Sub-indicator 2: Restrictions on FDI			50
1. Is there a pre-screening or prior-authorization requirement for investing in the energy sector? [Y/N]	Yes-0 No-100	Yes	0
If yes:			
1a. Is pre-screening applicable to both domestic and foreign investors? [Y/N]	Yes-50 No-0	Yes	50

5. Divided questions

For some sub-indicators the main question is bifurcated into sub-questions, which are awarded identical scores since they are equally important. The sub-questions develop a joint perfect score of 100, when answered positively. In the example below, the country scores 50 because it is a Contracting Party only to the Convention on the Settlement of Investment Disputes between States and Nationals of Other States.

Sample Question Type 5

INDICATOR 4: RULE OF LAW (COMPLIANCE WITH NATIONAL AND INTERNATIONAL OBLIGATIONS)	SCORING	RESPONSE	SCORE
Sub-indicator 1: Management and settlement of investor-State disputes			50
1. Is the country a Contracting Party to:			
1a. The Convention on the Settlement of Investment Disputes Between States and Nationals of Other States? [Y/N]	Yes-50 No-0	Yes	50
1b. The Convention on the Recognition and Enforcement of Foreign Arbitral Awards? [Y/N]	Yes-50 No-0	No	0



**ANNEX III:
ORBIS CROSSBORDER
INVESTMENT
GLOSSARY
AND INDUSTRY
CLASSIFICATION**

Terms used in EIRA 2022 from Orbis Crossborder Investment*

Acquisition deal	A deal in which the acquiror ends up with a stake of 50% or more in the target's equity. Even deals involving the purchase of a very small stake will be defined as an acquisition if the final stake held by the acquiror is 50% or above.
Co-location project**	The same company (investor) investing into the same location (city) in a different business activity (for example, XYZ company could be setting up a regional distribution center as well as a manufacturing plant). Sometimes companies will create a new warehouse to complement an existing manufacturing plant.
Completed project status	If a company has opened a facility or a location is deemed to be operational, the project will be deemed to have been completed.
Completed deal status	This is the date when the deal has officially completed.
Institutional buyout (IBO) deal	A deal in which a private equity firm has purchased a stake of 50% or more in a company. As with acquisitions, even deals involving the purchase of a very small stake will be defined as an IBO if the final stake held by the acquiror is 50% or above. The only difference between a standard acquisition and an IBO is that the acquiror in an IBO is a private equity firm.
Joint venture deal	A deal in which two or more companies create a new, jointly-owned entity. The two or more companies that have established the new entity continue to exist.
Minority stake deal	A deal in which the acquiror has purchased a number of shares in the target and the resulting final stake is less than 50%. A deal involving the purchase of a 2% stake could be defined as an acquisition if the acquiror's overall final stake is 50% or more, such as if a buyer increases its stake from 49% to 51%.
New project	A new operation, whether it is a manufacturing plant, regional headquarters, sales office, and so on.

*The value of some deals and the CapEx of some projects may be unofficial or modelled by Orbis Crossborder Investment. For more information on the Orbis Crossborder Investment methodology, data collection and definitions please visit <https://www.bvdinfo.com/orbis> (data accessed on 1 July 2022).

Industry Classification used in EIRA 2022 from Orbis Crossborder Investment

The data for EIRA 2022 is compiled using the following NACE Rev. 2 classes. **

Electrical energy		
35.11	Production of electricity	This class includes the operation of generation facilities that produce electric energy; including thermal, nuclear, hydroelectric, gas turbine, diesel and renewable.
35.12	Transmission of electricity	This class includes operation of transmission systems that convey the electricity from the generation facility to the distribution system.
35.13	Distribution of electricity	This class includes operation of distribution systems (i.e., consisting of lines, poles, meters, and wiring) that convey electric power received from the generation facility or the transmission system to the final consumer.
35.14	Trade of electricity	This class includes the sale of electricity to the user; activities of electric power brokers or agents that arrange the sale of electricity via power distribution systems operated by others; operation of electricity and transmission capacity exchanges for electric power.
Petroleum and gas		
06.10	Extraction of crude petroleum	This class includes extraction of crude petroleum oils; extraction of bituminous or oil shale and tar sand; production of crude petroleum from bituminous shale and sand; processes to obtain crude oils: decantation, desalting, dehydration, stabilisation etc.

Petroleum and gas

06.20	Extraction of natural gas	This class includes production of crude gaseous hydrocarbon (natural gas); extraction of condensates; draining and separation of liquid hydrocarbon fractions; gas desulphurization; mining of hydrocarbon liquids, obtained through liquefaction or pyrolysis.
09.10	Support activities for petroleum and natural gas extraction	This class includes oil and gas extraction service activities provided on a fee or contract basis: <ul style="list-style-type: none">• In exploration services in connection with petroleum or gas extraction, e.g. traditional prospecting methods, such as making geological observations at prospective sites• In directional drilling and re-drilling; 'spudding in'; derrick erection in situ, repairing and dismantling; cementing oil and gas well casings; pumping of wells; plugging and abandoning wells etc.• In liquefaction and regasification of natural gas for purpose of transport, done at the mine site• In draining and pumping services, on a fee or contract basis• In test drilling in connection with petroleum or gas extraction
19.20	Manufacture of refined petroleum products	This class includes production of motor fuel: gasoline, kerosene etc.; production of fuel: light, medium and heavy fuel oil, refinery gases such as ethane, propane, butane etc.; manufacture of oil-based lubricating oils or greases, including from waste oil; manufacture of petroleum briquettes; blending of biofuels, i.e. blending of alcohols with petroleum (e.g. gasohol); manufacture of peat briquettes; manufacture of hard-coal and lignite fuel briquettes.
49.50	Transport via pipeline	This class includes transport of gases via pipelines. It also includes the operation of pump stations.

Coal

05.10	Mining of hard coal	This class includes the mining of hard coal: underground or surface mining, including mining through liquefaction methods; cleaning, sizing, grading, pulverising, compressing etc. of coal to classify, improve quality or facilitate transport or storage; recovery of hard coal from culm banks.
05.20	Mining of lignite	This class includes mining of lignite (brown coal): underground or surface mining, including mining through liquefaction methods; washing, dehydrating, pulverising, compressing of lignite to improve quality or facilitate transport or storage.
08.92	Extraction of peat	This class includes peat digging; preparation of peat to improve quality or facilitate transport or storage.
09.90	Support activities for other mining and quarrying	This class includes support services on a fee or contract basis, required for mining of coal and lignite, among other: <ul style="list-style-type: none">• In exploration services, e.g. traditional prospecting methods, such as taking core samples and making geological observations at prospective sites• In draining and pumping services, on a fee or contract basis• In test drilling and test hole boring.

Nuclear energy

24.46	Processing of nuclear fuel	This class includes the production of uranium metal from pitchblende or other ores; smelting and refining of uranium.
07.21	Mining of uranium and thorium ores	This class includes mining of ores chiefly valued for uranium and thorium content: pitchblende etc.; concentration of such ores; manufacture of yellowcake.

** For more information on the NACE Rev. 2 statistical classification of economic activities please visit <https://ec.europa.eu/eurostat/web/nace-rev2>.

Electrical energy, petroleum, gas, coal and nuclear energy are covered by Annex EM I 'Energy Materials and Products' of the ECT (as amended).

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as of 25 June 2022
OBSERVERS (44)

MEMBERS (54)

Sig	Rat	EEC	IEC	Country
1994	2013	2006	2015	Afghanistan
1994	1997	1991	2015	Albania
1994	1997	1991	2015	Armenia
1994	1997	1991	2015	Austria
1994	1997	1991	2018	Azerbaijan
1994		1991	2015	Belarus (prov. application suspended as of 24.06.2022)
1994	1998	1991	2015	Belgium
1995	2001	1995	2016	Bosnia and Herzegovina
1994	1996	1991	2015	Bulgaria
1994	1997	1993	2015	Croatia
1994	1998	1991	2015	Cyprus
1995	1996	1993	2015	Czech Republic
1994	1997	1991	2015	Denmark
1994	1998	1992	2015	Estonia
1994	1998	1991	2015	European Union
1994	1998	1991	2015	EURATOM
1994	1997	1991	2015	Finland
1994	1999	1991	2015	France
1994	1995	1991	2015	Georgia
1994	1997	1991	2015	Germany
1994	1997	1991	2015	Greece
1995	1998	1991	2015	Hungary
1994	2015	1991		Iceland
1994	1999	1991	2015	Ireland
1995	2002	1991	2015	Japan
	2018	2007	2015	Jordan
1994	1995	1991	2015	Kazakhstan
1994	1997	1992	2015	Kyrgyzstan
1994	1995	1991	2015	Latvia
1994	1997	1991	2015	Liechtenstein
1995	1998	1992	2015	Lithuania
1994	1997	1991	2015	Luxemburg
1994	2001	1991	2015	Malta
1994	1996	1992	2015	Moldova
	1999	1997	2015	Mongolia
	2015	2012	2015	Montenegro
1994	1997	1991	2015	Netherlands
	1998	1996	2015	North Macedonia
1995		1991	2015	Norway
1994	2000	1991	2015	Poland
1994	1997	1991	2015	Portugal
1994	1996	1991	2015	Romania
1994	1995	1993	2015	Slovakia
1994	1997	1992	2015	Slovenia
1994	1997	1991	2015	Spain
1994	1997	1991	2015	Sweden
1994	1996	1991	2015	Switzerland
1994	1997	1991		Tajikistan
1994	2001	1991	2015	Türkiye
1994	1997	1994	2015	Turkmenistan
1994	1998	1991	2015	Ukraine
1994	1996	1991	2015	United Kingdom
1995	1995	1991	2015	Uzbekistan
	2018	2014	2015	Yemen

INTERNATIONAL ENERGY CHARTER 2015 (91)

EUROPEAN ENERGY CHARTER 1991 (70)

ENERGY CHARTER TREATY 1994 (56)



Country	EEC	IEC
Australia	1991	
Bangladesh		2015
Benin		2015
Burkina Faso		2017
Burundi	2015	2015
Cambodia		2015
Canada	1991	
Chad	2015	2015
Chile		2015
China		2015
Colombia		2015
EAC		2016
ECCAS		2016
ECOWAS		2015
Eswatini		2015
G5 Sahel		2016
Gambia		2017
Guatemala		2016
Guyana		2018
Indonesia	2009	
Iran		2016
Iraq		2016
Italy	1991	2015
Kenya		2017
Mali		2017
Mauritania	2014	2015
Morocco	2012	2015
Niger	2015	2015
Nigeria		2017
Pakistan	2005	2015
Palestine	2014	2015
Panama		2017
Rwanda		2016
Senegal		2016
Serbia	2001	2015
Sierra Leone		2018
South Korea		2015
South Sudan		2021
Syria	2010	
Tanzania		2015
UAE		2017
Uganda	2019	2015
USA	1991	2015
Vietnam		2018

INTERNATIONAL ORGANISATIONS WITH OBSERVER STATUS (by decision of the Energy Charter Conference):



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