

STATISTICS IN ELECTRICITY SUB-SECTOR AS OF JUNE OF THE YEAR 2018

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1. ELECTRICITY PRODUCTION

1.1. Domestic generation and imports

The total generated electricity is from domestic power plants and imports from regional shared plants.

Table 1: Trend of domestic generation and imported electricity (kWh) for first two quarters of2018

Plant name	Q1 2018	Q2 2018
Agatobwe	14,351	-
Cyimbili	135,988	307,388
Gaseke MHPP	332,221	668,529
Gashashi	198,978	325,179
Giciye I	3,617,594	4,638,805
Giciye II	3,736,083	4,881,241
GigaWatt Global	3,130,000	3,396,000
Gihira	1,576,867	2,444,544
Gisenyi	-	1,435,683
Gishoma Peat	-	342,925
Jabana I	5,532,300	1,692,010
Jabana II	27,849,392	18,083,916
Jali Solar	34,001	32,348
Keya	1,879,599	1,673,270
Kivuwatt	48,007,712	45,030,607
Mazimeru	673,814	802,382
Mukungwa I	8,953,742	13,018,981
Mukungwa II	807,692	_
Murunda	149,646	143,054
Musarara	116,442	856,841
Mutobo	342,968	386,950
Nasho Solar	1,032,562	1,035,497
Nkora	537,158	869,907
Nshili I	314,376	-
Ntaruka	2,390,400	5,795,000
Nyabahanga	68,704	77,100
Nyabarongo I	37,767,700	42,904,100
Rugezi	2,071,896	4,668,324
Rukarara I	11,577,500	14,487,200
Rukarara II	3,171,348	4,182,809
So Energy Masoro	3,724,480	672,328
So Energy Mukungwa I	4,775,940	998,164
Total Domestic Generation	174,521,453	175,851,081
Imports	20,306,079	24,300,093

Source: EUCL-REG, June 2018

The total domestic generated electricity increased by 0.8% from the first quarter to the second quarter of the year 2018.

1.2. Electricity generation mix

The electricity produced in Rwanda is generated using different sources namely hydro, methane gas, peat, solar, heavy fuel and light fuel oil used to run thermal power plants and another portion is imported.

Power Generation Mix	Q1 2018	Q2 2018
Hydro	41.3%	52.2%
Methane	24.7%	22.5%
Peat	0.0%	0.2%
Solar	2.2%	2.2%
Thermal	21.5%	10.7%
Imports	10.4%	12.1%

Table 2: Trend of electricity generation mix

Source: EUCL-REG, June 2018

The 52.2% of the electricity supplied during the second quarter of 2018 is generated from hydro, 22.5% from Methane, 10.7% from thermal, 2.2% from solar energy, 0.2% from peat power plants, and 12.1% is the imports. In aggregate, the electricity generated from renewable resources is greater than the electricity generated from fossil fuels and slow renewable resource (Peat).

1.3. System peak demand

The peak quarter over the first two quarters of the year 2018 was quarter two with a peak demand of 138.71 MW as presented in the Figure 1.





Source: EUCL-REG, June 2018

The system peak demand increased by 8.2% from the first quarter to the second quarter of the year 2018.

2. EXPORTED ELECTRICITY





The total exported electricity increased by 5.6% from the first quarter to the second quarter of the year 2018.

3. ELECTRICITY SUPPLIED AND SOLD

3.1.Trend of electricity supplied

The electricity supplied in each quarter includes both domestic generation and the imports.

Table 3: Trend of electricity supplied (kWh) for the first two quarters of 2018



Source: EUCL-REG, June 2018

The total electricity supplied by the utility increased by 2.7% from the first quarter of the year 2018 to the second quarter of the year 2018.

3.2. Trend of electricity sold

The electricity sold includes both the pre-paid and post-paid electricity.

Customer category	Q1 2018	Q2 2018	Share (Q2-2018) in %
Domestic/Residential	27,797,391	28,309,537	17.7
Non-Residential	54,018,462	56,795,796	35.5
Water Pumping Station	5,305,072	5,455,678	3.4
Water Treatment Plant	6,998,565	7,346,095	4.6
Telecom towers	11,657,663	11,599,725	7.3
Hotels	8,383,788	8,457,771	5.3
Industrial	40,648,102	41,977,590	26.2
Total	154,809,042	159,942,192	100.0

Table 4: Trend of electricity sold (kWh) per type of customer for the first two quarters of 2018

Source: EUCL-REG, June 2018

The 35.5% of electricity supplied by EUCL in the second quarter of the year 2018 were sold to non-residential customers, 26.2% to industries, and 17.7% to residential customers and the remaining 20.5% were sold to water pumping station, water treatment plan, telecom towers, and hotels.

4. ELECTRICITY END USER TARIFF

Table 5: Applicable electricity end user tariffs

Consumption block per month	RW	/F / kWh (VAT exclusive)
R	esidential Customers	
[0-15] kWh		89
]15-50] kWh		182
>50 kWh		189
Non	-Residential Customers	
[0-100] kWh		189
>100 kWh		192
I	ndustrial Customers	
Small industries including Water Treatmen	nt Plant, Water Pumping Stations an	d Telecom Towers
Flat Rate	RWF/kWh	126
Medium Industries: 0.4 kV <v td="" ≤15kv<=""></v>		
Energy charge	RWF/kWh	90
Max. Demand Charge (Peak)	RWF/KVA/month	10,469.55
Max. Demand Charge (Shoulder)	RWF/KVA/month	5,588.41
Max. Demand Charge (Off-Peak)	RWF/KVA/month	1,891.54
Customer Service Charge	RWF/Customer/month	3,125
Medium Industries: $15 \text{ kV} \le 33 \text{kV}$		
Energy charge	RWF/kWh	83
Max. Demand Charge (Peak)	RWF/KVA/month	7,184.44
Max. Demand Charge (Shoulder)	RWF/KVA/month	4,004.16
Max. Demand Charge (Off-Peak)	RWF/KVA/month	1,085.86
Customer Service Charge	RWF/Customer/month	3,125

Source: Board Decision N° 05/BD/ER-LER/RURA/2016

5. LICENSES AND PERMITS IN ELECTRICITY

There are twenty-five (25) licensed power plants with full licenses, two provisional licenses, one transmission license, one distribution license, one domestic trade license and one international trade license. The number of accredited electrical practitioners increased from 38 to 45.

SN	Name of licensee	Name of plant	Installed Capacity (MW)
1	Ngali Energy Ltd	Rukarara HPP	9
2	Gigawatt Global Ltd	Rwamagana Solar	8.5
3	Regrepower Ltd	Kavumu MHHP	0.38
4	Yumn Ltd	Akanyaru Peat	80
5	Kivuwatt Ltd	Kibuye Methane Gas	25
6	Rwanda Mountain Tea	Giciye I	4
7	Rwanda Mountain Tea	Giciye II	4
8	REPRO	Mutobo Hydropower	0.2
9	Rwaza Hydro Power Ltd	Rwaza-Muko	2.6
10	Refad Rwanda Ltd	Rukarara V Hydro Power Plant	7
11	Rubagabaga Hydro Power Ltd	Rubagabaga Hydro Power Plant	2.8
12	Energie Nyaruguru (Enny) Ltd	Mazimeru Hydro Power Plant	0.5
13	Soenergy Rwanda Ltd	Mukungwa, Masoro and Birembo Thermal PP	30
14	Spv Nyirahindwe Hpp Ltd	Nyirahindwe I Hydro Power Plant	0.9
15	Spv Nyirahindwe Hpp Ltd	Nyirahindwe II Hydro Power Plant	0.3
16	Energicotel Ltd	Keya Hydro Power Plant	2.2
17	Energicotel Ltd	Nkora Hydro Power Plant	0.68
18	Energicotel Ltd	Cyimbiri Hydro Power Plant	0.3
19	Energicotel Ltd	Nyamyotsi I Hydro Power Plant	0.1
20	Energicotel Ltd	Nyamyotsi II Hydro Power Plant	0.1
21	Novel Energy Ltd	Gaseke Hydro Power Plant	0.5
22	Prime Energy Ltd	Gisenyi	1.2
23	Prime Energy Ltd	Rukarara II	2.2
24	Prime Energy Ltd	Mukungwa II	2.5
25	Prime Energy Ltd	Gashashi	0.2

Table 6: List of IPPs with full license for generation as of June 2018

Source: RURA database

Table 7: List of IPPs with provisional license for generation as of June 2018

1Ngali Energy LtdRWONDO, NTARUKA A2.2Ngali Energy LtdBase I& II, NGORORERO	SN	Name of licensee	Name of plant	Installed Capacity (MW)
2 Ngali Energy Ltd Base I& II, NGORORERO	1	Ngali Energy Ltd	RWONDO, NTARUKA A	2.6
	2	Ngali Energy Ltd	Base I& II, NGORORERO	2

Source: RURA database

Table 8: List of other licenses as of June 2018

SN	Name of licensee	Type of license
1	EUCL	Transmission
2	EUCL	Distribution
3	EUCL	Domestic Trade
4	EUCL	International Trade

Source: RURA database

Table 9: List of electrical installation permit holders as of June 2018

SN	Name of licensee	Category of permit
1	Mutangana Jean Claude	Class B
2	Sebasinga Simon	Class B
3	Axar Technical Services Ltd	Class B
4	Bimenyimana Jean Bosco	Class B
5	Kigali Polytechnical Company Ltd	Class B
6	Kayiranga Prosper	Class B
7	4Stin Electronics Ltd (Dusingizimana Faustin)	Class D
8	Bigirimana Yves	Class B
9	Mukerangabo Louis De Gonzague	Class D
10	Teeccsm Ltd	Class C
11	Metha Electricals Ltd	Class A
12	Mehta Electricals Ltd	Class D (GEN)
13	Musabyimana Maurice	Class A
14	Animas Satellite Systems Ltd	Class C
15	Nibamureke Ildephonse	Class C
16	Buclino Company Ltd	Class B
17	Multito Svs Ltd	Class B
18	Habumugisha Placide	Class B
19	Habumugisha Placide	Class D
20	Ngenzi Herve Gilbert	Class Z
21	Ngenzi Herve Gilbert	Class D

22	Nzabonimpa Eric	Class D
23	Karasira Francis	Class C
24	Karasira Francis	Class D
25	Gahutu Yves	Class D
26	Gahutu Yves	Class Z
27	Ushizimpumu Leonard	Class B
28	Fair Technology Company Ltd	Class B
29	Fair Technology Company Ltd	Class D
30	Nshimiyimana Theodore	Class B
31	Intertech	Class D (Solar Systems)
32	Biganiro Mahirwe Patrick	Class A
33	Hategekimana Celestin	Class B
34	Molde Technical Services Ltd	Class B
35	Muragijimana Sylvestre	Class B
36	Mehta Electricals Ltd	Class B
37	Hardware Legrand Distributor (Haldi Group) Ltd	Class C
38	Hardware Legrand Distributor (Haldi Group) Ltd	Class D
39	Maniruta Jacques	Class D
40	Mutsinzi Jean Nepomuscene	Class C
41	Mutsinzi Jean Nepomuscene	Class D
42	Rwabizi Sylvestre	Class D
43	Electrical Vision Company Ltd	Class B
44	Bigirimana Bralo Alloys	Class B
45	Patronics Services (Rwanda) Ltd	Class Z

Source: RURA database

- **Class A:** For electrical installation of residential premises not exceeding five bedrooms and reparations on equipment of up to 230V;
- **Class B:** For electrical installation in multi- storied buildings, other big bungalows and mansions of complex design and commercial buildings, installation of light plants up to a level of 400V and any work under Class A;
- **Class C:** For Low voltage and medium voltage connections up to 30kV and any work under Class B;
- **Class D:** For electrical installation systems designs and Installation in specialized fields like switchgear, centralized heating, refrigeration, and generator sets and solar systems;
- **Class Z:** For installation of any plants up to and including high voltage (70kV and above).