



**STATISTICS IN ELECTRICITY SUB-SECTOR AS OF MARCH
OF THE YEAR 2019**

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TABLE OF CONTENTS

1. ELECTRICITY PRODUCTION.....	2
1.1. Domestic generation, regional shared and imports	2
1.2. Electricity generation mix	3
1.3. System peak demand.....	4
2. EXPORTED ELECTRICITY.....	4
3. ELECTRICITY SUPPLIED.....	5
4. ELECTRICITY SOLD.....	6
5. ELECTRICITY END USER TARIFF	7
5.1. Tariffs for non-industrial customer category	7
5.2. Tariffs for industrial customer category.....	7
5.3. Flat rates for industrial customers without smart meters	8
6. LICENSES AND PERMITS IN ELECTRICITY	8

LIST OF FIGURES

Figure 1: System peak demand (MW) as of March 2019.....	4
Figure 2: Exported electricity (kWh) as of March 2019.....	4
Figure 3: Electricity supplied (kWh) as of March 2019	5

LIST OF TABLES

Table 1: Domestic generation and imported electricity (kWh) as of March 2019	2
Table 2: Electricity generation mix as of March 2019	3
Table 3: Electricity sold (kWh) per type of customer as of March 2019	6
Table 4: Tariffs for non-industrial customer category.....	7
Table 5: Categorization of industrial customers	7
Table 6: Tariffs Industrial customers with Smart Meter.....	8
Table 7: Flat rates for industrial customers without smart meters.....	8
Table 8: List of IPPs with full license for generation as of March 2019	9
Table 9: List of IPPs with provisional license for generation as of March 2019.....	10
Table 10: List of other licenses as of March 2019.....	10
Table 11: List of electrical installation permit holders as of March 2019	10

1. ELECTRICITY PRODUCTION

1.1. Domestic generation, regional shared and imports

Table 1: Domestic generation and imported electricity (kWh) as of March 2019

Plant name	Q3 2018	Q4 2018	Q1 2019
Cymbili	137,988	286,592	241,903
Gaseke	214,378	218,032	159,189
Gashashi	158,184	178,107	170,483
Giciye I	3,055,468	3,466,866	2,915,985
Giciye II	1,996,317	3,629,504	3,028,357
GigaWatt Global	3,623,650	3,204,520	3,387,290
Gihira	2,312,847	2,334,005	2,239,733
Gisenyi	2,163,506	2,506,526	2,633,429
Gishoma Peat	23,987,700	7,229,805	-
Jabana I	1,946,018	5,417,060	6,565,100
Jabana II	26,848,448	21,351,744	30,434,880
Jali Solar	39,047	30,438	26,025
Keya	1,592,809	946,033	2,329,464
Kivuwatt	55,469,710	54,137,134	53,869,181
Mazimeru	554,644	551,548	539,664
Mukungwa I	12,939,332	18,738,168	10,171,334
Mukungwa II	-	832,765	2,866,353
Murunda	100,096	163,801	157,569
Musarara	700,030	555,602	612,852
Mutobo	380,712	306,867	328,255
Nasho Solar	1,276,499	1,073,156	1,093,554
Nkora	529,559	567,585	582,872
Nshili	-	-	336,120
Ntaruka	10,281,200	7,866,000	3,144,000
Nyabahanga	250,032	111,281	10,594
Nyabarongo	24,235,700	27,677,900	29,097,900
Rugezi	2,216,038	2,584,248	1,715,337
Rukarara I	8,261,402	9,727,286	9,443,050
Rukarara II	2,873,318	3,156,307	2,878,073
Rwaza		3,769,861	2,726,915
So Energy Birembo	8,644	188,562	136,528
So Energy Masoro	800,600	995,513	2,560,038
So Energy Mukungwa I	792,503	4,043,154	8,568,854
Total Domestic Generation	189,746,379	187,845,969	184,970,881
Regional shared and imports	23,545,961	25,665,007	24,814,020

Source: EUCL-REG, March 2019

The total generated electricity is from domestic power plants, regional shared plants, and imports. The total domestic generated electricity decreased by 1.5% from the fourth quarter 2018 to the first quarter of the year 2019.

The total electricity from regional shared plants and imports in the quarter under review showed a decline trend whereby they went down ward from 25,665,007 kWh recorded in the fourth quarter of the year 2018 to 24,814,020 kWh recorded in the first quarter of the year 2019 representing a decrease of 3.3%

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.

Table 2: Electricity generation mix as of March 2019

Power Generation Mix	Q3 2018	Q4 2018	Q1 2019
Hydro	35.1%	42.2%	37.3%
Methane	26.0%	25.4%	25.7%
Peat	11.2%	3.4%	0.0%
Solar	2.3%	2.0%	2.1%
Thermal	14.3%	15.0%	23.0%
Regional shared and imports	11.0%	12.0%	11.8%

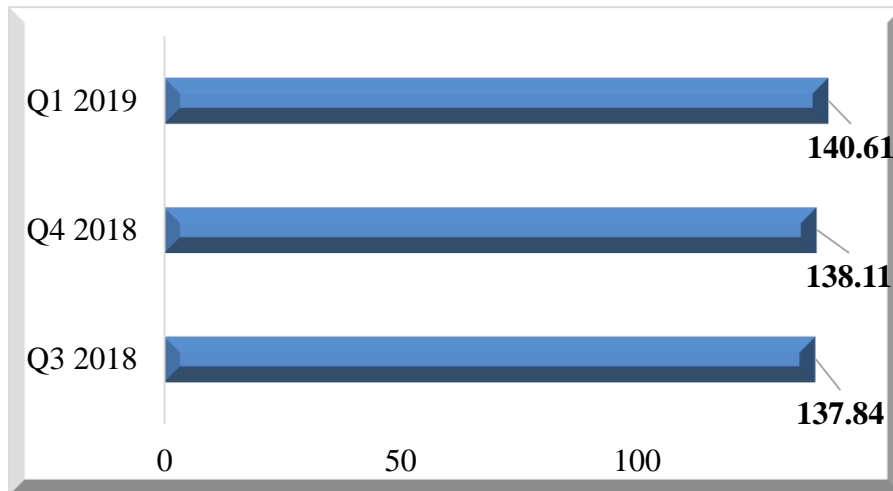
Source: EUCL-REG, March 2019

The 37.3% of the electricity supplied during the first quarter of year 2019 is generated from hydro, 25.7% from Methane, 23.0% from thermal, 2.1% from solar energy, and 11.8% is the regional shared and imports. In aggregate, the electricity generated from renewable resources is greater than the electricity generated from non-renewables.

1.3. System peak demand

The peak quarter over the last three quarters was quarter one of the year 2019 with a peak demand of 140.61 MW as presented in the Figure 1.

Figure 1: System peak demand (MW) as of March 2019

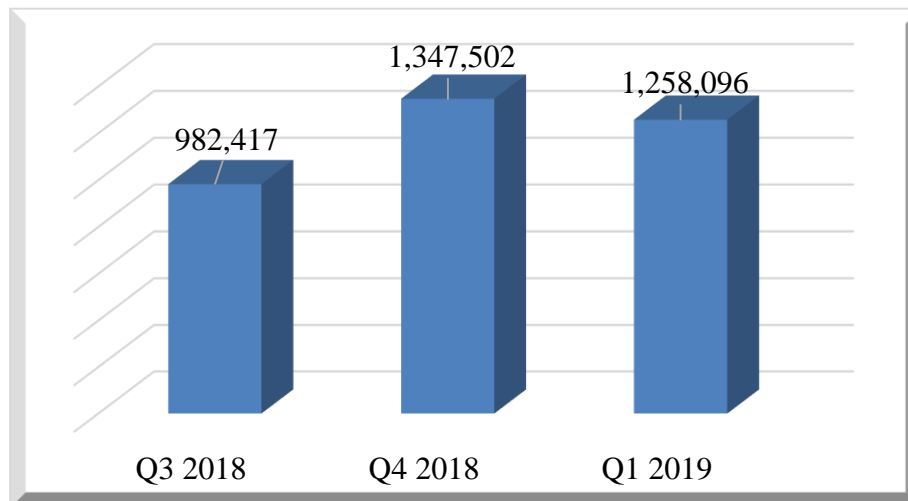


Source: EUCL-REG, March 2019

The system peak demand increased by 1.8 percentage points from the fourth quarter of the year 2018 to first quarter of 2019.

2. EXPORTED ELECTRICITY

Figure 2: Exported electricity (kWh) as of March 2019



Source: EUCL-REG, March 2019

The total exported electricity decreased by 6.6% from the fourth quarter of 2018 to the first quarter of the year 2019.

3. ELECTRICITY SUPPLIED

The electricity supplied in each quarter includes both domestic generation, regional shared and imports.

Figure 3: Electricity supplied (kWh) as of March 2019



Source: EUCL-REG, March 2019

The total electricity supplied by the utility decreased by 1.7% from the fourth quarter 2018 to the first quarter of the year 2019.

4. ELECTRICITY SOLD

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

Table 3: Electricity sold (kWh) per type of customer as of March 2019

Customer category	Q3 2018	Q4 2018	Q1 2019	Share per customer for Q1 2019 (%)
Domestic/Residential	29,141,795	30,137,355	29,686,710	17.7
Non-Residential	52,534,469	51,424,277	50,798,449	30.4
Water Pumping Station	6,375,509	6,528,931	6,521,576	3.9
Water Treatment Plant	8,212,806	8,185,132	6,553,022	3.9
Telecom towers	11,940,108	11,162,577	10,266,658	6.1
Health facilities	2,301,680	3,736,860	3,466,259	2.1
Broadcasters	660,091	1,007,411	937,844	0.6
Hotels	9,349,011	10,363,852	9,944,903	5.9
Industrial	46,430,902	49,724,686	49,096,709	29.4
Total	166,946,370	172,271,081	167,272,131	100.0

Source: EUCL-REG, March 2019

The 30.4% of electricity supplied by EUCL in the first quarter of the year 2019 were sold to non-residential customers, 29.4% to industries, and 17.7% to residential customers and the remaining 22.5% were sold to water pumping station, water treatment plan, telecom towers, health facilities, broadcasters, and hotels.

5. ELECTRICITY END USER TARIFF

The electricity tariff that was charged to electricity customers during first quarter of the year 2019 was structured as follow:

5.1. Tariffs for non-industrial customer category

Table 4: Tariffs for non-industrial customer category

Category	Consumption block per month(kWh)	Frw/kWh (VAT & Regulatory fee exclusive)
Residential]0-15]	89
]15-50]	182
	>50	210
Non Residential]0-100]	204
	>100	222
Telecom towers	All	185
Water Treatment Plants & Water Pumping Stations	All	126
Hotels	All	126
Health Facilities	All	192
Broadcasters	All	184

5.2. Tariffs for industrial customer category

Industrial customers are those registered as industries and are categorized based on their level of consumption as defined below:

Table 5: Categorization of industrial customers

Industry category	Annual consumption (kWh/Year)
Small	$\leq 22,000$
Medium]22,000- 660,000]
Large	$>660,000$

Table 6: Tariffs Industrial customers with Smart Meter

Category	Energy charge (Frw/kWh)	Charges VAT and regulatory fee exclusive				Customer service charge (Frw/Month)
		Maximum demand charge (Frw/kVA/month)				
		Peak (05:00PM-11:59PM)	Shoulder (08:00AM 04:59 PM)	Off-Peak (00:00AM 07:59AM)		
Small	110	11,017	4,008	1,691	10,000	
Medium	87	10,514	3,588	1,292	10,000	
Large	80	7,184	2,004	886	10,000	

5.3. Flat rates for industrial customers without smart meters

Industrial customers without smart meters are charged at flat rates until the smart meters are installed in their facilities in order to apply the time of use tariff as described in the table below:

Table 7: Flat rates for industrial customers without smart meters

Industry category	Flat rate (Frw/kWh, VAT & Regulatory fee exclusive)
Small	126
Medium	98
Large	97

6. LICENSES AND PERMITS IN ELECTRICITY

There are twenty-nine (29) licensed power plants with full licenses, two (2) 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 sixty-seven (67) to seventy (70).

Table 8: List of IPPs with full license for generation as of March 2019

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	Cymbiri 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	1.7
23	Prime Energy Ltd	Rukarara II	2.2
24	Prime Energy Ltd	Mukungwa II	2.5
25	Prime Energy Ltd	Gashashi	0.2
26	Amahoro Energy Ltd	Musarara	0.4
27	Rwanda Mountain Tea Ltd	Gihira	1.8
28	Rwanda Mountain Tea Ltd	Rugezi	2.6
29	RMT-Energy Development Ltd	Giciye III	7.2

Source: RURA Database

Table 9: List of IPPs with provisional license for generation as of March 2019

SN	Name of licensee	Name of plant	Installed Capacity (MW)
1	Ngali Energy Ltd	Rwondo MHPP	2.6
2	Ngali Energy Ltd	Base I MHPP	2.9
		Base II MHPP	2.9
		Ngororero MHPP	2.4

Source: RURA database

Table 10: List of other licenses as of March 2019

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 11: List of electrical installation permit holders as of March 2019

SN	Name of accredited electrical practitioner	Category of Permit
1	Mutangana Jean Claude	Class B
2	Sebasinga Simon	Class B
3	Musabyimana Frederic	Class A
4	Axar Technical Services Ltd	Class B
5	Munyantore Gasatsi Jean Claude	Class C
6	MUKERANGABO Louis De Gonzague	Class C
7	Vision Technologies Company Ltd	Class D
8	Vision Technologies Company Ltd	Class Z
9	Bimenyimana Jean Bosco	Class B
10	Kolitech &Partners	Class B
11	Kigali Polytechnical Company Ltd	Class B
12	MUKERANGABO Louis De Gonzague	Class D
13	Teccsm Ltd	Class C
14	Metha Electricals Ltd	Class A
15	Mehta Electricals Ltd	Class D (Gen)
16	Musabyimana Maurice	Class A
17	Animas Satellite Systems	Class C
18	Nibamureke Ildephonse	Class C

19	Buclino Company Ltd	Class B
20	Multito Svs Ltd	Class B
21	Habumugisha Placide	Class B
22	Habumugisha Placide	Class D
23	Ngenzi Herve Gilbert	Class Z
24	Ngenzi Herve Gilbert	Class D
25	Nzabonimpa Eric	Class D
26	Karasira Francis	Class C
27	Karasira Francis	Class D
28	Gahutu Yves	Class D
29	Gahutu Yves	Class Z
30	Ushizimpumu Leonard	Class B
31	Fair Technology Company Ltd	Class B
32	Fair Technology Company Ltd	Class D
33	Nshimiyimana Theodore	Class B
34	Intertech	Class D (Solar Systems)
35	Biganiro Mahirwe Patrick	Class A
36	Hategekimana Celestin	Class B
37	Molde Technical Services Ltd	Class B
38	Muragijimana Sylvestre	Class B
39	Mehta Electricals Ltd	Class B
40	Hardware Legrand Distributor (Haldi Group) Ltd	Class C
41	Hardware Legrand Distributor (Haldi Group) Ltd	Class D
42	Maniraruta Jacques	Class B
43	Mutsinzi Jean Nepomuscene	Class C
44	Mutsinzi Jean Nepomuscene	Class D
45	Rwabizi Sylvestre	Class D
46	Electrical Vision Company Ltd	Class B
47	Bigirimana Bralo Alloys	Class B
48	Patronics Services (Rwanda) Ltd	Class Z
49	Uwamahoro Jacques	Class A
50	Altes Ltd	Class C
51	Ushizimpumu Leonard	Class D (Sol, Gen and SG)
52	Mugwiza Nicolas	Class C
53	Mugwiza Nicolas	Class D (Sol, Gen and SG)
54	Eng. Kirenga Napoleon Innocent	Class Z
55	Eng. Kirenga Napoleon Innocent	Class D
56	Real Contractors Ltd	Class C

57	Real Contractors Ltd	Class D
58	Central Electricals International Ltd	Class C
59	Central Electricals International Ltd	Class D
60	Mwongereza Jean Jacques	Class B
61	Ntawuhorakize Jean Marie Vianney	Class B
62	Talab Mohamed Ekbal Harun	Class C
63	Nsabimana Cyprien	Class B
64	Dikson Mbotti Mwangunde	Class B
65	Dikson Mbotti Mwangunde	Class D
66	Twagirayesu Jean Bosco	Class B
67	K.E.P Technologies Ltd	Class B
68	Nizeyimana Jean Marie Vianney	Class B
69	Dusengumuremyi Andre	Class B
70	Fresnelle Networking And Supply Ltd	Class A

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).