



**STATISTICS IN ELECTRICITY SUB-SECTORAS OF
DECEMBER OF THE YEAR 2018**

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1. ELECTRICITY PRODUCTION

1.1.Domestic generation, regional shared and imports

Table 1: Trend of domestic generation and imported electricity (kWh) for the year 2018

Plant name	Q1 2018	Q2 2018	Q3 2018	Q4 2018
Agatobwe	14,351	-	-	-
Cymbili	135,988	307,388	137,988	286,592
Gaseke MHPP	332,221	668,529	214,378	218,032
Gashashi	198,978	325,179	158,184	178,107
Giciye I	3,617,594	4,638,805	3,055,468	3,466,866
Giciye II	3,736,083	4,881,241	1,996,317	3,629,504
GigaWatt Global	3,130,000	3,396,000	3,623,650	3,204,520
Gihira	1,576,867	2,444,544	2,312,847	2,334,005
Gisenyi	-	1,435,683	2,163,506	2,506,526
Gishoma Peat	-	342,925	23,987,700	7,229,805
Jabana I	5,532,300	1,692,010	1,946,018	5,417,060
Jabana II	27,849,392	18,083,916	26,848,448	21,351,744
Jali Solar	34,001	32,348	39,047	30,438
Keya	1,879,599	1,673,270	1,592,809	946,033
Kivuwatt	48,007,712	45,030,607	55,469,710	54,137,134
Mazimeru	673,814	802,382	554,644	551,548
Mukungwa I	8,953,742	13,018,981	12,939,332	18,738,168
Mukungwa II	807,692	-	-	832,765
Murunda	149,646	143,054	100,096	163,801
Musarara	116,442	856,841	700,030	555,602
Mutobo	342,968	386,950	380,712	306,867
Nasho Solar	1,032,562	1,035,497	1,276,499	1,073,156
Nkora	537,158	869,907	529,559	567,585
Nshili MHPP	314,376	-	-	-
Ntaruka MHPP	2,390,400	5,795,000	10,281,200	7,866,000
Nyabahanga MHPP	68,704	77,100	250,032	111,281
Nyabarongo MHPP	37,767,700	42,904,100	24,235,700	27,677,900
Rugezi	2,071,896	4,668,324	2,216,038	2,584,248
Rukarara I	11,577,500	14,487,200	8,261,402	9,727,286
Rukarara II	3,171,348	4,182,809	2,873,318	3,156,307
Rwaza	-	-	-	3,769,861
So Energy Birembo	-	-	8,644	188,562
So Energy Masoro	3,724,480	672,328	800,600	995,513
So Energy Mukungwa I	4,775,940	998,164	792,503	4,043,154
Total Domestic Generation	174,521,453	175,851,082	189,746,379	187,845,969
Regional shared and imports	20,306,079	24,300,093	23,545,961	25,665,007

Source: EUCL-REG, December 2018

The total generated electricity is from domestic power plants, regional shared plants, and imports. The total domestic generated electricity decreased by 1.0% from the third quarter to the fourth 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.

Table 2: Trend of electricity generation mix

Power Generation Mix	Q1 2018	Q2 2018	Q3 2018	Q4 2018	2018
Hydro	41.3%	52.2%	35.1%	42.2%	42.6%
Methane	24.7%	22.5%	26.0%	25.4%	24.7%
Peat	0.0%	0.2%	11.2%	3.4%	3.8%
Solar	2.2%	2.2%	2.3%	2.0%	2.2%
Thermal	21.5%	10.7%	14.3%	15.0%	15.3%
Regional shared and imports	10.4%	12.1%	11.0%	12.0%	11.4%

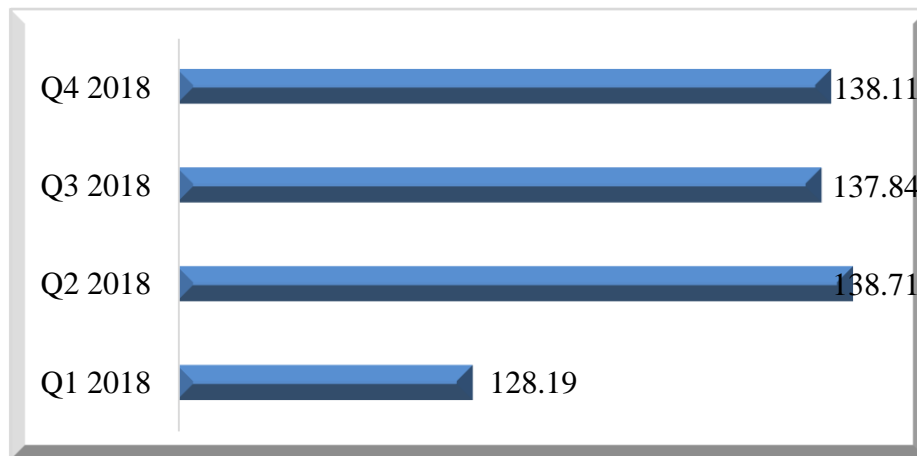
Source: EUCL-REG, December 2018

The 42.6% of the electricity supplied during the year 2018 is generated from hydro, 24.7% from Methane, 15.3% from thermal, 2.2% from solar energy, 3.8% from peat power plants, and 11.4% 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 four quarters of the year 2018 was quarter two with a peak demand of 138.71 MW as presented in the Figure 1.

Figure 1: Trend of system peak demand (MW) for the year 2018

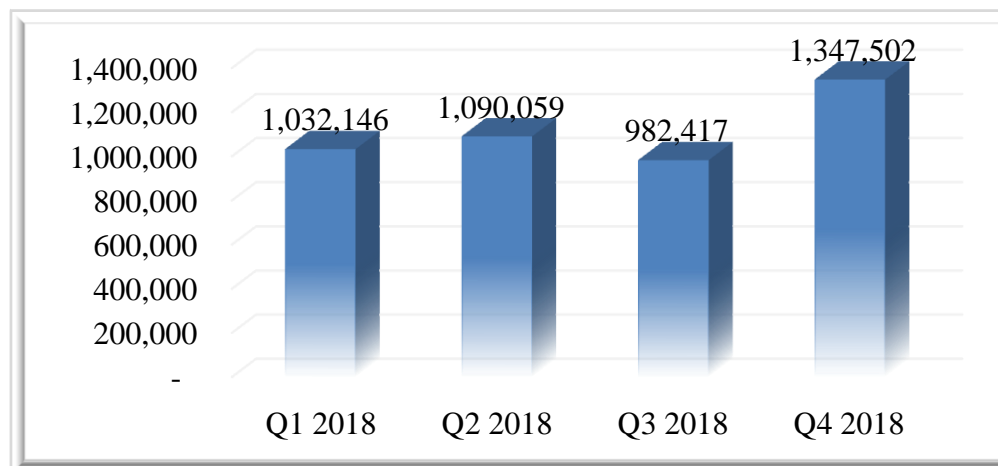


Source: EUCL-REG, December 2018

The system peak demand increased by 0.2% from the third quarter to the fourth quarter of the year 2018.

2. EXPORTED ELECTRICITY

Figure 2: Exported electricity (kWh) for the year 2018



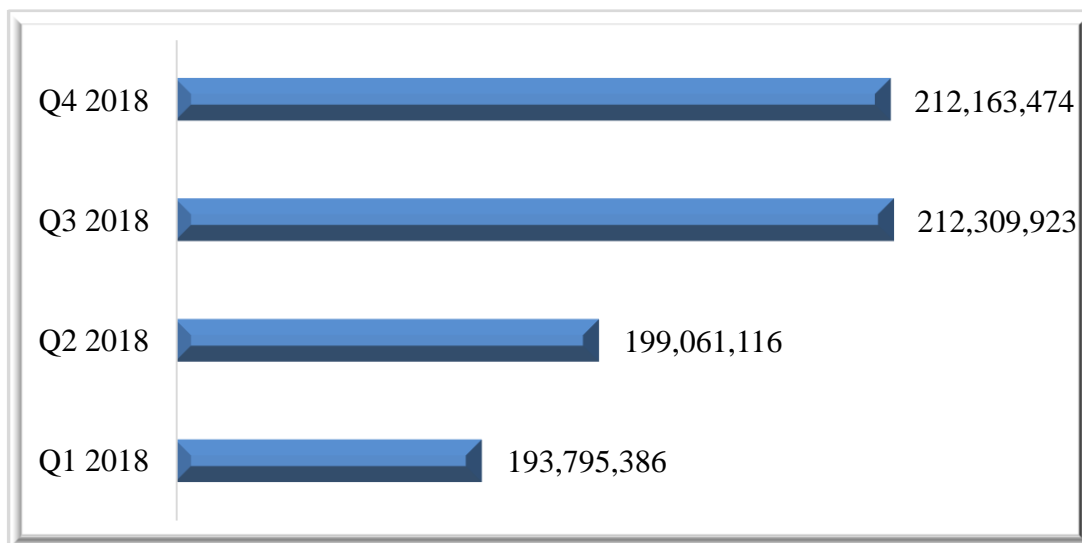
Source: EUCL-REG, December 2018

The total exported electricity increased by 37.2% from the third quarter to the fourth quarter of the year 2018.

3. ELECTRICITY SUPPLIED

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

Figure 3: Trend of electricity supplied (kWh) for the year 2018



Source: EUCL-REG, December 2018

The total electricity supplied by the utility decreased by 0.1% from the third quarter to the fourth quarter of the year 2018.

4. ELECTRICITY SOLD

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

Table 3: Trend of electricity sold (kWh) per type of customer for the year 2018

Customer category	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Share for 2018 (%)
Domestic/Residential	27,797,391	28,309,537	29,141,795	30,137,355	17.6
Non-Residential	54,018,462	56,795,796	52,534,469	51,424,277	32.8
Water Pumping Station	5,305,072	5,455,678	6,375,509	6,528,931	3.6
Water Treatment Plant	6,998,565	7,346,095	8,212,806	8,185,132	4.7
Telecom towers	11,657,663	11,599,725	11,940,108	11,162,577	7.1
Health facilities			2,301,680	3,736,860	0.9
Broadcasters			660,091	1,007,411	0.3
Hotels	8,383,788	8,457,771	9,349,011	10,363,852	5.6
Industrial	40,648,102	41,977,590	46,430,902	49,724,686	27.3
Total	154,809,043	159,942,192	166,946,370	172,271,081	100.0

Source: EUCL-REG, December 2018

The 32.8% of electricity supplied by EUCL in the fourth quarter of the year 2018 were sold to non-residential customers, 27.3% to industries, and 17.6% to residential customers and the remaining 22.2% 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 last quarter of the year 2018 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	≤ 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			
		Maximum demand charge (Frw/kVA/month)			Customer service charge (Frw/Month)
		Peak (05:00PM-11:59PM)	Shoulder (08:00AM04:59 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-five (26) 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 fifty-four (54) to sixty-seven (67).

Table 8: List of IPPs with full license for generation as of December 2018

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	EnergieNyaruguru (Enny) Ltd	Mazimeru Hydro Power Plant	0.5
13	Soenergy Rwanda Ltd	Mukungwa, Masoro and Birembo Thermal PP	30
14	SpvNyirahindweHpp Ltd	Nyirahindwe I Hydro Power Plant	0.9
15	SpvNyirahindweHpp 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	1.2
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

Source: RURA database

Table 9: List of IPPs with provisional license for generation as of December 2018

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

Source: RURA database

Table 10: List of other licenses as of December 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 11: List of electrical installation permit holders as of December 2018

SN	Name of licensee	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	Kigali Polytechnical Company Ltd	Class B
11	MUKERANGABO Louis De Gonzague	Class D
12	Teeccsm Ltd	Class C
13	Metha Electricals Ltd	Class A
14	Mehta Electricals Ltd	Class D (GEN)
15	Musabyimana Maurice	CLASS: A
16	Animas Satellite Systems Ltd	CLASS: C
17	Nibamureke Idéphonse	CLASS: C
18	Buclino Company Ltd	CLASS: B
19	MultitoSvs Ltd	CLASS: B
20	Habumugisha Placide	CLASS: B
21	Habumugisha Placide	CLASS : D
22	Ngenzi Herve Gilbert	CLASS: Z
22	Ngenzi Herve Gilbert	CLASS: D
24	Nzabonimpa Eric	CLASS: D

25	Karasira Francis	CLASS:C
26	Karasira Francis	CLASS: D
27	Gahutu Yves	CLASS:D
28	Gahutu Yves	CLASS:Z
29	Ushizimpumu Leonard	CLASS: B
30	Fair Technology Company Ltd	CLASS:B
31	Fair Technology Company Ltd	CLASS: D
32	Nshimiyimana Theodore	CLASS: B
33	Intertech	CLASS: D (Solar systems)
34	BiganiroMahirwe Patrick	CLASS: A
35	Hategekimana Celestin	CLASS:B
36	Molde Technical Services Ltd	CLASS:B
37	MuragijimanaSylvestre	CLASS:B
38	Mehta Electricals Ltd	CLASS:B
39	Hardware Legrand Distributor (Haldi Group) Ltd	CLASS:C
40	Hardware Legrand Distributor (Haldi Group) Ltd	CLASS:D
41	Maniraruta Jacques	CLASS:B
42	Mutsinzi Jean Nepomuscene	CLASS:C
43	Mutsinzi Jean Nepomuscene	CLASS:D
44	Rwabizi Sylvestre	CLASS:D
45	Electrical Vision Company Ltd	CLASS:B
46	BigirimanaBralo Alloys	CLASS:B
47	Patronics Services (Rwanda) Ltd	Class Z
48	Uwamahoro Jacques	Class A
49	Altes Ltd	Class C
50	Ushizimpumu Leonard	Class D (SOL,Gen and SG
51	Mugwiza Nicolas	Class C
52	Mugwiza Nicolas	Class D (SOL,Gen and SG)
53	Eng. Kirenga Napoleon Innocent	Class Z
54	Eng. Kirenga Napoleon Innocent	Class D
55	Real Contractors Ltd	Class C
56	Real Contractors Ltd	Class D
57	Central Electricals International Ltd	Class C
58	Central Electricals International Ltd	Class D
59	Mwongereza Jean Jacques	Class B
60	Ntawuhorakize Jean Marie Vianney	Class B
61	Talab Mohamed Ekbal Harun	Class C
62	NsabimanaCyprien	Class B
63	DiksonMbottiMwangunde	Class B
64	DiksonMbottiMwangunde	Class D
65	Twagirayesu Jean Bosco	Class B
67	K.E.P Technologies Ltd	Class B

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).