



## RUBAVU: SHEMA GAS METHANE POWER PLANT NEARS COMPLETION

# REG

NEWSLETTER

Issue N°: 8  
October - December, 2020

## TABLE OF CONTENTS

RWANDA AND ZIMBABWE SIGNED AN AGREEMENT TO PARTNER IN ENERGY DEVELOPMENT	5
ELECTRICITY ACCESS RATE REACHES 59.7% FROM 10% IN ONLY 10 YEARS	6
GICIYE III HYDROPOWER PLANT TO ADD 9.8 MW TO THE NATIONAL GRID	8
THE GOVERNMENT OF RWANDA AND REPUBLIC OF KOREA SIGN US\$ 66.2 MILLION LOAN AGREEMENT TO REINFORCE ACCESS TO ELECTRICITY	9
GOVERNMENT LAUNCHES US\$35 MILLION SOLAR PROJECT FOR RURAL HOUSEHOLDS	10
KIBANGU: THE LAST SECTOR IN RWANDA TO ACCESS ELECTRICITY	12
REG COMPLETED A SUBSTATION THAT WILL HELP ITS RESIDENTS ACCESS UNINTERRUPTED ELECTRICITYCOMPLETION	13
ELECTRICAL LINE THAT WILL SUPPLY THE INDUSTRIAL PARK AND AIRPORT COMPLETEDhe	14
FOUR PEOPLE ARRESTED IN KIGALI OVER VANDALIZING AND STEALING ELECTRICITY PYLONSas	15
AROUND 198 THOUSAND HOUSEHOLDS WERE ELECTRIFIED DURING THE YEAR 2019/2020	16



## Our Vision

To be the leading regional provider of innovative and sustainable energy solutions for national development

## Our Mission

Developing and providing reliable and affordable energy while creating value for our stakeholders

## Core Values of REG



### Customer Oriented

Serving our customers and ensuring their satisfaction through our culture of excellence



### Integrity

We are open, fair and honest with our stakeholders



### RESPECT FOR PEOPLE

We respect, empower, recognize and ensure the continuous development of our people.



### TEAM WORK

We work together reinforcing our professional capabilities as individuals, teams and operating units



### EFFICIENCY

We innovatively achieve more with fewer resources without compromising quality



### SUSTAINABILITY

We provide sustainable solutions in a safe environment

## 1 RWANDA AND ZIMBABWE SIGNED AN AGREEMENT TO PARTNER IN ENERGY DEVELOPMENT



Kigali, 3<sup>rd</sup> December 2020 Rwanda and Zimbabwe signed an agreement that will increase cooperation and partnerships between both countries in energy related infrastructure and services.

The Memorandum of Understanding was signed between Rwanda Energy Group (REG) and Zimbabwe Electricity Supply Authority (ZESA Holdings Ltd) on the cooperation between the two companies. The agreement signed covers different aspects inter-alia exchange of experts in energy generation, transmission, distribution and reduction of energy losses together with capacity building of personnel engaged in the sector.

The signing ceremony was officiated by Rwanda's Minister of Infrastructure, Honourable, Claver Gatete and the Ambassador of the Republic of Zimbabwe to

Rwanda, H.E Prof. Charity MANYERUKE.

The signed MoU has validity of 5-years with the possibility of being renewed.

Speaking about the agreement, Claver Gatete the Minister of Infrastructure emphasized the importance of the partnership between the two companies, saying it is necessary for sustaining what Rwanda and Zimbabwe are building in the energy sector.

*"There are some skills that Zimbabwe has that we don't have. There is what we have that we can share with them. So, at the end of the day, it is a win-win situation,"* he said.

Charity Manyeruke Zimbabwe's envoy to Rwanda said the deal signals the deepening of the two countries' economic relations and will assist in improving the livelihoods of people of Zimbabwe and Rwanda.



## 2 ELECTRICITY ACCESS RATE REACHES 59.7% FROM 10% IN ONLY 10 YEARS



According to statistics, the number of households accessing electricity has increased from 10% in 2010 to 59.7% as of December 2020. Kicukiro and Nyaruguru Districts have currently the highest rate with 93% and 84% respectively. The total number of households connected across the country is around 1.6 million today.

The Government of Rwanda has taken a policy decision to diversify the sources of electricity by adding to traditional dominant grid connections some mini-grid and off-grid connections. Subsequently, Households located far away from the planned national grid coverage are being encouraged to use alternatively cheaper connections such as Mini-grids and Solar Photovoltaics (PVs) to reduce the cost of access to electricity whilst relieving constraints on historical government subsidies.

Among the 59.7% households accessing electricity, 43.8% are connected to the national grid while 15.9% are accessing through off-grid solution, mainly solar energy and mini-grids.

During the last year of 2020, around 200 thousand households were electrified, including those connected to the grid and those electrified through off-grid systems.

No		On/Off-Grid	INSTALLED CAPACITY(MW)	OWNERSHIP	Year	Location / District
Renewable energy (Sub-Total)			132.778			
Renewable share % to the total generation			55.703			
HYDROPOWER						
1	Ntaruka	On-grid	11.250	REG/ GoR	1959	BURERA
2	Mukungwa 1	On-grid	12.000	REG/GoR	1982	MUSANZE
3	Nyabarongo I	On-grid	28.000	REG/ GoR	2014	MUHANGA
4	Gisenyi	On-grid	1.700	PRIME ENERGY LTD/ PPP	1957	RUBAVU
5	Gihira	On-grid	1.800	RMT LTD/ PPP	1984	RUBAVU
6	Murunda	on-grid	0.100	REPRO LTD/ IPP	2010	RUTSIRO
7	Rukarara 1	On-grid	9.000	NGALI ENERGY LTD/ PPP	2010	NYAMAGABE
8	Agatobwe	Off-grid	0.390	CARERA-EDERER/ IPP	2010	NYARUGURU
9	Janja	On-grid	0.200	RWANDA ENERGY UK LTD/ PPP	2012	GAKENKE
10	Rugezi	On-grid	2.600	RMT LTD/PPP	2011	BURERA
11	Keya	On-grid	2.200	ENERGICOTEL LTD/ PPP	2011	RUBAVU
13	Nkora	On-grid	0.680	ENERGICOTEL LTD/ PPP	2011	RUTSIRO

14	Mutobo	On-grid	0.200	REPRO LTD/ IPP	2009	MUSANZE
15	Mukungwa 2	On-grid	3.600	PRIME ENERGY LTD/ PPP	2013	MUSANZE
16	Nyabahanga	On-grid	0.200	REG/GOR	2012	KARONGI
17	Cyimbili	On-grid	0.300	ENERGICOTEL LTD/ PPP	2011	RUTSIRO
18	Mazimeru	On-grid	0.500	ENNY LTD / IPP	2012	NYARUGURU
19	Nyamyotsi II	On-grid	0.100	ENERGICOTEL LTD/ PPP	2011	NYABIHU
20	Nyirabuhombohombo	Off-grid	0.650	RWANDA ENERGY UK LTD/ PPP	2013	NYAMASHEKE
21	Nyamyotsi I	On-grid	0.100	ENERGICOTEL LTD/ PPP	2007	NYABIHU
22	Nshili1	On-grid	0.400	REG /GoR	2012	NYARUGURU
23	Gashashi	On-grid	0.280	PRIME ENERGY LTD/ PPP	2013	RUTSIRO
24	Musarara	On-grid	0.400	AMAHORO ENERGY LTD/IPP	2013	GAKENKE
25	Rukarara 2	On-grid	2.200	PRIME ENERGY LTD/ PPP	2014	NYAMAGABE
26	Giciye 1	On-grid	4.000	RMT LTD/ IPP	2014	NYABIHU
27	Giciye2	On-grid	4.000	RMT LTD/ IPP	2016	NYABIHU
28	Gaseke	On-grid	0.500	NOVEL ENERGY LTD /IPP	2016	GAKENKE
29	Rwaza-Muko	on-grid	2.600	Rwaza-Muko SPV	2018	MUSANZE
30	Ruzizi 1	On-grid	4.100	SNEL/ IPP	1958	RUSIZI
31	Ruzizi 2	On-grid	12.000	SNELAC/ PPP	1989	RUSIZI
32	Mushishito	on-grid	2.300	REFAD	2019	NYAMAGABE
33	Kigasa	on-grid	0.272	LED Solutions	2020	MUSANZE
34	Nyirantaruko	On-grid	1.840	Nyirantaruko Hydropower Ltd	2020	NYAMASHEKE
35	Rubagabaga	on-grid	0.450		2019	NYABIHU
36	Mukugu Pico power plant	Off-grid	0.016	Handed over to REG in Jan/2020	2020	KARONGI
37	Giciye III	ongrid	9.800	RMT-Energy Development Ltd	2020	NYABIHU
Total Hydropower			120.728			
SOLAR POWER						
37	Jali	On-grid	0.250	MAINZ/ IPP		GASABO
38	GigaWatt /Rwamagana	On-grid	8.500	GIGAWATT GLOBAL/ IPP	2015	RWAMAGANA
39	Nasho Solar	On-grid	3.300	REG/GoR	2017	KIREHE
Total Solar			12.050			
Non-renewable energy (sub-total)			103.590			
No-renewable energy % to the total generation			43.458			
THERMAL POWER						
40	Jabana 1	On-grid	7.800	REG/GoR		GASABO
41	Gishoma	On-grid	15.000	REG/GoR	2016	RUSIZI
42	SoEnergy LTD ( SEZ)	On-grid	10.000	SoEnergy / IPP	2017	MUSANZE/ GASABO
43	SoEnergy LTD ( MUKUNGWA)	On-grid	10.000	SoEnergy / IPP	2017	MUKUNGWA
41	Jabana 2	On-grid	21.000	REG /GoR		GASABO
42	SoEnergy LTD ( Birembo)	On-grid	10.000	SoEnergy / IPP	2017	GASABO
43	KP1	On-grid	3.600	SYMBION POWER / PPP	2012	RUBAVU
44	Kibuye Gaz methane	On-grid	26.190	KIVUWATT LTD / IPP	2015	KARONGI
Total Thermal			103.590			
Mixed (not well specified)						
45	UETCL	On-grid	2.000			
Grand TOTAL			238.368			



### 3 GICIYE III HYDROPOWER PLANT TO ADD 9.8 MW TO THE NATIONAL GRID



A new hydropower plant (HPP) located in Rugera sector of Nyabihu district, Giciye III with an installed generation capacity of 9.8 megawatts was completed and inaugurated in December 2020.

The power plant was built by RMT Energy development Ltd, a subsidiary of Rwanda Mountain Tea. At the cost US\$ 38 million.

The new power plant was built in the framework of increasing electricity generation in Rwanda whereby the Government has embarked on partnering with private power producers that are now participating in power production through Power Purchase Agreements.

Residents in neighborhood of the hydropower welcomed the infrastructure expected to drive livelihoods transformations. Some got jobs during the construction phase, while others expect to be connected to the grid thanks to new distribution lines in the area.

The General Manager of Rwanda Mountain Tea Ltd and coordinator of construction activities at Giciye III, Kabeja Alain thanked the Government of Rwanda for providing investment opportunities in development projects.

"First of all, we voice appreciation to the Government of

Rwanda under the stewardship of President Paul Kagame for providing investment opportunities in different sectors. We are ready to take advantage of it and tap into such opportunities without leaving behind interests of residents," he said.

The CEO of Rwanda Energy Group (REG), Ron Weiss highlighted that the hydropower plant is a great contribution to Rwanda's goal for universal electricity access by 2024.

Construction activities of Giciye III hydropower plant took 18 months since March 2019. RMT Energy will manage the plant for 25 years before handover to the Government as per agreements.

Giciye III HPP is additional to two other hydropower plants built by RMT Energy development Ltd generating electricity from Giciye River in Nyabihu district including Giciye I and Giciye II.

The current installed power generation capacity in Rwanda is 238.368 MW from various sources where hydropower has the biggest share of 50.6%. The Government of Rwanda is targeting to increase the generation capacity by 556MW by the year 2024.

### 4 THE GOVERNMENT OF RWANDA AND REPUBLIC OF KOREA SIGN US\$ 66.2 MILLION LOAN AGREEMENT TO REINFORCE ACCESS TO ELECTRICITY



November 26<sup>th</sup>, 2020: The Governments of Rwanda and the Republic of Korea today signed an arrangement for a loan from the Economic Development Cooperation Fund for the electricity transmission and grid expansion project worth US\$ 66.2 million (Approximately Frw 64 billion). The loan is concessional and will be repaid in forty (40) years including a grace period of fifteen (15) years, at the interest rate 0.01% per annum.

Once complete, the project will reinforce the national power system through expanding the transmission grid and provide stable power.

Speaking after the signing of the arrangement for a loan agreement, the Minister of Finance and Economic Planning Dr. Uzziel Ndagijimana said: "This project will support our National Strategy for Transformation targets of 100% access to electricity for every Rwandan in 2024 from the current 54%. We thank the Government of the Republic of Korea for the continued support and collaboration in many areas of our economy but most importantly Agriculture, Education,

Digitalization, and Water and sanitation."

Ambassador Plenipotentiary and Extraordinary of the Republic of Korea to Rwanda, His Excellency Jin-weon CHAE, said: "Korea will continue its close partnership with Rwanda in its journey towards sustainable development. I believe this project will provide solid electricity infrastructure, which is vital for industrial development and improvements in the quality of life of Rwandans".

The project will support the grid extension of Gasogi, Mamba, Nyabihu, Rwabusoro and Nyabarongo power sub-stations as well as connecting transmission lines and line bays.

This project comes to complement other projects in pipeline in a multi-Donor Program to support the Energy sector. These include financing from the World Bank, Africa Development Bank, European Investment Bank, Agence Française de Développement (AFD), OPEC Fund for International Development (OFID) and Saudi fund for Development.



5

## GOVERNMENT LAUNCHES US\$35 MILLION SOLAR PROJECT FOR RURAL HOUSEHOLDS



**K**igali, 3rd October 2020: Minister of Infrastructure, Honourable Claver Gatete officially launched the Subsidy Window and the Guarantee Framework as part of the Renewable Energy Fund (REF) Project. The venture aims at connecting at least 445,000 households with solar energy, where about 1.8 million people will benefit from this project.

The US\$ 15million REF Subsidy window is a newly created facility to address the affordable issue for solar home systems for off-grid households while the other is a \$20 million guarantee framework covering lending institutions.

During the launch, Minister Gatete noted that the Government of Rwanda considers energy as one of key

sectors that will stimulate the development of the country as reflected in the National Strategy for Transformation (NST1) which sets out as a target universal access to electricity for all the Rwandans by the year 2024. It is planned that the 52% of the energy will come from the grid and 48% from off grid.

Minister, emphasized on the role of the private sector and development partners as a vital tool in achieving 100% access target by 2024.

The infrastructure minister appreciates the interest of private sector players and financial institutions to drive REF financing instrument and commends their strong collaboration in energy sector development.

“Today, we are at 56% access, where 40% is on grid and 16% off grid. This indicates a huge gap in achieving the off-grid target of 48% by 2024 and that is why partnership with private sector and other development partners is vital”, he added.

For off-grid targets to be achieved, the Government of Rwanda through the support of Climate Investment Fund (CIF) has secured USD \$ 49 million with the objective of providing electricity through off grid solutions such as standalone solar home systems and mini grids.

The Chief Executive Officer of the Development Bank of Rwanda (BRD), Mrs. Kampeta Pitchette Sayinzoga said

that the products were designed to address affordability of solar home systems which the lower-income population and solar companies identified as a key hindrance.

Since its establishment in 2017, only 6 per cent of REF loans were exploited and the experts attribute the low utilization to issues of affordability of solar systems, limited collaterals for loans and weak marketing.

“We had previously been observing a low uptake of the loans among the intended beneficiaries in the rural areas, so we had to act fast to ease the challenges of affordability and securities or collateral,” Sayinzoga said.

As a response to low levels of awareness of the fund across the market, an agreement was also signed between BRD and selected saving-lending cooperatives to boost demand for solar home systems through Deal Origination Agencies (DOAs).

The partial grant schemes are financed by the World Bank, the Swedish International Development Cooperation Agency (SIDA) and Belgium’s Enabel.

The subsidy facility will be offered to eligible households living in off-grid areas. Beneficiaries from Ubudehe 1 category will be subsidised by 90 per cent, Ubudehe 2 by 70 per cent and Ubudehe 3 by 45 per cent. The guarantee scheme will cover lending risks on loans provided by financial institutions to households as well as small and medium enterprises.

As opposed to what has been the practice, clients now will not need to pledge their property as collateral. To benefit from either scheme, citizens approach lending institutions or solar companies to apply for solar loans while institutions apply at BRD for a maximum of US\$1 million per institution. Applications are open until March 2021 and the schemes will last three years.



## 6 KIBANGU: THE LAST SECTOR IN RWANDA TO ACCESS ELECTRICITY



Kayitare said they used Generator or candles in their teaching materials but it was difficult for them and it made many children complain about the school and move to other schools, but now they are going to solve it after accessing electricity.

Minani Jean Paul is also a resident of Kibangu Sector. The man has since installed electricity, has set up a welding house, and is now helping many people.

Minani is pleased that the services they would now provide to the community are better after the power supply by REG.

Clementine Cyuzuzo, a woman who lives in Kibangu Sector and owns a stationery at Gitega Center. She said that she set up this stationery to help Kibangu residents, especially those in need of photocopy, printing services and more.

She added that they used to travel to Ngororero to get those services before accessing electricity but now they get them at Kibangu.

Sofar in Muhanga, 30,702 households have been provided with electricity equivalent to 61.8% of households in Muhanga.

In order to accelerate economic development, the Government of Rwanda has set a target that every Rwandan will have access to electricity by 2024.

**K**ibangu Sector, located in Muhanga District in the Southern Province, was the only remaining sector in Rwanda that has not had access to electricity. The Sector is made of six Cells namely Gitega, Mubuga, Ryakanimba, Rubyiniro, Jururwe and Gisharu. In those Cells, Gitega Cell had already accessed electricity. Mukaseti Rosine; The REG Branch Manager in Muhanga said that they will also supply electricity in Mubuga Cell very soon. Mukaseti says that so far in Kibangu, 163 households have been provided with electricity but the power supply is still in progress. REG Branch Manager in Muhanga says the challenge they face in electricity supply in Kibangu is that households are scattered, many residents do not live in villages, which is why they started from residents in nearby villages.

### Electricity has changed the lives of Kibangu Residents

Kayitare Pierre Célestin, is the Director of St Sylvain TVET which is a private vocational school located in Kibangu Sector.

Kayitare says the teaching courses they have includes electricity, but it was difficult for them to teach without electricity in Kibangu.

## 7 RUBAVU: REG COMPLETED A SUBSTATION THAT WILL HELP ITS RESIDENTS ACCESS UNINTERRUPTED ELECTRICITY

**R**wanda Energy Group (REG) has declared that the Rubavu Electrical Substation has now been completed and is now in the process of being commissioned.

The Substation, built in Murambi Cell, Rubavu Sector in Rubavu District, is the first Substation to be completed in the District and will help residents of the District and nearby Districts including Nyabihu, Rutsiro and Ngororero and the City of Goma in the Democratic Republic of Congo to get uninterrupted power supply.

Rubavu district is a big city with a growing population and many factories being constructed over there that needs efficient infrastructure.

Due to the growing population in need of electricity and the factories and hotels and various other construction projects that require a lot of electricity, the existing electrical lines were starting to be overwhelmed by the users, so that many complained about its disruption and found that it was not enough.

In this regard, the Rwanda Energy Group (REG) has built this Rubavu Substation in order to improve service delivery in Rubavu and the surrounding areas.

Nzamurambaho Marcel, REG Hub Manager in the Northern Province and Rubavu, Nyabihu and Ngororero Districts says that after the completion of this Substation power supply in Rubavu will be efficient.

'Rubavu residents were receiving electricity from Camp Belge Substation in Musanze or from Karongi Substation which was causing power interruption, now after the



completion of the Rubavu substation and electrical supplying line, the power supply is better." Nzamurambaho noted.

Nzamurambaho goes on to say that in addition to the construction work at Rubavu Substation, the old power lines have been renovated and 11 new Electrical Cabins were built to improve the electricity services available to the residents of Rubavu.

"The renovated lines were built so long ago in 1976 they needed to be renovated. Many of these old electrical lines were out to date, while others are already burdened with a large number of beneficiaries and the need for electricity, so we opted for the renovation and now power supply is efficient in Rubavu."

Nzamurambaho says that this is in the government's direction to provide electricity to all and reach them in such a way that they can use it without hindrance and make it productive.



## 8 BUGESERA: ELECTRICAL LINE THAT WILL SUPPLY THE INDUSTRIAL PARK AND AIRPORT COMPLETED



The 110-kilovolt power line that will supply electricity to the industries being constructed in Bugesera District, to Bugesera Airport and the surroundings of Nemba border is complete and beneficiaries will be able to start receiving electricity in the near future.

Construction of the electrical line began in January 2019, and construction was completed by 2020. The 23-kilometer-long line cost \$ 4.7-million.

The construction of the line was carried out by a Tunisian company called STEG-IS in collaboration with NPD Ltd of Rwanda.

Mudasigwa Alex, Rwanda Energy Group (REG) Bugesera Branch Manager said the line would be of great benefit especially to the factories in the Bugesera industrial zone.

He said: "The line will be connected to the Rilima Substation in Bugesera, through Bugesera Airport and in Gashora industrial area. It will also provide electricity at Nemba border."

Mudasigwa says this electrical line will reduce power outages in Bugesera and nearby areas.

"Gashora industrial zone and in the areas near Nemba border used to get electricity coming from Mont Kigali Substation, it was a long way and sometimes causing more electrical tripping, but now Bugesera line is complete they will get electricity from Rilima / Bugesera Substation, the electricity they are going to get will be good and stable because it is from nearby." Mudasi gwa disclosed.

The head of the REG branch in Bugesera says the only thing left to install in the line is a transformer that was set to be installed by December 2020.

## 9 FOUR PEOPLE ARRESTED IN KIGALI OVER VANDALIZING AND STEALING ELECTRICITY PYLONS

Rwanda National Police (RNP) has arrested four men in City of Kigali in connection with vandalizing electricity pylons causing power outage.

The suspects were paraded before the media on Friday, January 15, at the Police metropolitan headquarters in Remera.

They include one Edson Uwitonze, who was allegedly buying and selling metal pieces stolen from pylons; Emmanuel Muhirwa, a taxi-moto operator, who was allegedly transporting thieves and metal pieces taken from pylons; Samuel Ndayizeye, one of the suspected thieves vandalizing the powerlines; and Eric Kubwimana, who was linking thieves to dealers in metals or scraps.

Stanley Nkubito, the head for energy efficiency and revenue protection at EUCL-REG, said that these criminal activities continue to cause power cuts in some parts of the country and they cause energy inefficiency.

"We register at least 50 cases of people destroying pylons every year. Since the beginning of this year and this raises concern. In some cases, this vandalism cause power outage in areas that are supplied by the same electricity line" Nkubito said.

He explained that this prompted REG to constitute a team that works with security organs to fight such criminal activities.

RNP spokesperson, Commissioner of Police (CP) John Bosco Kabera warned that the force will continue the search and arrest anyone that destroys public infrastructure, which affects service delivery, lead businesses into losses



as well as the government in terms of repairing the affected utilities.

"Everyone, including these suspects, benefit from electricity in one way or another. It is the responsibility of everyone to protect these infrastructures jealously to ensure that anyone that attempts to destroy them is arrested," CP Kabera said.

According to article 182 of the law relating to offences and penalties in general in Rwanda, "any person, who maliciously demolishes or damages in any way, in whole or in part of construction, building, bridge, dams, water pipes and their routes, railway rails or any other means of communication or electric power infrastructure, wells or any other constructions, which do not belong to him/her, commits an offence.

Upon conviction, he/she is liable to imprisonment for a term of not less than three (3) years and not more than five (5) years with a fine of not less than Frw3 million and not more than Frw5 million.



## 10 AROUND 198 THOUSAND HOUSEHOLDS WERE ELECTRIFIED DURING THE YEAR 2019/2020

In order to accelerate economic development, the Government of Rwanda has set target to electrify every single household in the country, either by on-grid connection or provision of off-grid solution, mainly solar home systems.

During the year 2019/2020, more than 134 thousand households were connected to the national grid and around 62 thousand were provided with solar home systems.

According to Reuben Ahimbisibwe, the Ag. Coordinator of the Electricity Access Rollout Program (EARP), there are a many ongoing projects to extend Rwanda's distribution network and therefore allow more on-grid connections, while areas located far from the grid will be provided with standalone solar home systems.

*"Last year we extended our distribution network by 839 km of new Low voltage lines and 363 km of new Medium Voltage lines, which enabled us to connect to the grid 134,356 new customers of which the productive users were 471".*

Out of the 471 productive users connected this year, 147 were sector and cell offices, 91 were health facilities, 42 secondary schools, 23 water pumping stations and the remaining included among others markets, factories and telecom towers.

Reuben says that in addition to the population receiving electricity at the outset, connection of all households located nearby the goes on. As of now 56.7% of all households in Rwanda have access to electricity.

*"we are very committed to meet the Government's target of universal electrification. We now have many other ongoing projects to build new distribution lines and we are planning to electrify more than 100 thousand households this year"* he said.

In addition to this, a total of 62,306 households were provided with off-grid electricity. These off-grid connections are mainly standalone solar home systems installed by the independent private companies on a willing-buyer-willing-seller basis.

### Ongoing projects

Among the projects under implementation include project funded by the Arab Bank for Economic Development in Africa (BADEA), which will connect to the grid around 18,000 households in Nyagatare and Burera Districts.

There is also a World Bank-sponsored project which will provide electricity to more than 13,000 households in the Eastern Province, 10,000 in the Southern Province, 8,000 in the Northern Province and more than 5,700 in the Western Province.

There is another project funded by the African Development Bank (AfDB) that will provide electricity to more than 6,280 households in Ngororero District and about 4,835 in some Districts of the Northern Province.

In addition to these projects, which are co-funded by the Government of Rwanda and various donors, there are various other projects being undertaken financed by the Districts budgets.

### Access to electricity in off-grid areas

While the grid extension across the country will take time to be completed and therefore challenge the quick universal electrification, some areas located far from the grid network have been designated to be provided with off-grid solutions as a solution that will help to achieve the country's electrification goal.

A map has been elaborated showing how electricity will be distributed in each part of the country and the technology that will be used, either on-grid or off-grid.

James Twesigye the Head of Off Grid solutions at EDCL said that as of today, more that 15% of Rwanda's households have access to electricity thanks to off-grid systems

*"As of now, we have signed cooperation agreements with 21 private companies to deliver solar home systems to residents living in off-grid areas".*

James also said that there are special subsidy programs to enable the poor families living in off grid areas to buy solar systems at a low cost under loans which don't require collaterals.

He said that the first subsidy was established through the Development Bank of Rwanda and will be offered to eligible households living in off-grid areas. Interested people should go to their respective SACCOs and provide all the required information enabling them to get the subsidies and loan to acquire the solar systems from the nearest vending companies.

*"Beneficiaries from Ubudehe 1 category will be subsidized by 90 per cent, Ubudehe 2 by 70 per cent and Ubudehe 3 by 45 per cent. We strongly encourage everyone who needs to acquire a solar home system to go to use this opportunity as the program will end in April 2021"* he said.

The second subsidy program was established through Endev program supported by GIZ. The program also provide subsidies to families that need to buy solar home systems depending on their Ubudehe categories. It is implemented in 5 Districts of the Southern Province namely Nyanza, Nyamagabe, Gisagara, Huye and Ruhango.

Twesigye also says that there are projects to electrify households located in off-grid areas by using mini-grid systems supplied by micro power plants, either hydro or solar.

*"There are mini-grids which will be built by private companies or donor projects to give access to electricity to households located in off-grid areas. This helps us to reach our target of universal electrification as mini-grids enable citizens to use high consuming appliances and therefore start some businesses such as milling, hair dressing, carpentry, and welding"* he said.





## ELECTRICITY SAVING TIPS

- Turn off non-essential lights and appliances. Example make sure all bedroom lights, fans, air conditioners etc. are turned off when the whole family is in the living room watching Television.
- Avoid running large appliances such as washers, dryers and electric ovens during peak-demand hours from 6:00 am to 9:00am and 6:00pm to 9:00pm.
- Fridge doors should not be left open for longer than necessary. [cold air escape]. Hot or warm food should not be put straight into the fridge (need to cool down first).
- Fridge should be regularly defrosted to keep running efficiently. If it tends to frost up quickly, the door seal should be checked and if the fridge is next to a gas cooker or a boiler, a gap should be left between them.
- Buy Energy efficient appliances, products and light such as the compact fluorescent lamps instead of incandescent bulbs.
- Turn off all unnecessary lights, especially in unused offices and conference rooms and turn down remaining lighting levels where possible. Take advantage of natural lights where possible.
- Use skylight for roofing of production floors and ware houses.
- Set computers, monitors, printers copiers and other business equipment to their energy saving mode and turn them off during long idle periods such as lunch breaks and at the close of the day. Minimize energy usage during peak demand hours from 6:00am to 9:00am and from 6:00pm to 9:00pm.
- Ensure that offices having air conditioners have properly sealed windows and all doors are closed when the air conditioner is in use. Make sure your air conditioner is switched off at the end of the day. Again switch it off when you know you will be leaving the office for a longer period. Ensure regular maintenance of air conditioners.
- You could install simple motion detectors with your office lighting and air conditioner systems to turn off lights when not needed and cut down your energy consumption.





[www.reg.rw](http://www.reg.rw)