### Newsletter

Issue №: 4 October - December, 2019















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#### **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

### SHANGO SUBSTATION TO ENABLE

### INTERCONNECTION OF ELECTRIC GRIDS OF THE

### NILE EQUATORIAL LAKES REGION COUNTRIES

igali, December 05, 2019 - Hon. Claver GATETE, Minister of Infrastructure, officially inaugurated Shango substation built to interconnect the electric grids of Rwanda, DR Congo, Tanzania and Uganda.

The construction of Shango substation falls into the Power Interconnection Program aiming at interconnecting the electric grids of the Nile Equatorial Lakes (NBI) countries, including Burundi, Kenya, Uganda,

DR Congo and Rwanda. The project seeks to improve the living conditions of the people, as well as the quality of the socio-economic development environment of the region, based on the availability of affordable electric energy and communities' access to electricity through increased cross-border electric power trade.

Shango is a 220/110kV substation with two 220kV lines bays to interconnect with Uganda networks, two 220kV line bays to interconnect with Northern Eastern DRC network through Rubavu substation and two 220kV line bays to Western Tanzania network through Regional Rusumo Falls hydropower plant.

The Minister of Infrastructure, Claver GATETE appreciated the achievement and said that this project is part of a bigger plan to ensure ¬that the Rwanda's electricity supply meets the increasing demand.

"This energy is going to help us to address our needs and also fostering our economic development. It is also helping us to achieve our energy rollout in terms of access to everybody by the year 2024." He said.

He also said that this project will enable Rwanda to exchange power with neighboring countries and also distribute it across all areas in the country.

"The importance of this work is that it is helping us to be able to transport all the energy that is being generated. Next year we'll have Hakan Power plant that will be generating 70 MW of energy. We'll also have another transmission line that is going to bring that energy. By March 2021, we are getting 56 MW from methane gaz in Rubavu. We'll be able to transport that energy and be able to sell in the country and also abroad" he said.



Hon. GATETE Claver, Minister/MININFRA, CEO/REG Ron WEISS and different development partners on the Inauguration of Shango substation.

He also mentioned other ongoing project to increase Rwanda's electricity generation capacity such as Nyabarongo II that will be add to the grid about 43MW by 2024 being financed by China Exim Bank, Rusizi III that is being financed by the Africa Development Bank, the World Bank and the European Investment Bank.

We have a target to connect all households in Rwanda by 2024, and this increase of the electricity is what we need to meet the target. Also, Rwanda's industrial sector is growing very fast and this means that we need to be ready to supply this demand. This interconnection project is one of the strategies in place to make sure that we will meet the future demand" he noted.

The Chief Executive Officer of REG, Eng. Ron Weiss appreciated REG technicians who worked on this substation saying that this is the first ever substation to be installed by REG technicians.

"The company that was hired to build this substation failed to complete the works and we terminated the contract. After the preparation of project sites and equipment handover, we engaged our inhouse teams to work on the remaining electromechanical works at this substation; now it is ready for the interconnection with Uganda network. The two other networks; one from DR Congo and another one from Tanzania will also be interconnected once completed" He said.

This project was sponsored by the African Development Bank, the German Bank for Development (KFW), the Government of Netherlands as well as the Government of Rwanda.

### 45 TECHNICIANS RECEIVE TRAINING ON SMALL HYDRO TECHNOLOGY



Different trainees and their instructors after the completion of the training of on small hydro technology.

technicians and administrative staff from Rwanda Energy Group, University of Rwanda, IPRC Kigali, IPRC Tumba, Byumba University of Technology and Art, Energicotel Ltd, Prime Energy, Hobuka Ltd and Rwanda Mountain Tea attended a 3 weeks training course on small hydro technology.

This training was organized in Rwanda with technical and financial assistance of the Government of People's Republic of China through the Hangzhou Regional Centre for Small Hydropower (HRC).

This training course is an outcome of cooperation through a memorandum of understanding signed between REG/EDCL and HRC in July 2015. Apart from promoting the development of small hydropower and other renewable energies through trainings, the agreement also reflects cooperation in research and development, consultancy, as well as project planning and design.

While giving his speech during the opening ceremony, Mr. Donath Harerimana, the Director of Transmission and Generation at REG/EDCL expressed his sincere gratitude to Chinese Government and HRC for the contribution and help in capacity building of small hydropower and rural electrification.

"We appreciate the contribution and support accorded to us by the Chinese government in providing capacity building to our technicians and we hope that they will apply the acquired knowledge in their day to day activities in the sector" Donath said

"We have so far successfully implemented 4 batches of same training course, and this is a high time to start valuing the cooperation for some other areas to benefit both parties" he added hoping that similar training courses will continue to be held, so that more local technicians will benefit from it.

Mr. Wang Jiaxin, the Economic and Commercial Counsellor of The Chinese Embassy to Rwanda said that power is essential in everyday life of Rwandans.

"Power is very important for Rwanda's transformation and the improvement of the economy and also the betterment of the livelihoods of Rwandans" he said.

During the training sessions participants covered a wide range of topics which have equipped them with required knowledge and skills to develop the small hydropower energy, and hence allowing to overcome the shortage of clean energy supply in remote areas of Rwanda where the national grid has not yet reached.



Rusumo Power Plant

### ENERGY MINISTERS PUSH THE COMPLETION OF RUSUMO POWER PLANT BEFORE 2021

usumo Border-Ngara, Tanzania, 6 December, 2019: Ministers responsible for energy from Burundi, Rwanda and Tanzania held the 11th Council of Ministers Meeting on the 80 MW Regional Rusumo Falls Hydroelectric Project to discuss progress of the project.

The meeting brought together Rwanda's Minister of Infrastructure, Honorable Claver Gatete, Burundi's Minister for Energy, Eng. Come Manirakiza, and Tanzania's Energy Minister, Dr. Medard Kalemani together with board members. Ministers visited the project located on the River Akagera at the border between Rwanda and Tanzania, and about 25 kilometers from Burundi. They inspected all project components including dam site, tunnel, power house and switch yard.

The construction works of the project is currently at 59% and hoping to be completed before June 2021. The timeline was set by the Ministers during the inspection of the project to avoid further delays that may occur. The Ministers instructed the Rusumo Power Company Limited (RPCL), the company responsible to oversee the implementation of the entire project, to speed up all activities attached to the project." We need electricity on grid so that the citizens of all countries can start benefiting from the project. Said Minister Gatete.

The Nile Equatorial Lakes Subsidiary Action Program (NELSAP) secured \$340 million from World Bank for the construction of the 80MW power plant, and \$128 million from the African Development Bank for the transmission lines.

The three countries share the Akagera River Basin, which covers an area of about 60,000 square kilometers, a subbasin of the River Nile system.

Once the project is completed, it will unlock more opportunities in improving cross-border trade in the region, eradicate poverty and contribute to the economic growth, and reversal of environmental degradation in the Nile Equatorial Lakes region.

There transmission lines for electricity evacuation are equivalent to 94km from Rusumo to Nyakanazi (Tanzania), 161km to Rwanda, and 194km to Burundi. The lines are parallel built to fast-track connection activities.

Regional Rusumo Falls Hydroelectric Project is implemented by NELSAP Project Implementation Unit / Nile Basin Initiative on behalf of the Rusumo Power Company Limited (RPCL) for Burundi, Rwanda, Tanzania. NELSAP is always poised to ensure the Nile Equatorial Lakes countries get benefits accruing from cooperation and working together. The project is also meant to improve livelihoods, enhancing social economic impact and reducing environmental degradation.

The Council of Minister's Chairmanship was handed over to Burundi from the United Republic of Tanzania, where the board of directorate was handled over to Tanzania from Rwanda. The new Chairman of Council of Ministers Meeting affirmed his commitment to fast-tracking the project activities by the monitoring of the project progress, identifying issues and coming up with tangible solution.

### A NEW DISTRIBUTION LINE FROM RUHANGO HAS IMPROVED POWER SUPPLY IN BUGESERA

issue of voltage drop has been solved in Bugesera District thanks to the recently completed distribution line linking Bugesera to Ntongwe feeder in Ruhango District. The line has added more 1.8 megawatts of electricity to the 7.7 MW supplied in Bugesera.

Bugesera is made 15 sectors which were previously supplied only by Mount Kigali Substation. Sectors which are very far from this substation such as Nemba and Shyara were having a problem of voltage drop. To address this issue, a secondary line was built connecting Bugesera to Ntongwe feeder in Ruhango which now supplies these sectors.

The manager of REG branch in Bugesera District, Rosine Kalisa, during an interview with the media, said that before, when all the customers were using electricity during peak hours, power cuts were frequent as the only substation supplying the areas was overloaded.

REG also installed 3 auto-

reclosers which help to detect and interrupt momentary faults on the our network made of 267 transformers.

This network strengthening project has significantly reduced the number and duration of power cuts due to faults on the network in Bugesera District as attested by citizens living in the area.



Bimenyimana Ibrahim, who owns an electrical mill, said that before, his clients used to bring their maize at his workshop and wait for hours without electricity. "today, no more lines of waiting clients, they are all served immediately as we have enough power" he said.



### RUSIZI: **7697 HOUSEHOLDS** WILL HAVE BEEN CONNECTED **TO THE GRID BY THE END OF THIS YEAR**

new electrical line distributing electricity in different parts of Rusizi District connecting to the grid more than 7697 households is now at its completion phase. By the end of this year, all these households will have been connected to the grid. As of now, 4383 are already connected.

Among the 95 thousand households located in Rusizi District, 60% have access to electricity, including 54% connected to the national grid while the rest are using off-grid solutions, mainly solar home system.

The project to build this line started in 2017 but the company which was contracted, Overseas Infrastructure Alliance (OIA), which failed to complete the works and REG took over the works in the midst of this year. All the households to be connected to the grid by this line will celebrate Christmas and the end of the year with electricity.

Gikundamvura and Nkungu sectors are one of the areas which were recently connected to the grid by this line. Residents of these sectors are now jubilating as they no longer have to travel long distances to access services requiring electricity.

"I have agreed with my friends to jointly start a carpentry workshop and produce materials that are needed here in our area" said Dusengimana Alphonse living in Gikundamvura, adding that they used to travel a long distance up to a neighboring sector to get their hair cut or have their crops milled.

Mukambayire Agnes aged 65, says that service delivery at their SACCO has improved thanks to electricity.

"There are many times that I could come here and go back without getting my money just because the battery in the computer was finished and needed charging. Now, this issue no longer exists because we have electricity" She said.

Byukusenge Judith, the accountant at Gikundamvura Sacco said that they had to go pay a moto to bring their computer to CIMERWA for charging and that it costed them around 4000 Frws.

The Executive Secretary of Gikundamvura Sector, Hategekimana Claver also said that electricity has improved service delivery at his sector.

"Sometimes we had to shift our offices and go to Muganza Sector where we could find electricity, which hampered our service delivery. Now, things have changed thanks to electricity" he said.

He also said that residents of this sector were reluctant to build good houses as there was no electricity, and that now the area is going to see more investments.

### **REG APPRECIATES THE NEW PROJECT** TO GENERATE 56 MW FROM KIVU METHANE GAS

wanda Energy Group (REG) expresses its appreciation for the new methane gas to power plant construction project which, once completed, will generate 56 Mw to be added to Rwanda's national grid. REG says that the project will contribute to the target of 100% electrification by the year 2024.

This project kicked off on 03rd October 2019 and will be implemented by a private company called "Shema Power Lake Kivu Limited" (SPLK Ltd) in partnership with the Rwandan Government. It will cost 200 million USD.

The Chief Executive Officer of REG, Eng. Ron Weiss, said that this project will contribute to Rwanda's target to increase electricity generation capacity from MW 224.6 up to MW 556 by the year 2024.

"As you know we have a target to connect all households in Rwanda by 2024, and it means the increase of the electricity that we need to produce. Also, we are trying to support as best a possible the economic growth, industries, agriculture, commercial activities, anything that is done in Rwanda in order to help the development of the country" he said.

The agreement between SPLK Ltd and the Rwandan Government stipulate that REG will build transmission line and subsequent substations to be able to connect the power plant to the grid for distribution of the generated power.

"The project itself is 56 MW but the contract that we have with them is 50, if we will need more we will be able to buy more from them. This is not an easy project because the extraction of Methane gas is not easy, but we hope that they will succeed" he added.

Eng. Ron Weiss said that to reach Rwanda's 2024 energy targets, REG has in the pipeline many projects among which the Shema Power Lake Kivu is included.

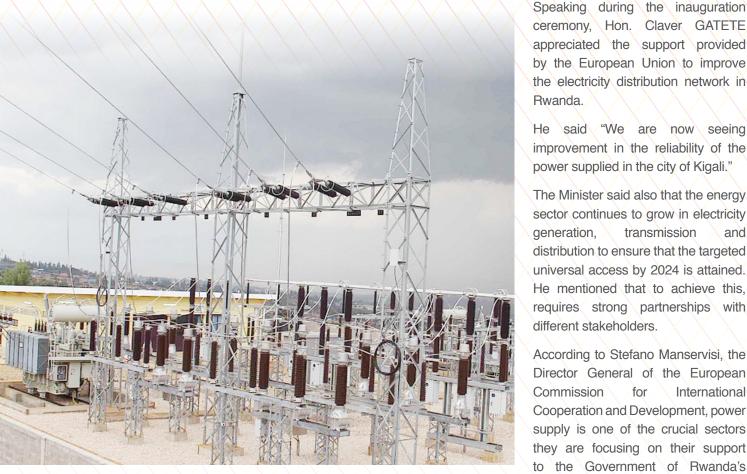


PS/MININFRA, Patricia Uwase with Governor of Western Province Munyentwali Alphonse with other partners in energy development.

Some of these projects include Hakan Peat to power 70 MW that will be completed in 2020, Rusumo hydropower plant under construction with a capacity of 80 MW to be shared between Rwanda, Burundi, and Tanzania, Rusizi III which will have a capacity of 148 MW and Rwanda's share will be 67MW as well as Nyabarongo II with 43.5 MW

"At the moment, we have enough power to serve the needs of today, but if we look forward to the big increase of demand, we need more power" added the CEO, Ron Weiss.

### NEW MOUNT KIGALI SUBSTATION TO REDUCE POWER LOSSES



ceremony, Hon. Claver GATETE appreciated the support provided by the European Union to improve the electricity distribution network in Rwanda.

He said "We are now seeing improvement in the reliability of the power supplied in the city of Kigali."

The Minister said also that the energy sector continues to grow in electricity generation, transmission distribution to ensure that the targeted universal access by 2024 is attained. He mentioned that to achieve this, requires strong partnerships with different stakeholders.

According to Stefano Manservisi, the Director General of the European Commission for International Cooperation and Development, power supply is one of the crucial sectors they are focusing on their support to the Government of Rwanda's

development journey.

He is confident that the support provided by European Union enabled the Government of Rwanda to achieve important results in the energy sector especially in terms of connectivity, quality and renewable energy.

The Chief Executive Officer of REG, Eng. Ron Weiss said that the project has tremendously improved reliability and quality of power supply in the Kigali City. "There is a big improvement in terms of power loss reduction. During the 2016-2017 financial year, we had a power loss of 21.1% and we've been able to reduce it to 19.6% in the last financial year. This year we aim to further reduce at least by 1% to reach 18.6% thanks to such projects strengthening our distribution network." he said.

Rwanda's energy sector continues to grow in electricity generation, transmission and distribution infrastructure and the main reasons for growth is the government targets to have universal electricity access by 2024. Today, 46.46% (35% on grid and 11.46% off grid) of all households in Rwanda have access to electricity while the installed generation capacity is 218 MW.

n the 18th October 2018, Hon. Claver GATETE, Minister of Infrastructure together with Stefano Manservisi, the European Commission's Director General for International Cooperation and Development, inaugurated yesterday the new Mount Kigali Power Substation which is part of the Grid Loss Reduction Project funded by the European Union.

Sustainable energy is a priority area under the European Union's partnership with Rwanda. In March 2015, the Government of Rwanda signed with the European Union a financing agreement of €23m for Grid Loss Reduction project which was aligned to REG targets to reduce power losses from 23% in 2013 with an annual 1% loss reduction target.

The substation was upgraded with two transformers of 20MVA each, replacing the old 10 MVA transformers, which could not cope with the demand during peak hours, sometimes leading to power outages.

The substation supplies electricity in Nyamirambo, City of Kigali and in neighboring districts of Bugesera, Kamonyi and big parts of Muhanga District.

### 9 PEOPLE CAUGHT ACCUSED OF ELECTRICITY THEFT IN NOVEMBER, 2019



man was caught red handed stealing electricity at his house located in Village Kora Cell, Bigogwe Sector. He has been stealing electricity since 2016. He is now detained at Kora RIB station for further investigation.

On 25th October, in Nyabihu District, a

On 23rd October another man was caught red handed stealing electricity, in Gakenke District.

On 15th October, in Musanze District, two men were caught doing illegal connections in Gacaca Sector, Kabirizi Cell. They are now detained at MuhozaRIB station.

The same date Annick Mugisha; owner of Urwuri Motel located in Huye Sector, Huye District was caught stealing electricity.

On 14th October, MBARUSHIMANA Claude was caught red-handed using fraudulent electricity in his mini-bar, "Buvetteltuze" located in Gasabo District, Gatsata Sector.

rom 07th October to 07th November, 2019 in regular campaigns to combat electricity theft conducted by Rwanda Energy Group Limited (REG) in collaboration with Rwanda Investigation Bureau, Rwanda National Police and local communities, nine (9) people were caught across the country accused of stealing electricity.

The detained people are owners of motels, bars, milling machines and so on.

On 07th November, 2019 NDAHIMANA Abuba who was impersonating a REG staff to connect to the grid illegally households in Nyagatare district, was caught and immediately handed to RIB for investigation. The same date KAVAMAHANGA Jean d'Amour a resident of Kabukuba cell, Juru sector, in Bugesera District was caught stealing electricity in his milling machine.

On 28thOctober, 2019 MUKWIYE Bernard was caught red-handed using fraudulent electricity in his tailoring business "Sun Hill Ltd" located in Masaka Sector, Kicukiro District.

All these 9suspects have been arrested and their cases are being handled by RIBto respond to crimes committed.

Nkubito Stanley; the head for energy efficiency and revenue protection at EUCL-REG

condemns the act of stealing electricity and says that REG will not tolerate such crimes and measures to curb electricity theft have been reinforced.

He further says that electricity theft hinders the development of the country and may cause incidents.

Nkubito says that many of these people were apprehended in facilitation of local communities and announcements have been made to call the public to collaborate with REG and security organs in demonstrating these people stealing electricity.

Theft of electricity is a crime and is punishable by fines and/or incarceration.

Theft of electricity is punishable by the law  $N^{\circ}52/2018$  of 13/08/2018 modifying Law  $N^{\circ}21/2011$  of 23/06/2011 governing electricity in Rwanda as modified to date.



### RWANDA TARGETS 60% OF RENEWABLE RESOURCES BY 2030

igali, 5 November, 2019: Permanent Secretary at Ministry of Infrastructure, Eng. Patricie Uwase officiated the opening of the 3rd Edition of the Renewable energy for Sustainable Growth (RE4SG) conference taking place in Kigali Convention Centre from 5th and 6th November, 2019.

This year's conference marked under the theme "Achieving Universal Green Energy Access in Africa" was organised by Energy Private Developers (EPD) in partnership with World Bank, Open Africa, Shell Foundation and BFZ under the patronage and support of the Government of Rwanda (GoR).

The conference brought together about 300 participants from across the globe including government officials, financial institutions, private sector, technology developers, investors, civil societies and development partners to discuss ways to scale up and drive forward renewable energy and sharing experiences for renewable energy development across the globe.

In her opening remarks, the Permanent Secretary at Ministry of Infrastructure, Eng. Patricie Uwase reiterated the commitment of Rwanda to continue championing Renewable Energy as the major share of the generation mix where the GoR through its Energy Sector Strategic Plan 2018-2024 & Least Cost Power Development Plan has set a target of 60% of the generation mix to be powered by Renewable resources by 2030."

She noted, adding, "The current total generation installed capacity is 224.5MW and the share of renewable energy is currently 53% of the total electricity generated in the mix with the largest contributor being hydro and solar".

Eng. Uwase said that Renewable Energy will continue to be the main source of energy for the off-grid sector powering standalone home systems and mini-grids. "This sub-sector will be dominated by solar energy which will unlock significant environmental and social economic benefits", she added.

Permanent Secretary Uwase further insisted on the role of Government in putting in place incentives and encouraging initiatives geared towards promoting investment in the renewable energies.

"One of the initiative that is currently running is the US \$48 million Renewable Energy Fund (REF) that is managed by the Rwanda Development Bank (BRD) and which is being used to provide low cost debt financing to households and companies through SACCOs, commercial banks and solar companies for purchase of off grid solar home systems (SHS) and development of Renewable Mini-grids", she noted.

The Chairman of EPD Dr Ivan Twagirashema said that EPD is committed to play a significant role to the Rwanda's target of having 100% electricity access by 2024, where 52% will be on-grid and off-grid 48%.

He said that "hydropower provides around a fifth of current capacity but not even a tenth of its total potential is being utilized".

"Similarly, the technical potential of solar, biomass, wind and geothermal energy is significant", he added.

Dr Twagirashema noted that access to energy is crucial not only for domestic use, health and education outcomes, but also for reducing the cost of doing business and for unlocking economic potential and creation of jobs.

## REG STAFF TRAINED ON FIRE SAFETY

his Wednesday on 04th November, 2019 Staff from Energy Utility Corporation Limited (EUCL), a subsidiary of Rwanda Energy Group (REG) from different departments were trained to prevent and combat fire in case it occurs, the training which attracted around 100 staff from EUCL.

6 people were selected from the Head Office, each power plant was represented by two staff, substations, branches and other EUCL-REG departments were also represented.

This training was organized by EUCL-REG and facilitated by trainers from Rwanda National Police, Fire brigade unit at Hilltop Hotel, Kigali.

REG staff were told that fire or any other emergencies could happen at any time without warning and when they occur they can hurt or kill lives and destroy properties.

The training aimed at delivering practical skills and knowledge in fire prevention and fire fighting with a view to minimizing losses both human and material resources.

Trainers got an opportunity for a rehearsal of fire fighting in case it might occur.

Different participants who graced the training appreciated skills got and promise to brief/train their colleagues and to implement.



### 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 gap cooker or a boiler, a good 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.



## Rwanda Energy Group | Compared to the compare