

INVESTING IN RENEWABLE ENERGY

Gaseke Hydropower Plant

In 2015, the Rwanda Green Fund (FONERWA) invested in the construction of the Gaseke Hydropower Plant in Gakenke District, Northern Province. The power plant came as a solution to the lack of electricity in the area. The 500 kW plant is now providing clean power to communities living around the Gaseke river and demonstrates the potential of small-scale renewable energy to meet the country's electrification targets. Through the generation of renewable energy, this fund investment has created hundreds of green jobs and prevents 3,321 tonnes CO₂-eq from being emitted into the atmosphere every year.

Rwanda has the vision to become a low carbon, developed economy by 2050. To achieve this, the country is rapidly expanding both on-grid and off-grid connections. In the short term, Rwanda aims to achieve 512 MW of installed power generation capacity by 2023/24 and universal access by 2023/24.

The Rwanda Green Fund is supporting this effort by investing in renewable energy production. A partnership with Novel Energy to construct the Gaseke Hydropower Plant in Gakenke District is just one example. The fund's support of approximately Rwf 1.1 billion was provided through its credit line mechanism, a collaboration with the Development Bank of Rwanda (BRD).

INVESTMENT MILESTONES

- Construction of 500 kW hydropower plant
- Connection of power plant to the national grid
- Transfer of technical skills to local technicians to operate and maintain the plant
- Provision of electricity to local communities



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Protogene Hagenimana, who lives close to the Gaseke river, started working at the plant in August 2016. For Protogene, the fund's investment has had a positive impact in his life and that of his family.

“ With the money I earned, I have bought six cows, two bicycles and I have built a house for my parents. ”

In addition to the income he earns, Protogene says that the plant is helping him improve his skill set.

“ It's not just money that I'm getting from my work here. I am also acquiring new skills that will help me become an entrepreneur and an engineer in power plant construction. I hope I will one day operate a similar plant, ”

says Protogene.

“ We had the idea of developing the Gaseke Hydropower Plant with the capacity to generate 500 kW. The plant is now producing renewable energy and contributing to the national grid. This is increasing access to electricity at a national level. ”

Theoneste Nizeyimana Gatsinzi,
Manager, Gaseke Hydropower Plant



CHALLENGE SOLVED

At the time of the project's commencement, Rwanda's average energy production costs stood at US \$c 30 per kWh. The Gaseke plant investment is helping to reduce this high energy production price by providing cheaper and cleaner energy at approximately US \$c 17 per kWh. The plant has been operational since February 2017 and has the capacity to generate 500 kW - enough to power four sectors of Gakenke District.



“In the past, our working hours were very limited because the power supply was unreliable. Running a business here was risky. But thanks to the Gaseke Power Plant, our businesses are now operating very smoothly, and our children can do their homework easily. When I look back, I can see my life has completely changed.”

Fulgence Mutabeshya,
Gaseke resident and a business owner



RETURN ON INVESTMENT

3.3

million units of electricity generated per year

+400

green jobs created

400

kWh power added to the national grid

3,321

tonnes of CO₂-eq prevented from being emitted into the atmosphere every year



Energy price reduced through increased supply



“I am happy to be working here because I want to build a green Rwanda. Normally we collect firewood for cooking and use oil lamps because we don't have electricity. Now we will be using clean energy in our daily lives.”

Marceline Namahoro



GREEN JOBS

From the construction phase until today, the plant has created more than 400 green jobs, and an additional 30 part-time jobs have been created on a rolling basis.

Before the plant became operational, communities surrounding the plant had limited access to electricity as they were not connected to the national grid. The construction of the Gaseke Hydropower Plant has addressed this challenge and been welcomed by local residents.

FUTURE PLANS

The Gaseke Hydropower Plant aims to increase its capacity and generate more than the current 3.3 million units of electricity per year. Moreover, plant operator Novel Energy will provide capacity building to its employees through regular trainings to enable them to optimally run and maintain the plant.

With the support of the Rwanda Green Fund, Novel Energy is establishing similar small-scale renewable energy power plants, including a rice husk power plant in the Eastern Province. These efforts will ensure that all Rwandans have access to the electricity they need to live dignified and prosperous lives and be part of the country's socio-economic transformation.



It makes me happy to provide green electricity for the community and reduce deforestation. With the money I earned from working as a mason on the Gakenke hydro plant, I have built a house and supported my younger brothers to study



Martin Nzayisenga, an employee of the Gaseke Hydro Power Plant

RWANDA GREEN FUND

The Rwanda Green Fund is a national environment and climate change fund that invests in public and private projects that have the potential for transformative change and that align with Rwanda's commitment to building a green and climate resilient economy. Learn more at www.fonerwa.org or follow us on Twitter at @GreenFundRw.

FUND PARTNERS

This fund is thankful to our partners who have joined us on the journey to build a green Rwanda and we look forward to even greater impact in the future.



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