

Climate change is worsening water related challenges in Rwanda, where severe drought has been combined with extreme rain and floods in recent years. In most rural parts of the country, clean water is not available. This lack of access to clean water is the main cause of illness and diseases. Water-borne diseases represent the vast majority of diseases treated at Health Posts in rural areas.

Through this project, OffGridBox Rwanda intended to showcase its technology's contribution to reducing waterborne diseases and overall quality improvement of health care service in rural Rwandan communities in areas hit by floods and those suffering from drought, caused by climate change. Offgrid installed modular and integrated power and water purification solutions in 4 rural health centers selected by Grand Challenge Canada (GCC) and 8 flexes in partnership with Society for Family Health (SFH). These health centers are located in four different districts : Musanze, Nyaruguru, Ngoma and Kirehe Districts.

The installation of the FLEX and CHIARA systems, along with the biomedical equipment, marks a significant milestone in OffGridBox's mission to bring sustainable energy solutions to the most challenging environments

SFH, through collaboration with the Ministry of Health, the selected health centers (both first- and second-generation health clinics) act as the main users of the integrated power and water purification solutions. Through these systems, clinics and their patients are provided with free, clean water which serve to improve health and hygienic circumstances; additionally, the systems provides energy to run both the water purification system and certain medical equipment. By selling excess water and energy to the surrounding community, the OffGridBox Rwanda team aims to further reduce water borne diseases, as well as create a sustainable business model. This project not only enhances healthcare services but also contributes valuable insights into the role of energy in improving health outcomes.

In order to make sure that this project will be sustainable, we added a business model that includes the generation of revenues by selling excess solar power and clean water to entrepreneurs and members of the communities around the health clinics. The clinics will be able to use these revenues to pay for an operations and maintenance contract with OffGridBox, which will help to increase the lifespan of the equipment.

As we move forward, OffGridBox remains committed to expanding our impact, working closely with our partners to innovate and deliver solutions that transform lives. The journey towards a healthier, more sustainable future has just begun, and we are excited to continue making strides in empowering communities .

Renewable energy and clean water anywhere in the world