

Bukavu green community as pioneers of an integral and sustainable development Democratic Republic of Congo

THE PROJECT

The project has achieved 3 ambitious objectives: 1) offering high-level **training** to Congolese engineering graduates in the fields of renewables and correct use and reuse of water and waste; 2) starting up **work** cooperatives in the solar energy sector, which were born as a spin-off of the project itself, that may quickly find their own entrepreneurial space in local realities; 3) installing some **electric energy** production sites from renewable sources to serve local institutions and communities, in places where access to electricity is limited.

Among the completed solar energy plants, 2 are particularly significant; the first was built in the **Peace Center area that Sant'Egidio is completing in Bukavu**, and is the largest built, so far, in South Kivu with a power of 70kW. It produces energy for the entire surrounding area and, in particular, supplies electricity to both the largest city high school and the nearby university campus. The second is, instead, built in Goma and serves the **Primary School named after Floribert Bwana Chui**, and the surrounding neighborhood, Mugunga, which over time has transformed itself from a refugee camp into the most peripheral neighborhood at the western end of Goma. The requalification of both buildings has a demonstrative nature: the aim is to encourage the repetition of these initiatives in other sites.

BACKGROUND

The Democratic Republic of the Congo has significant energy potential, in terms of renewable energy sources, (solar, wind, hydroelectricity, biomass, etc.). However, the level of access to energy services is very low, (between 12% and 15%), and there is a strong disparity between the provinces: some are relatively rich in electricity infrastructure, although the level of reliability is generally low; others do not have the infrastructure to ensure sufficient access to electricity.

OBJECTIVE

Promotion of energy efficiency and renewable energies; creation of new jobs in the solar energy sector.

CARRIED OUT ACTIVITIES

- Taking place, from October 2018 to April 2019, of a specialization course on the design, construction and management of plants for the production of electricity from renewable sources, held at the Catholic University of Bukavu, (UCB). The course is aimed at 30 engineers from Bukavu and Goma.
- Creation of a start-up, connected to scientific partners such as the Polytechnic of Turin and UCB, operating on the following topics: recycling of materials, water management, improvement of resilience to climate change and enhancement of existing environmental quality.
- Development, by the cooperative, of a model for the promotion of renewable energy based on the involvement of local communities. The model will be used in the redevelopment of the 2 selected buildings.
- Redevelopment of the Bukavu Peace Center, (installation of a 70 kW photovoltaic system on the Center roof; improvement of the building's energy efficiency; construction of a rainwater collection system connected to solar pumps and photovoltaic boilers for the supply of running water; organization of the waste separate collection for the materials' recycling).
- Redevelopment of the Floribert Bwana Chui Primary School in Goma, (installation of an 80 kW photovoltaic system on the Center roof; improvement of the building's energy efficiency; organization of separate waste collection for material recycling).

CONTRIBUTION TO

⇒ **NDC DRC:** 17% reduction of greenhouse gas emissions, within 2030, according to the *Business as Usual* (BAU), scenario.

⇒ **2030 Agenda:** Goal 7 - Sustainable energy; Goal 13 - Actions for climate.

SUBJECTS

Promoters:

- Italian Ministry for the Environment, Land and Sea
- Ministry of the Environment, Nature Conservation and Sustainable Development of the DRC

Actuators:

- Sant'Egidio Community
- Polytechnic University of Turin
- Catholic University of Bukavu

DURATION

June 2018 – June 2021

TOTAL COST OF THE INITIATIVE

€ 1,000,000

Lender: MATTM

Other lenders: ---

OUTPUT

- 30 trained engineers from Goma and Bukavu.
- 1 Start-up active in the operational green economy sector.
- Bukavu Peace Center redeveloped and equipped with a 70 kW photovoltaic system. Beneficiaries: 5,000 people a year, (estimate), who participate in the social and educational activities organized by the Center; 3,500 students per year, (estimate), attending WIMA college that will receive energy from the Center's plant.
- Floribert Bwana Chui Primary School in Goma redeveloped and equipped with an 80 kW photovoltaic system. Beneficiaries: 100 children who attend school every year; 100 families in the Mugunga district who will receive energy from the plant by paying only a small fee which will be used for plant maintenance.



PROJECT STATUS

✓ completed ✓ in progress