

# Decentralized off-grid systems based on renewable sources

## Democratic Republic of Congo

### THE PROJECT

The project will improve access to electricity and drinking water in Gbadolité and Yakoma, (respectively capital of North Ubangi province and capital of Yakoma territory of North Ubangi province), and in Ngemba, (in Madimba territory, Central Kongo province). Off-grid photovoltaic solar kits will be purchased and installed for the lighting of internal and external spaces, and 2 wells will be built equipped with solar-powered water pumping systems. 50 young people from local communities will be trained in the management of this system and two cooperatives of women will be created for the maintenance of installed systems. A communication and fund raising campaign will also be promoted.

### BACKGROUND

The Democratic Republic of the Congo has significant energy potential, in terms of renewable energy sources, (solar, wind, hydroelectric, or biomass, etc.). However, access to energy services is still very scarce, (between 12% and 15% of the total population), and there is a strong disparity between the various provinces of the country.

### OBJECTIVE

Promote access to electricity and drinking water through the use of renewable sources.

### PLANNED ACTIVITIES

- Preparation of a feasibility study, (identification of the beneficiary entities, quality of the equipment, necessary standards, etc.).
- Acquisition and installation of equipment, (Kwp solar kits), for autonomous photovoltaic solar systems, (domestic/public lighting).
- Installation of solar pumps for water collection, (feasibility study, drilling and development of a well at each of the two sites, installation of equipment).
- Training of local communities through workshops, seminars, formal education, exchange of experience.
- Raising awareness of the beneficiary communities on the technology relevance, (through website, workshops, seminars, formal education, experience exchanges).

### SUBJECTS

#### Promoters:

- Italian Ministry for the Environment, Land and Sea
- Ministry of the Environment, Nature Conservation and Sustainable Development of the Democratic Republic of the Congo

#### Actuators:

UNDP

### DURATION

**36**  
**months**

(Project not started yet, dates to be defined)

### TOTALE COST OF THE INITIATIVE

**\$ 926,620**

**Lender: MATTM**

**Other lenders: ---**

### CONTRIBUTION TO

- ➔ **NDC RD Congo:** 17% reduction In greenhouse gas emissions, within 2030, according to the *Business as Usual* (BAU), scenario.
- ➔ **2030 Agenda:** Goal 6 - Clean water and sanitation; Goal 7 - Sustainable energy; Goal 13 - Actions for climate.

### OUTPUT

- • 1,000 50-watt solar photovoltaic kits for public lighting in Gbadolité, and 1,000 50-watt solar photovoltaic kits for domestic lighting in Ngemba. ✓
- • A total of six 3 KWC photovoltaic solar kits for lighting, installed at the Université de Gbadolité and at a school, (to be identified), in Ngemba. ✓
- • A total of four 3 KWC photovoltaic solar kits for lighting, installed in 2 administrative buildings, (to be identified), in Gbadolité and Ngemba. ✓
- • A total of two 3 KWC photovoltaic solar kits for lighting, installed at the Center de Santé of Yakoma, and the Center de Santé of Ngemba. ✓
- • 2 wells each equipped with a 3 KWC solar water pumping kit in Yakoma and Ngemba. ✓
- • 2 groups of 25 young people trained in the management of solar kits, and 2 women's cooperatives formed to manage the system. ✓
- • Communication campaign and fund raising promoted. ✓

STATUS DEL PROGETTO

✓ completed ✓ in progress