Development, project management, construction and operation of a small hydroelectric power plant and a power grid for 8 Cameroonian communities

Company name: Energy Development Innovation Group (IED)

Project Title: PCH Mbakaou-Career and Associated Network

Intervention country: Cameroon

Duration: 2011-2021

Total cost: 7 million euros

Mobilized workforce: Dozens of local and international employees and subcontractors

Topics: Hydro Electricity / Rural Electricity / Productive Uses of Electricity

Benefits:

- Pre-project engineering studies and project definition activities (technical, socio-economic, financial, impact), activities to obtain various authorizations
- Assembly of institutional, legal and contractual facilities
- Contracting contracts, construction, site control and commissioning
- Local recruitment, training and management of operations teams
- The benefits of people's accompaniment to the productive uses of electricity
- Business plan, process and operation of the PCH

Project description:

This project concerns socio-economic development of the town of Tibati in Cameroon, capital of Adamaoua region. IED Group is investing, building and operating a hydroelectric power plant and its associated electricity grid on Djerem River in 2020 to supply electricity to 8 rural communities in the area that are without or under-supplied with electricity.

Objectives:

- Provide a sustainable, low-cost, and accessible electricity service for people
- Improve people's quality of life and development of productive uses
- Preserve region's natural environment by producing a quality supply of electricity and combating dependence on fossil fuels and deforestation
- Demonstrate the ability of private operators to join Cameroon's rural electricity reform to encourage energy investment

IED group funds and exploits the Small Hydroelectric Power Plant (PCH), mobilizing equity funds, loans and subsidies (Cameroon Ministry of Energy, FFEM and EU). From 2021, IED will sell all of its electricity production to the state-owned electricity company Eneo, with a tariff already regulated for kWh price. Definition of the project and legal-institutional arrangements, and activities of obtaining construction permits, have benefited from the technical support of national sectoral agencies such as Rural Electricity Agency (AER) or Electricity Sector Regulatory Agency (ARSEL), and support from local authorities, showing the interest of Cameroonian public authorities for energy decentralisation and promotion of the development of small-scale electricity farms using renewable energy.

The PCH will have a capacity of 1.22 MW and the associated electricity grid will be about 70 km, connecting 2800 subscribers and impacting development of more than 40,000 people, while reducing costs of electrical production compared to expensive and polluting generators.

French partners:

FONDS FRANÇAIS POUR L'ENVIRONNEMENT MONDIAL

Commission européenne

Foreign partners:

Quote: *"It is established that no economic and social development is possible without sufficient and good quality energy, and PCH building project in Mbakaou-Career is lined up with Cameroon's energy policy"* - Adolphe Ndjouke Thome, General Secretary of Ministry of Energy of Cameroon, during the stone-laying ceremony in June 2019.

Post-project results:

- Improved electricity supply in quality and quantity in localities of the region and reduced costs through the injection of hydroelectric power on the electricity grid
- Spreading energy-efficient equipment and promoting the economical uses of electricity, promoting employment and income-generating activities through electricity

Spin-offs for France:

- Valuing French expertise abroad (Energy / Construction / Financial Engineering)
- Definite and sought-after leverage for PPP projects in Cameroon (high hydro-electric potential)
- Use of official development assistance for economically profitable, environmentally sustainable and socially responsible projects with reproducible legal arrangements

Spin-offs for Cameroon:

- Ecological rural electrification and fighting against dependence on fossil energies
- Increased income-generating activities by improving electricity distribution in rural areas, More than 50 direct jobs created by the plant
- Affordable project, adapted to local potential, First public-private partnership project on this type of activities in Cameroon to consider future replications across the country
- Involvement of local partners and ownership of the project by local people

Environmental impact:

- More than 123,000 tons of CO_2 savings over 20 years
- Preserving the environment and natural biodiversity of the rural site