



ADEME

Agence de l'Environnement  
et de la Maîtrise de l'ÉnergieClub ADEME  
International

Yélé Consulting

## Project coordination assistance for the electrical company of Togo

(CEET) in the project of electrical  
grid extension of Lomé (PEREL)

*The electrical company of Togo (CEET) has set some ambitious target regarding the access to electricity and the mix of energy production. The government is willing to reach the universal electrification by 2030 with an integration of 50% of renewable energy.*

*To overcome those challenges, one of the main solutions is the creation of a control centre for the mid-voltage grid of Lomé that will be at a later stage extend to the rest of the country.*

*This investment is part of a global program of 2 majors projects:*

- 1. The PEREL (extension of the electrical grid of Lomé) financed by the AFD, the UE and the KfW*
- 2. The PRISET (restructuration and investment in the energy sector of TOGO) financed by the World Bank.*

*The control centre is an important component of the PEREL*

### Financial support - Grant

- ADEME / PIA 50%

### Objectives of the project

The electrical company of Togo (CEET) is encountering a major challenge which is to maintain a continuous service for the end user by:

- limiting the impact of the defaults on the grid
- reducing the time to localise those defaults
- reducing the time to alleviate those defaults
- reducing the frequency of defaults on the grid



Togo - Lomé



#### Duration

2 years project  
(ongoing)

#### Total costs

&gt; 1 m €



#### Staff called up

11 people

### Thématique



### Services performed

Service  
Studies

Which SDGs  
is the project  
related to ?

Clean energy  
and affordableIndustry, Innovation  
and Infrastructure

On top of that, another challenge is to gather clean and accurate data to evaluate the state of the grid for the CEET and the national regulator.

The operators should be able to simulate the reaction of the grid based on predefined conditions (loss of equipment, integration of new equipment, perturbation...).

The system should propose to the operator some reconfiguration options to maintain the network in the optimal conditions.

## Main phases

The project is divided in 2 parts:

1. The first part is the construction of the building that will host the control system. It will be a modern showroom for the CEET.
2. The second part is the integration and installation of the control system that will run 24/7 to operate the network.

Yélé Consulting assists the CEET throughout all the steps of the project from the tendering phase till the start of the system.

## Local clients and beneficiaries

The unique client of the PEREL project is the CEET. However, this project is strategic for the country itself and will have an impact beside the boundary of the urban area of Lomé. The CEET targets to manage the power grid of all the other big towns of the country.

Moreover, on top of improving the quality of the power distribution, the main control centre should ease in a near future the integration and the management of renewable energy.

## Post project results

### Added value on site

- Better control of the power grid
- Reduction of technical and non-technical losses
- Improvement of the reliability of the power grid
- Ease of the renewable integration

### Added value for the company

- First strategic project in West Africa
- Creation of a subsidiary company in West Africa
- Improvement of the experience in terms of power grid control system

## Environmental impact

- Non Distributed Energy (MWh)
- Gas emission related to electrical production (TCO<sub>2</sub>eq/MWh)
- Technical and non-technical losses (%)



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