

Fiche projet - Réaménagement de 23 réseaux-diesel avec des énergies renouvelables hybrides (Kenya) – English



Informations générales

PROJET EN COURS

Date de début : novembre 2019

Date de fin : décembre 2022

Localité : Kenya

Zones d'intervention : [Afrique de l'Est](#)

Pays d'intervention : [Kenya](#)

Budget : Overall 33MUSD (including ~120k € for Meteolien (wind studies for 4 towns)

Financeurs régionaux : --

Financeurs nationaux : Agence française de développement

Autres financeurs : --

Secteurs d'intervention : [Croissance économique](#) - [Emploi](#), [Énergie](#), [Enseignement](#) - [Formation](#)

Objectifs de Développement Durable



Porteur du projet

Météolien Scop

Type de structure : ENTREPRISES ET RÉSEAUX
D'ENTREPRISES, Entreprise, groupement
d'entreprises, coopérative

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Représentant : Mme Corinne Dubois

Pays d'intervention : [Afrique du Sud](#), [Algérie](#),
[Allemagne](#), [Andorre](#), [Belgique](#), [Brésil](#), [Cap-Vert](#), [Chili](#),
[Cuba](#), [Djibouti](#), [Égypte](#), [Erythrée](#), [Espagne](#), [Éthiopie](#),
[France](#), [Guadeloupe](#), [Haïti](#), [Jordanie](#), [Kenya](#), [Liban](#),
[Libye](#), [Madagascar](#), [Martinique](#), [Mauritanie](#), [Mexique](#),
[Namibie](#), [Niger](#), [République dominicaine](#), [Sénégal](#), [Syrie](#)
, [Tanzanie](#), [Tchad](#), [Venezuela](#)

Secteurs d'intervention : [Énergie](#)

Retrofitting of 23 towns Diesel Mini Grids in Kenya with Hybrid Renewable Energy

The program targets to put PV-Wind-Batteries hybrid systems to complete/replace the existing Gensets in 23 sites program over the Kenyan territory.

4 to 5 towns will include wind turbines: Maikona , Dadaab, Banisa, Wajir and/or North Horr.

Meteolien participates to the wind production studies, the hybridization optimization and the detailed design of the equipment. They will provide technical assistance during the tender of the contracting companies and validate the construction and commissioning.

Contexte

By June 2016, over the 88581 public facilities in Kenya, 31.6% were un-electrified. As pointed out in the report "The role of renewable energy mini-grids in Kenya's electricity sector" (Evidence of a cost-competitive option for rural electrification and sustainable development), published by the NewClimate Institute, ECN and the German Ministry of Energy in November 2019 :

"Mini-grids have a long history in Kenya, with the first installations dating back to the early 1980s. In recent years, several diesel-based mini-grids have been transformed into hybrid diesel-solar or diesel-wind systems, and several fully renewable energy mini-grids have been deployed. The total installed capacity in 2016 was approximately 25.3 MW, most of which consists of public operated mini-grids [...]. However, to date, the overarching strategy for Kenya's electricity sector focuses primarily on national grid extension; mini-grids are included but significantly under-represented in the 2018 Kenya National Electrification Strategy (KNES)."

This gives basically the framework, the responsibility and the challenges of this program and the exemplarity it shall demonstrate to further mini-grid projects especially including wind energy.

Publics concernés

KPLC - 23 towns related electricity consumers

Partenaires locaux

- Gamma System Ltd
- Artelia (France et Local)

Objectifs du projet

Transformer les groupes diesel, qui sont l'unique source électrique des micro-réseaux, en groupes de secours afin d'**économiser le diesel, diminuer les coûts de l'électricité produite et éviter les émissions de CO2** correspondantes, ainsi que le bruit et la pollution qu'ils impliquent.

Activités

- Detailed studies for wind power plant in 4 villages, including wind resource and production assessment studies ;
- support the optimization/conception of the PV-wind-batteries hybrid system design ;
- technical support during the tendering process for the wind power plants construction ;
- supervision of the wind power plants construction ;
- coordination of the wind experts team and works.

Résultats

- Millions of tons of CO2 will be saved each year
- Millions of USD will be saved for the Kenyan Ministry of Energy, due to difference between diesel and renewable energies costs.