

Green Energy Transition in Africa – Burkina Faso

2 Solar Power Plant Projects



Context



The electricity sector in Burkina Faso is characterized by a low access rate of the populations to electricity (20%).

Electricity production in Burkina is mainly based on thermal power stations generating particularly high costs which remains insufficient and emits CO2.

Interconnections with neighboring countries exist but imports are limited.

In this context, Burkina Faso has decided to develop electricity production through solar power plant projects.





Zagtouli's Solar Power Plant

Taking this concern into account, the European Union (EU) and the French Development Agency (FDA) supported the SONABEL (National Electricity Company of Burkina) through the financing of the Zagtouli's Solar Power Plant Project.

The project was funded to the tune of € 47.5 million, including € 22.5 million by the FDA in the form of a loan to the Burkinabe State and € 25 million in the form of a grant by the European Union through the European Fund of Development (EFD).

This project thus aimed to increase the supply of available electricity while lowering the cost price.





Zagtouli's Power Plant



Completed in 2017, the Zagtouli's Solar Power Plant includes the installation of nearly 130,000 panels on 60 ha of land.

Today, the plant has an effective power of 33.7 MWp, ie a production of around 55 GWh/year, representing 4% of Burkina's annual electricity consumption.

It is the equivalent of the consumption of 660,000 people and its economic cost of production is estimated between 30 and 40 FCFA/kWh.

A cost significantly lower than the average production cost of SONABEL, which stood at 133 FCFA per kWh in 2016.

From an environmental and social point of view, the Zagtouli's Solar Power Plant currently saves 26,000 tons of CO₂.

It also contributes to accelerating the development of skills in the field of solar energy in Burkina Faso.

Being a first in the field, this initiative was intended to create a ripple effect to develop solar energy production in Burkina Faso and in the sub-region.



The YELEEN Project

PROJECT TIMELINE

Pipeline

25 Jun 2018 - 118 days

- Funding proposal received
25 Jun 2018
- Cleared by iTAP
26 Sep 2018

Approved

20 Oct 2018 - 696 days

- Approved by GCF Board
20 Oct 2018
- Legal opinion on AE's Internal Approval
04 Dec 2019
- FAA executed
22 Jun 2020

Under implementation

14 Sep 2020 - 216 days so far

- FAA effective
14 Sep 2020

Completed

14 Jun 2027 - 2,250 days to go

STATUS

Under implementation

DATE APPROVED

20 Oct 2018 at B.21 >

EST. COMPLETION

14 Jun 2027

The Yeelen rural electrification program has obtained funding of € 75 million from the FDA.

The program is currently under implementation.

Yeelen is funded at 53% by the FDA, at 34% by the AfDB and at 6% by the European Union. The National Electricity Company of Burkina Faso (SONABEL) will provide 4% of the funding and the Burkina Faso's State the remaining 3%.

The Yeelen program is about developing photovoltaic production and facilitating the integration of this energy into the grid.

This goal will be achieved by building four photovoltaic power plants.

Yeelen will make it possible to densify and extend the distribution network to improve people's access to electricity. It will also develop decentralized electricity production from solar energy in the form of mini-grids and individual solutions.



IMPACTS



The production of this new public solar power plants will cover 5% of the national consumption while reducing carbon emissions.

The electrical storage system installed in Ouagadougou, the main hub of the national grid, is a first in West Africa.

With a capacity of 8 MW / 8 MWh, this system will improve dramatically the quality of the current delivered to the network and provide electrical service to 65,000 new households.

"This funding also aims to contribute to the economic growth and job creation, mainly for the most vulnerable populations and in rural areas" - Minister of Energy, Mines and Quarries,
Dr Bachir Ismaël OUEDRAOGO

Tonnes of emissions avoided

Beneficiaries

390.0k

335.0k



Thank You

