

# DJERMAYA CHAD



**Location**  
Hadjer-Lamis region,  
Chad

## PROJECT SUMMARY

Ambitious plans for a 25MW utility-scale solar PV power plant in Chad could catalyse the transformation of the country's inadequate and entirely fossil-fuel based energy system, and help to alleviate poverty.

Despite numerous financial and geopolitical challenges associated with the project, REPP has committed to a EUR 380,000 development loan to Smart Energies International on the strength of the enormous positive impact the success of the project would have on Chad and its people.

Today, Chad is one of the world's poorest countries and has just 125MW installed power generation capacity, all of which is reliant upon heavy fuel oil and diesel. As of 2016, only 8.8% of its population was connected to the national grid.

At the same time, the country experiences exceptional levels of solar irradiation, creating significant potential for solar energy generation. For this project, the developers have secured a site in the Hadjer-Lamis region, 30km north of the capital city of N'Djamena, with an estimated irradiation value of 2,191 kWh/m<sup>2</sup>.

Once built, the solar plant will help alleviate poverty in Chad by providing power to the grid at a lower cost than fossil fuel-fired generation, meaning the government can reduce its subsidies to the energy sector and focus its limited resources on other vital services such as infrastructure, education and health. The project will also create 250 jobs during construction, and 12 permanent positions during the operational phase.

In addition to the development loan, REPP will provide further support to the developers by helping them to access long-term lending and risk mitigation instruments.

As of June 2019, the project was at a relatively advanced stage of development, with the site secured, a tariff agreed with the off-taker, a PPA signed and a PCOA to be approved by September.

## AT A GLANCE

### Technology

Grid-connected  
solar PV



### Project type

Greenfield, grid-  
connected

### Offtaker

La Société Nationale  
D'Electricité (SNE) -  
Chad's national utility

## KPIs



Greenhouse gas emissions  
avoided: 39,600 tCO<sub>2</sub>e per  
year



Jobs created:  
250 during construction,  
12 during operation



Installed capacity:  
25MW

## FUNDING STRUCTURE

### Contracted date

26 March 2018

### Lending type

Development capital

### REPP funding

Up to EUR 380,000

*"The energy needs are very important in Chad – needs mostly satisfied today by polluting energies. In a country with strong sunlight like Chad, solar energy appears as a great means to expand access to clean energy. We are happy to contribute to its deployment in Chad."*

*Hugues Antoine Guinoiseau, Director of Smart Energies International*