

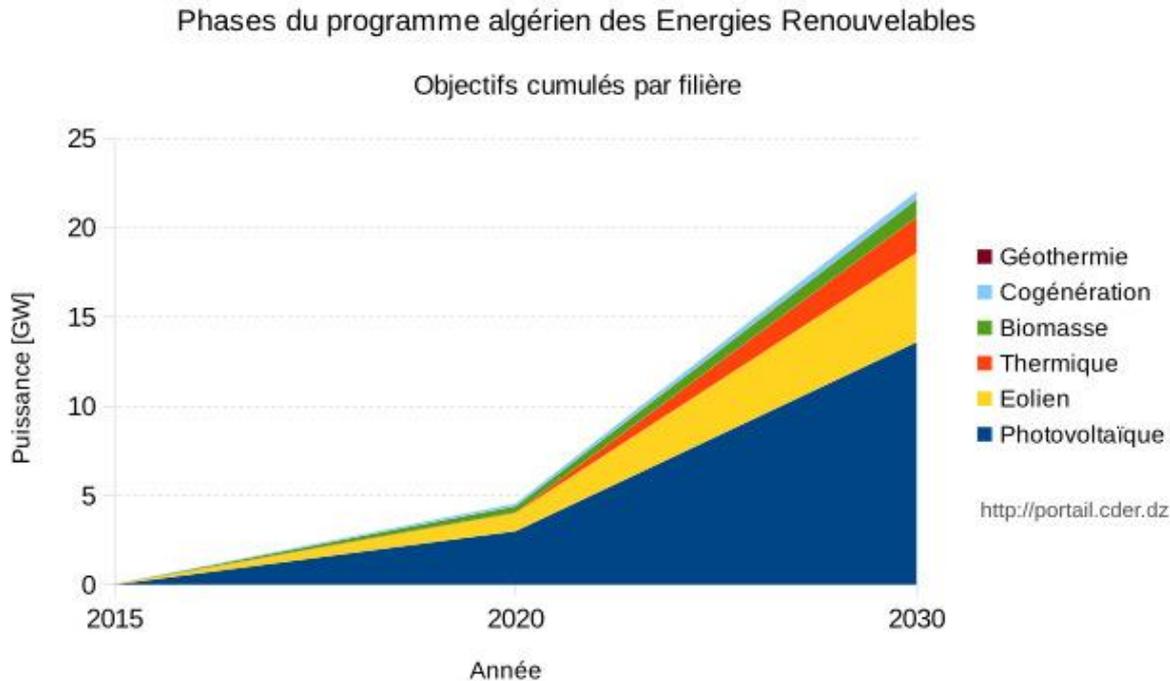


- 1- Technical assistance for the establishment of a laboratory for accreditation and quality control of photovoltaic modules
- 2- Technical assistance on the design and construction of a ground-based photovoltaic plant of 1 MW rated capacity

**CTCN Advisory Board 10<sup>th</sup> meeting**  
**Information Session**  
**29-31 August 2017**

# National Context

- ✦ In 2011, Algeria adopted a wide-ranging development program for renewable energies (PRE). The program was updated in 2015 and aims to produce 22,000 MW of electricity from renewable sources by 2030, over 60 percent of which (13,575 MW) would be of photovoltaic (PV) solar origin.



# National Context

- ✦ 23 photovoltaic power plans with a global power of 343 MW are realized with the feed-in tariff mechanism;
- ✦ Preparing a tender for the implementation of 4050 MW of PV plants;



## Technical assistance for the establishment of a laboratory for accreditation and quality control of photovoltaic modules



- ✦ Rapidly growing of photovoltaic (PV) market in Algeria thanks to the Renewable Energies Program (REP)
- ✦ The emergence of multiple industrial actors working on PV module manufacture (ENIE, Condor, ALPV, AURES SOLAIRE, ...)
- ✦ To succeed the PRE, Algeria must ensure the quality and reliability of the PV modules that enter the domestic market as well as the proper operation and maintenance of the PV plants through their lifetimes.
- ✦ According to Algerian regulations, the certification of photovoltaic modules, manufactured in Algeria or imported, is compulsory (inter-ministerial decree 2008). But currently does not have a domestic certification body that has the capability to ensure the control of manufactured and imported solar PV modules.

# Context and issue

- ✦ In this context, CDER decided to create a certification laboratory for PV modules. But it requires a great investment in equipment (more than 1 million \$) and great expertise.
- ✦ The first step begins with 11 tests among the 18 tests required by the IEC 61215 standard. This choice is dictated by the availability of equipment required for these tests. But this requires considerable expertise, e.g to the use of natural light instead of the solar simulator (a way that can save up to 30% of investment in equipment and is recommended by scientists).

**In this context, the CTCN offers the assistance that meets our need, in terms of accompanying policy and quality of expertise offered**

# The intended impacts of the technical assistance

- ✦ CDER will be able to contribute – as a certification body – to the successful and sustainable implementation of the PRE through the testing of PV modules and the control and monitoring of PV power plants.
- ✦ CDER will work on outdoor testing, maintenance, and monitoring of PV power plants to support the evaluation power plant performance with SKTM (Algerian company in charge of PV plant operation) and potentially other operators.
- ✦ CDER may provide assistance to the Algerian Standards Institute (IANOR) in the development – or amending of applicable international standards for domestic use – of PV module standards that reflect the climate conditions in Algeria.
- ✦ Successful implementation of this TA will contribute to the implementation of the PRE to diversify the Algerian primary energy mix and scale up of renewables while developing and utilizing local technical capabilities.

the CDER plans several actions to complete this project.

- ✦ Financing: CDER has submitted a funding request for the acquisition of equipment for the remaining 8 tests (JICA and other local bodies).
- ✦ Accreditation: the CDER is currently working with the PTB (National Metrology Agency, Germany) and Algerac (Algerian Accreditation Organization) for the ISO 17025 accreditation for two laboratories; Calibration of pyranometers laboratory and Solar water heater certification laboratory. We want to reproduce this collaboration for our laboratory

26 Feb  
2016

- Request submission

28 Aug 2016

- Request validation

- Several meetings, exchanges and discussions

02 Dec  
2016

- Selection of NREL to be the lead planner of the design of the Response Plan

- Several meetings, exchanges and discussions

17 June  
2017

- Response plan validation

## Communicate with the CTCN team



CLIMATE TECHNOLOGY CENTRE & NETWORK



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of Foreign Affairs



European  
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[www.ctc-n.org](http://www.ctc-n.org)

[ctcn@unep.org](mailto:ctcn@unep.org)



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