

**Ministry of Energy Transition
and Renewable Energies**



Algerian Renewable Energy Program

Phase I : SOLAR1000 MW



Algerian Renewable Energy Program

The Algerian Renewable Energy Program provides the installation of 15.000 MW by 2035, mainly based on photovoltaic solar energy

15 000 MW

**20
35**



Algerian Renewable Energy Program

The Ministry of Energy Transition and Renewable Energies (MTEER) charged SHAEMS company to promote and develop the 1st phase of this program.



Algerian Renewable Energy Program

SHAEMS has been created by the two major publics companies of energy in Algeria, SONATRACH and SONELGAZ.



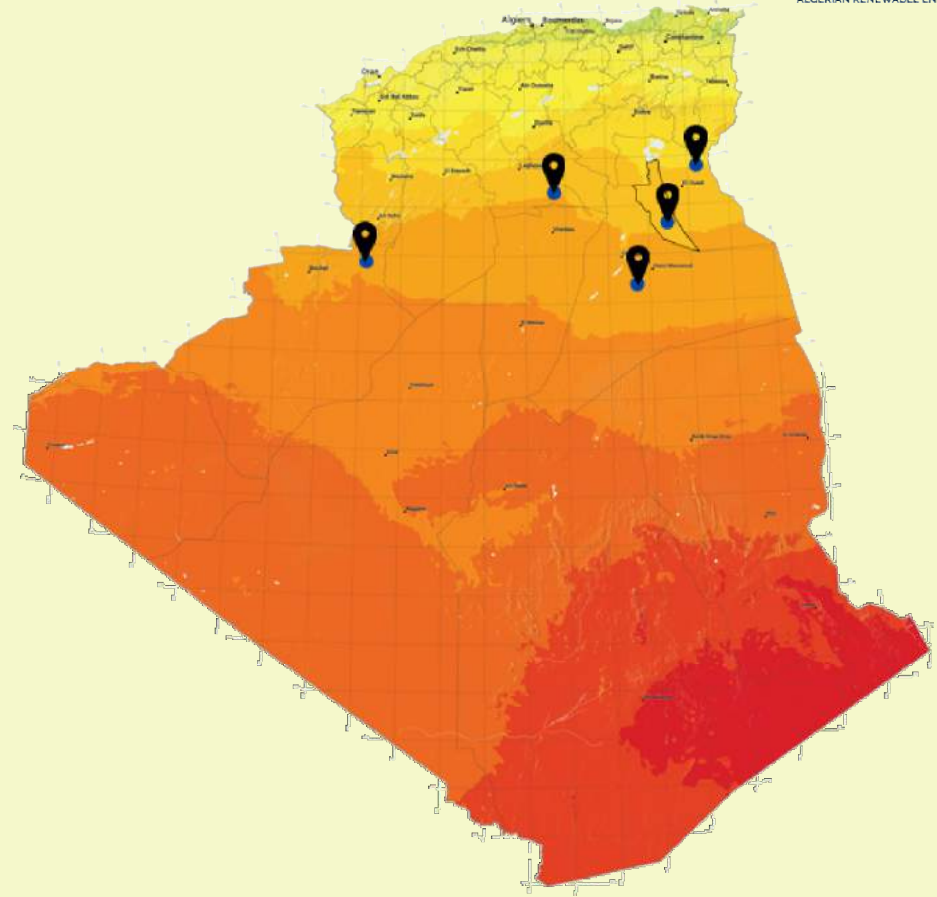
Phase I : SOLAR 1000 MW Project



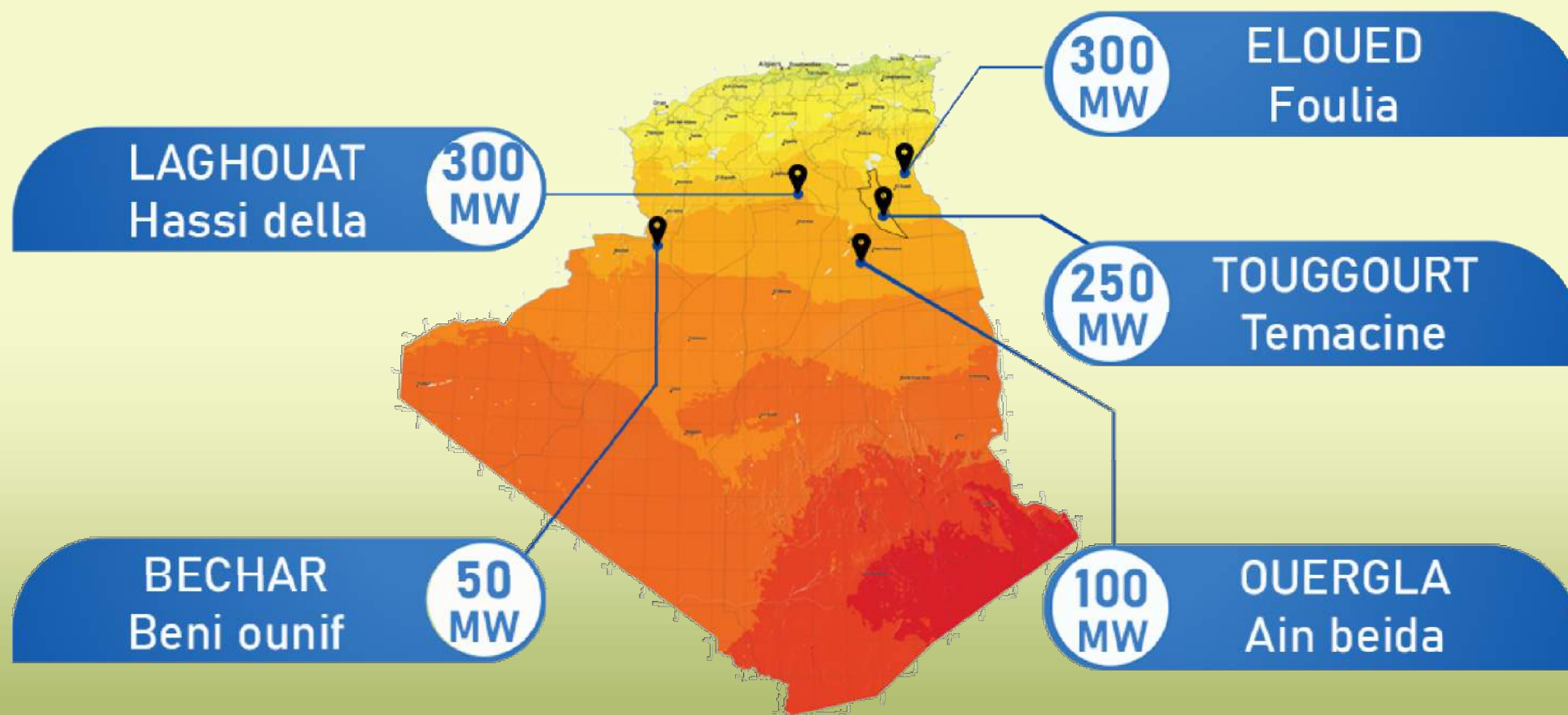
الشركة الجزائرية للطاقة المتجددة
ALGERIAN RENEWABLE ENERGY COMPANY

Phase I : SOLAR 1000 MW

The SOLAR 1000 MW project consists in the Construction and Operation of several photovoltaic solar power plants with a total capacity of 1000 MW in plants of 50 to 300 MW each.



SOLAR 1000 MW



The SOLAR1000MW project includes five PV plant of 50 to 3000 MW

Sites selection criteria

The sites assessment study was conducted by SHAEMS.

This study considered:

Availability
of field

Soil and
environment
studies

Feasibility of
interconnection to the
substation-power and
stability of the electrical
network

Objective of this choice is to:



Hold the widest fields and closest sites at the substations



Consider the social and economic impact of each region



Try different power levels (50 MW-100-250 and 300 MW) to study the impact of power lever on the cost of the KWh



Ensure regional equity in site distribution

Selection of partners for the future IPP SOLAR 1000 MW



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Reminder of the main dispositions of the first Investor Tender SOLAR1000MW

- Participation in the Call for Investors is open to Algerian or foreign investors (public or private), alone or in consortium companies.
- Each investor may bid for one or more plants with a max cumulative capacity of up to 300 MW.
- For each Power Plant, a Power Purchase Agreement (PPA) will be signed for 25 years.





Reminder of the main dispositions of the first Investor Tender **SOLAR1000MW**

- The project will be B.O.O (Build – Own – Operate).
- SHAEMS will associate in this project with the Investor selected through a participation in the share capital of the Project Company (SPV) by 34%.
- The level of participation of the Investor in the capital of the Project Company must be 66%.

Reminder of the main dispositions of the first Investor Tender SOLAR1000MW

- The investment will be financed in Project Financing at 20% by share capital (shareholders of the SPV) and 80% by debt (financed by bank loan).
- The investor selected has to arrange the bank loan with the best conditions to achieve the lowest cost of kWh.



Promotion of national integration

SHAEMS

شمس

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Local Content Requirement



As part of the strategy implemented by the MTEER to promote the local solar photovoltaic industry in Algeria, investors are urged to respect and achieve a local content rate set by the Specifications.

Local Content Requirement

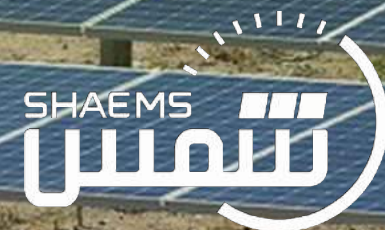
Without being exhaustive, the following equipments may be acquired from Algerian manufacturers :

- Metal frames
- Cables
- Transformers
- Solar panel

It remains understood that these products and equipments must meet the technical specifications of the terms of reference.



Key investment considerations



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SHAEMS commitment



- Provision of power plant sites.
- PPA with the exclusive Algerian Electricity Operator.
- Support to obtain all necessary authorizations.
- Participation in the share capital by 34%.
- Obtaining investment benefits, including tax exemptions.
- Meteorological information, Geotechnical Survey, Topographical Data, Soiling Measurement.
- Technical Requirements for connecting new generation to the transmission System



Why the PPA is bankable?



- Principle of Take or Pay for the electricity produced.
- Guarantee of profitability of investors (ROE of 12%).
- Indexation of the kWh price to the EURO/DZD rate exchange variation.
- Indexation of the kWh price to the inflation rate.
- Tariff Revision in the event of a Chang in laws.
- Covering the additional cost of the tariff obtained by the National renewable energy funds.



Why take position in Algeria?



- Algeria is the largest producer of energy in Africa.
- Algeria adopted his energy transition strategy and set a target of 15.000 MW by 2035.
- Algeria offers many future opportunities for the development of solar PV, Wind and hydrogen.
- Algeria has an important infrastructure that allows to export all types of green energy.
- Algeria is a very solvent country and has no foreign debt.
- The implementation of projects in Algeria will allow easy access to future renewable projects.

What benefit for Algeria?

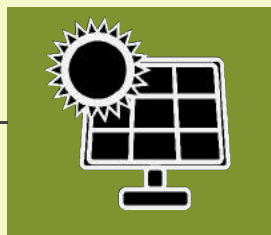


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« Gas saving »

**SOLAR 1000 MW =
2190 GWh**

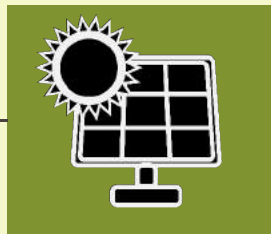
**Gas saving =
547 Millions de m3**



« CO2 avoided »

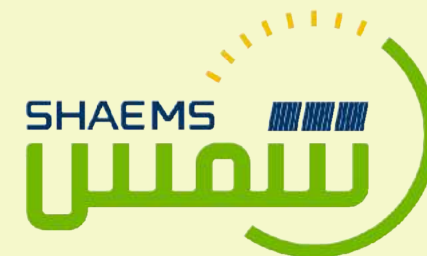
**SOLAR 1000 MW =
2190 GWh**

**CO2 avoided =
1,007 Millions tonnes**



«Green Hydrogen»

Algeria plans to quickly launch green hydrogen production production that requires upstream green energy which motivates an increase in installed renewable energy capacities.



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Thank you for your attention

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