

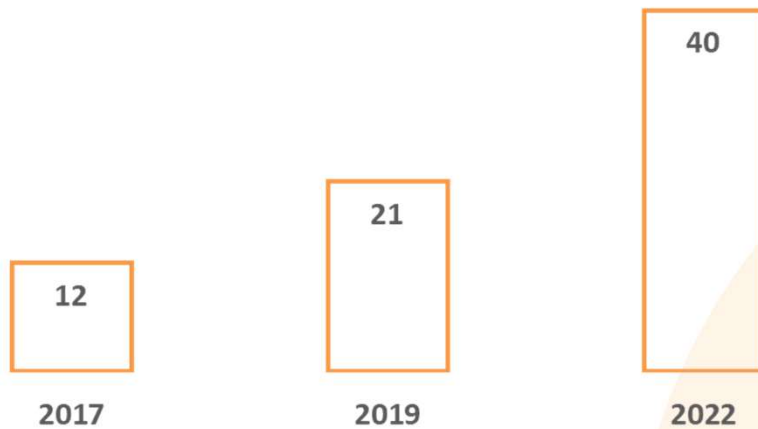
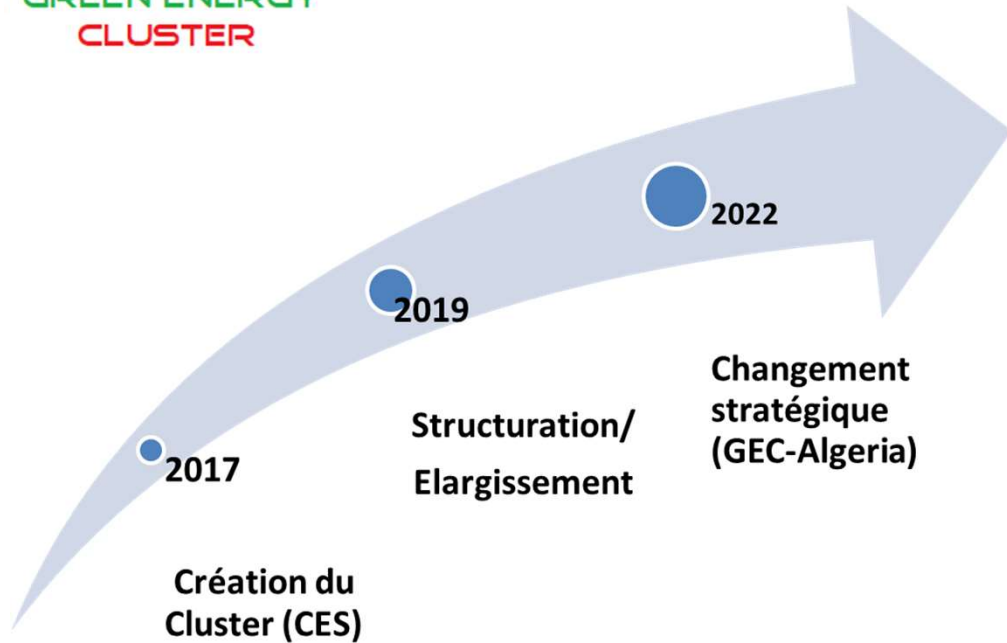
# Apport de l'industrie solaire locale au programme des énergies renouvelables

**Mehdi Bendimerad**, President of Board Members  
**Green Energy Cluster Algeria** (Ex Cluster Energie Solaire)

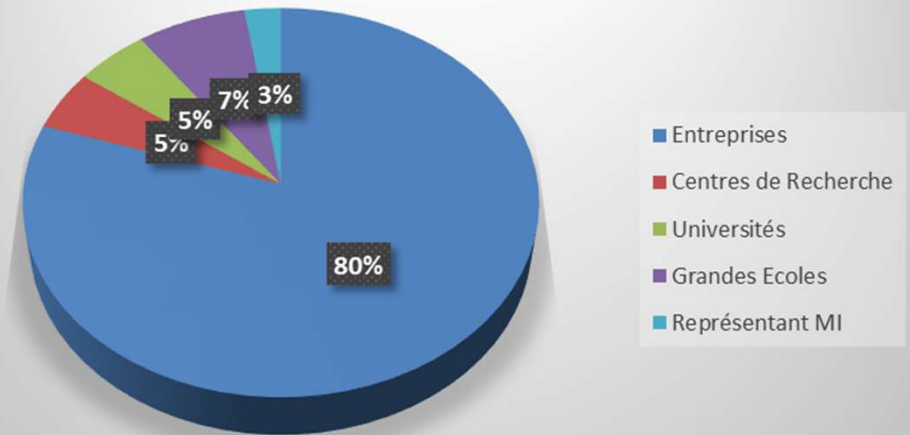
4ème édition de la Journée algéro-allemande de l'Énergie  
20 Décembre 2022

1. Green Energy Cluster Algeria: a short presentation
2. The RE program: Scaling-up, jobs and local content
3. Embracing all-value chain
4. Conclusions

# Our members: companies, R&D centres, Universities and High Schools

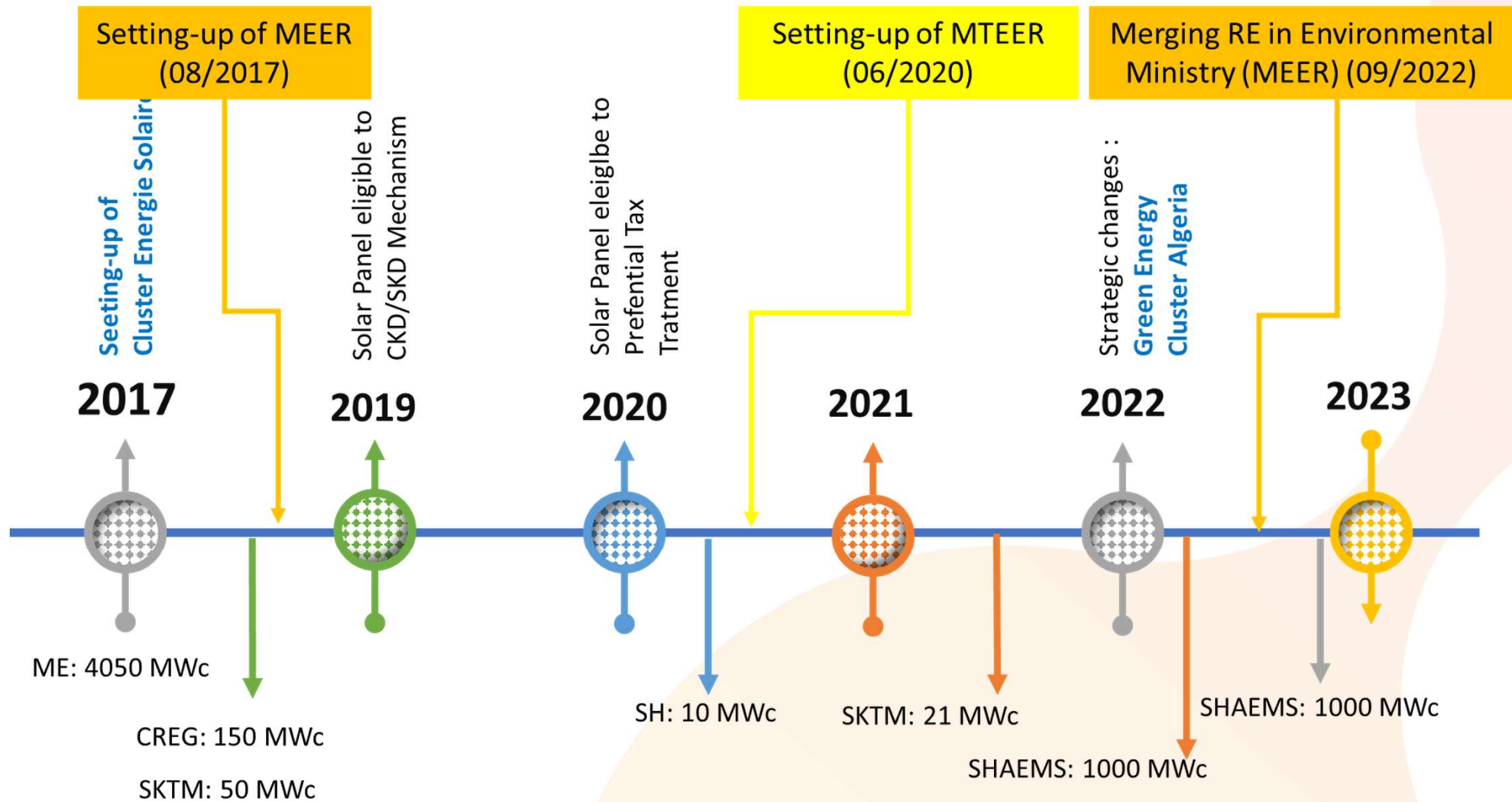


Les membres du GEC Algeria

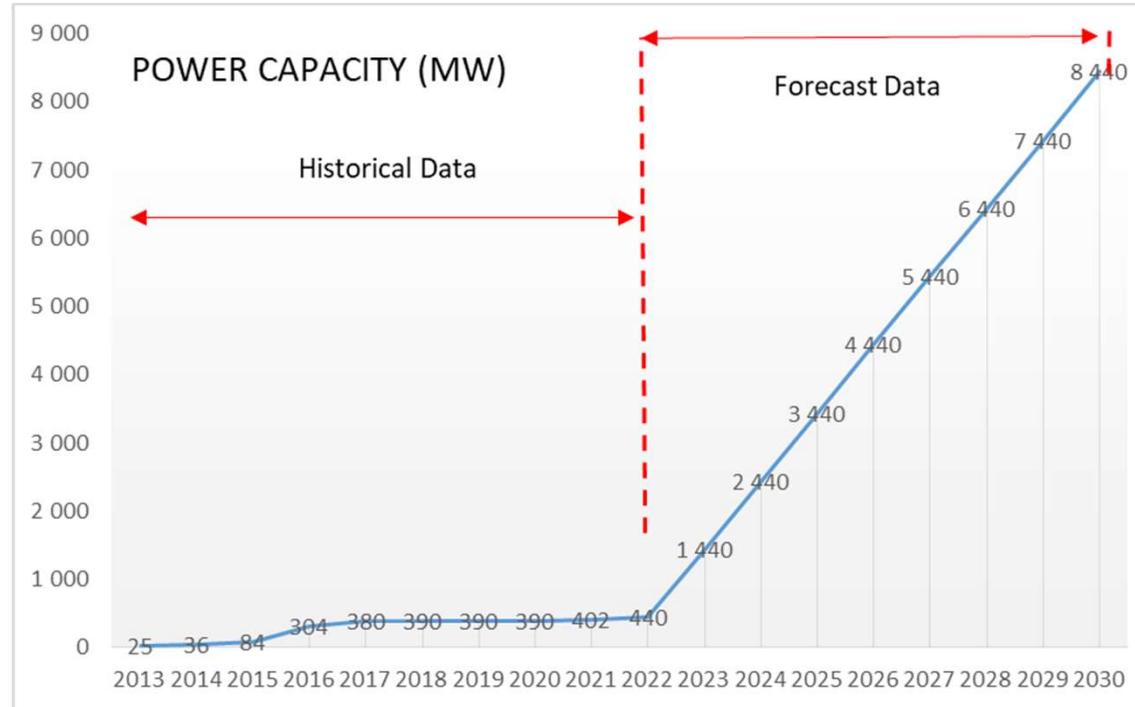


# Our Challenge.

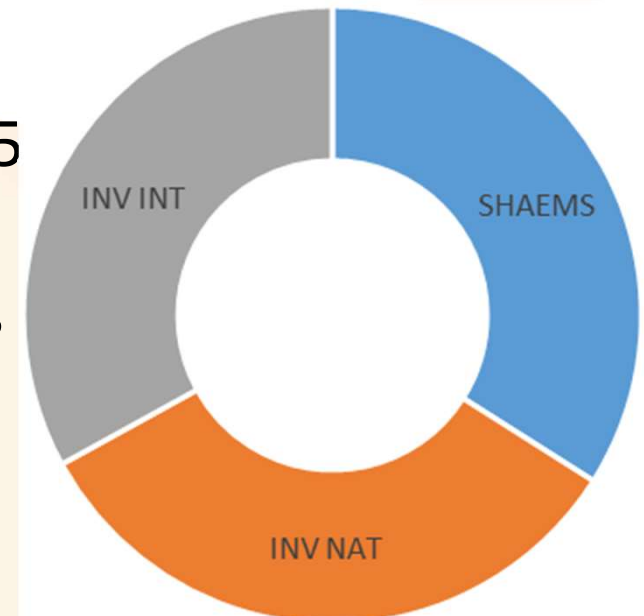
To be a driving force in the process of change



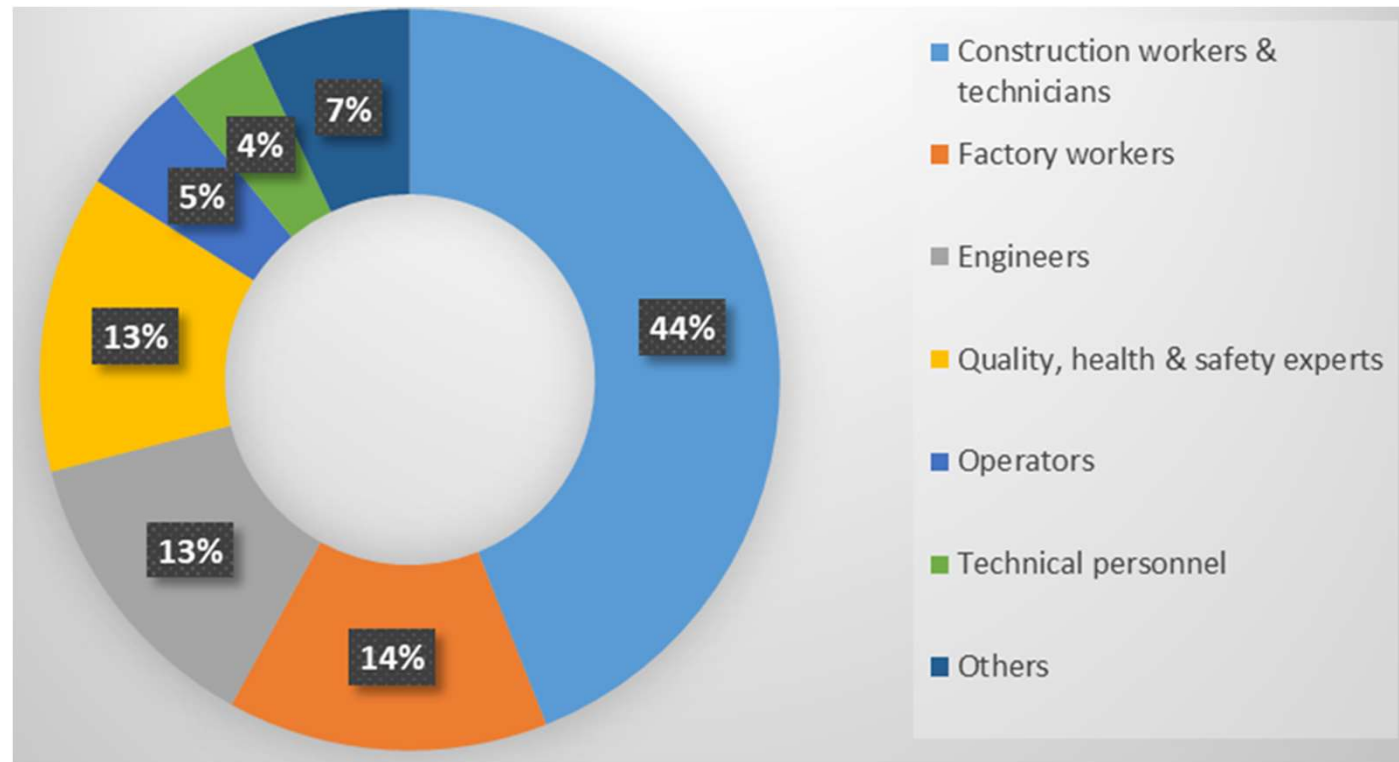
# The Algerian RE program until 2035



- **Scaling-up of the Algerian program**: from less than 500 MW in the past to 15.000 MW by 2035
- **Accelerating the deployment**: 1000 MW/year
- **Local Content**: a min 30% for Solar 1000MW is required
- **Partnerships to sustain this program**: public – private partnership, national –international partnership



# The Algerian RE program until 2035



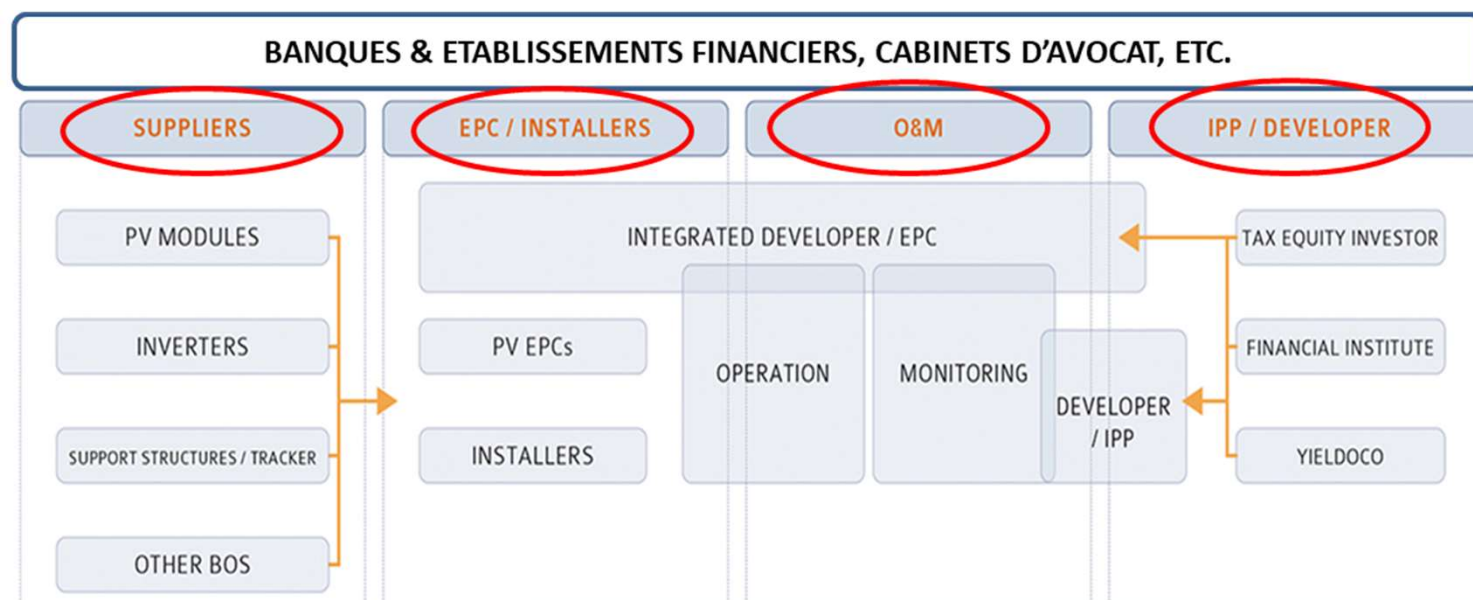
Source:  
IRENA\_Renewable energy benefits. Leveraging local capacity for solar PV. 2017

- **JOB CREATION.** 67.500 direct jobs for 15.000 MW.
- **DEVELOPMENT OF SERVICES:** Technical side (engineering, O&M) and non technical side (legal, finance, capacity building).
- **EMERGENCE OF NEW PLAYERS:** (developers, EPC contractors, O&M companies).
- **NEW HIGH-LEVEL COMPETENCIES:** Expertise + High-competition among players.

# Embracing all value chain. Products & Services

The **GEC Algeria** adopted objectives set by the country to develop RE activities according to 2 strategic axes:

- **Industrial Strategy**: initiation, development and strengthening of activities to contribute to the establishment of a local industry;
- **Energy Strategy**: products and services from local industry will serve as a basis for producing the green energy and fueling our economy. At long term period, export perspective is projected.



A triple objective can be achieved:

- Enhancing competitiveness of our companies
- Reducing of imports
- Developing skills and jobs

# Embracing all value chain. **Products & Services**

	Available capacity	Expected additional capacities to support te program
Solar panel	300 – 350 MWp	> 800 MWc
Structures	860 MWp	Large possibility
Cables	> 1000 MWp	
EPC	500 MWp	> 500 MWc
O&M	300 MWp	Large possibility

1. Priority to products available in Algeria.
2. A minimum of Local Content Rate is in place ( $\geq 30\%$ )





# Embracing all value chain. Products & Services

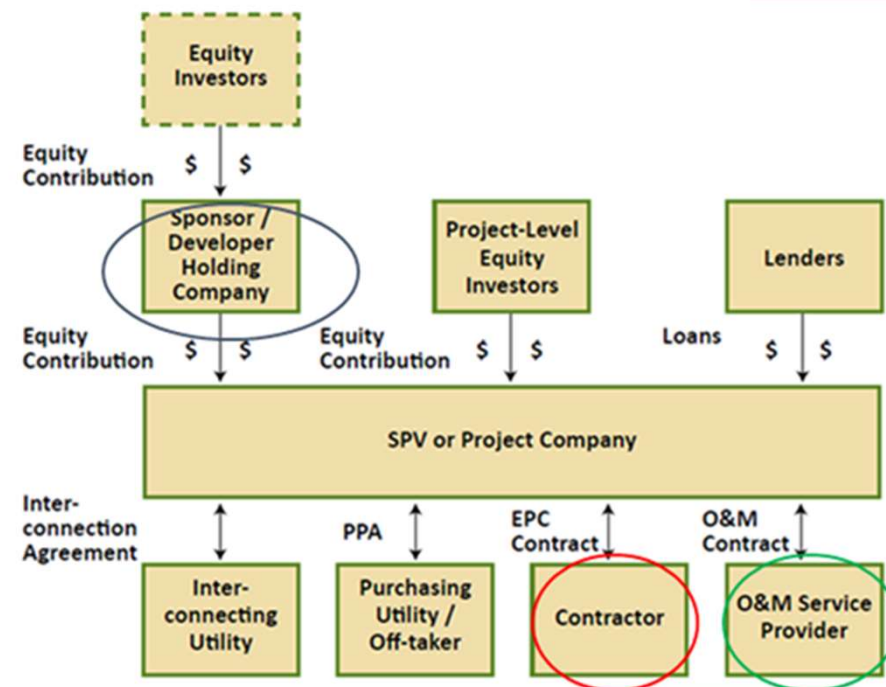
BoS	Equivalent	Obs.
Galvalized strcutures	860 MWp	<ul style="list-style-type: none"> <li>• Fixed</li> <li>• 100% local product</li> </ul>
Electrical cables (DC and AC)	'>1000 MWp	DC & AC
Telecom cables	300 MWp	
MV electrical equipement	4500 cells , 30 kV	

BoS components including metal frames, cables, transformers, etc.



## Emerging Private IPP

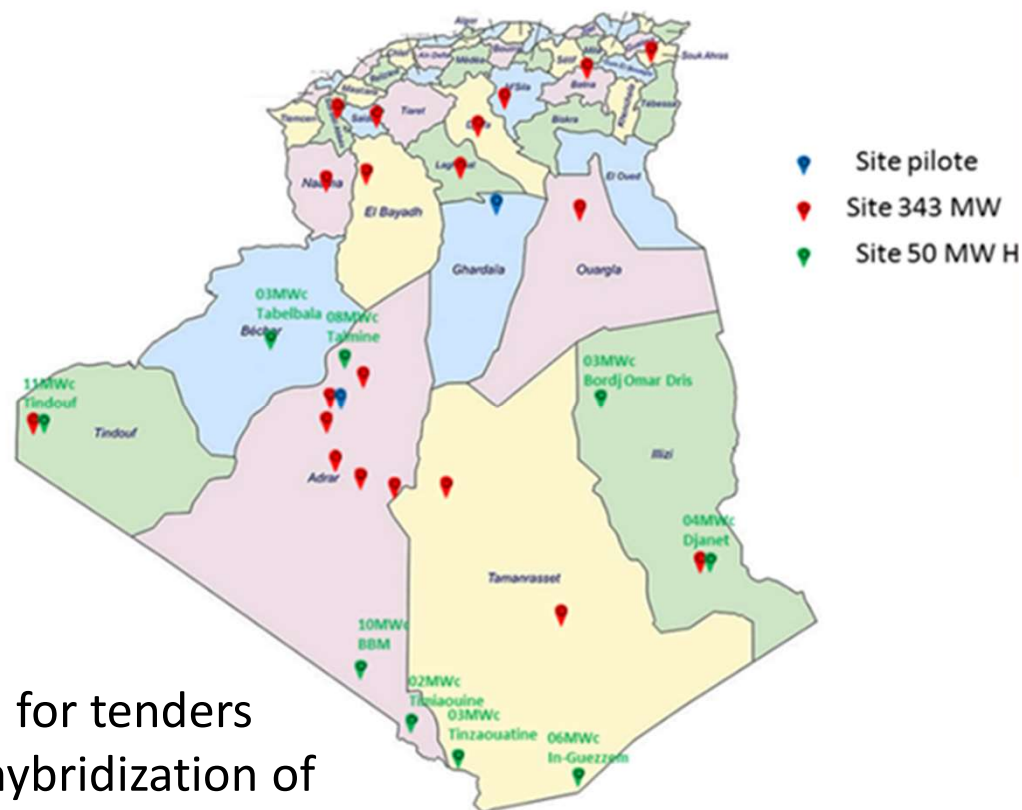
- A large part of the renewable energy program will be carried out in the form of calls for tenders to investors and calls for tenders using auction process.
- This means that contracts for the sale of electricity from renewable sources will be signed between IPP and a buyer (represented by a company from the Sonelgaz group).
- This model has been successfully tested on seawater desalination projects, a solar-gas hybrid power plant project (ISCC of Hassi Rmel). As well as the 1200 MW Hadjeret Ennous combined cycle power plant



Year	Buyer	IPP	Techno
2011	Sonatrach	SPP1	Gas-CSP
2018	SADEG	-	PV
2023	SONELGAZ DISTRIBUTION	SHAEMS+ INV	PV

## Emerging Private & Public EPC companies

- The EPC model (also called turnkey model) is a model used for many years by Sonelgaz and Sonatrach for their energy projects.
- In the field of renewable energies, more than 343 MWp spread over 22 PV power plants were acquired through EPC type contracts by SKTM (Shariket Kahraba wa Taket Moutadjadida) signed in 2014.
- In 2019, SKTM decided to launch a national call for tenders and to sign contracts totaling 50 MWp for the hybridization of diesel power plants with five (5) Algerian EPC companies. Three of the five winners are members of GEC Algeria (Amimer Energie with 12 MWp, C EGL with 11 MWp and ETP Habbi Kouider with 11 MWp).



# Embracing all value chain. Products & Services

**SKTM is gaining experience as the most important solar PV O&M company in Algeria**

- In the field of O&M service for solar PV power plants, SKTM, a subsidiary of the Sonelgaz Group, is managing operation and maintenance of all its power plants (22 PV power plants + 1 wind power plant).
- It is expected that 50 MWp solar PV projects will also facilitate the development of new O&M companies as part of the contracts signed between SKTM and the winners.



- Algeria has an ambitious 15000 MW program by 2035.
- Green Energy Cluster Algeria is supporting the governmental policy with the aim to develop local content and job creation.
- Green Energy Cluster Algeria is facilitating relationship between its members and international players.
- GEC Algeria is your best channel to enter to Algeria!