

RENEWABLE PROJECTS

Enhancing The Local Supply Chain

June, 2017



Introduction

- The Ministry of Energy, Industry and Mineral Resources (“MEIM”) is the party which has been given the responsibility for achieving the energy related objectives set out in Saudi Arabia’s Vision 2030.
- MEIM has created a new office, namely the Renewable Energy Project Development Office (“REPDO”), to execute the Kingdom’s renewable energy plan. The first round consists of:

Project	Capacity (MW)	Technology
Sakaka IPP	300	Solar PV
Dumat Al Jandal	400	Wind Turbine

Saudization Strategy in the Renewable Program (Sakak RFP)

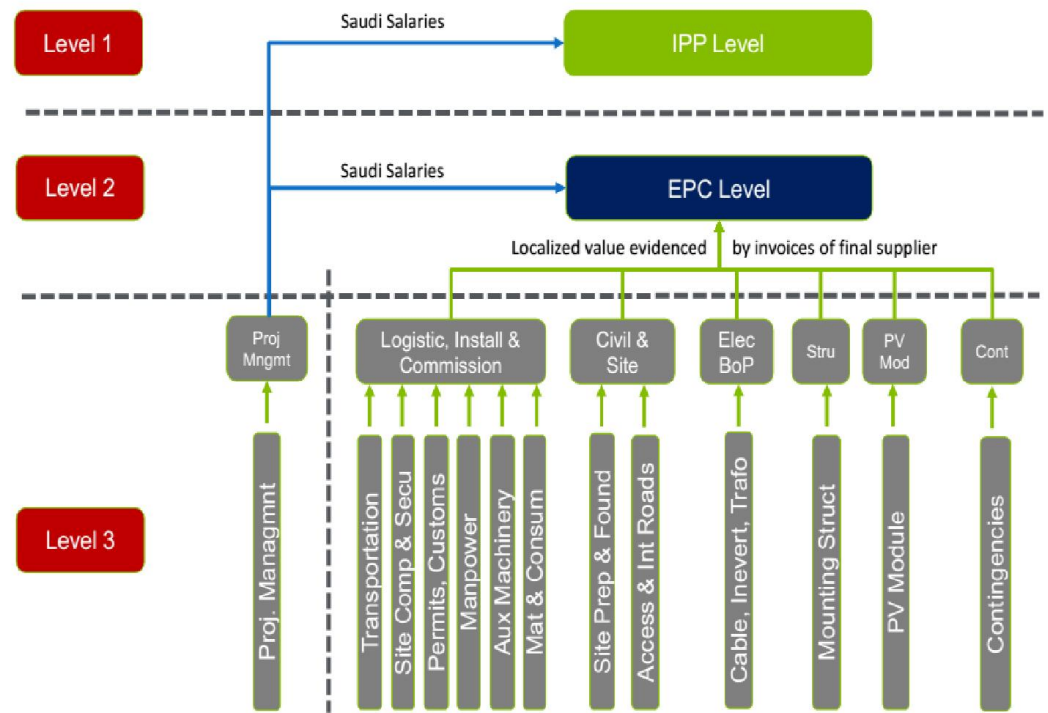
- REPDO has shown at different occasion that the Renewable Program aims to stimulate the developers, EPC contractors and operation and maintenance services providers to use to the maximum extent the local available equipment and services and create partnerships between international manufacturers and local supplier to delocalize the manufacturing activities to the Kingdom of Saudi Arabia and accordingly create more jobs and opportunities to Saudi nationals.
- The RFP issued by REPDO in relation to Sakaka 300 Mwac solar PV project RFP has clearly identify The NRP Saudization Compliance Metric (NSCM) formula is established to measure the levels of Saudization and local spending in the Kingdom of Saudi Arabia of the total expected CAPEX of the Project and to establish and develop a network of local suppliers.
- Bidders are requested to achieve an NSCM Percentage of **30%** and liquidated damages will apply if this target is not achieved.

Saudization Strategy – Development phase

- During the development phase, REPDO will evaluate each bidder's NSCM ratio through the following formula:
- NREP Saudization Compliance Metric % = $\frac{\text{Localized value}}{\text{Total Project CAPEX}} \times 100$**

Where:

Localized Value = \sum Goods & Services with C.O. + \sum Salaries paid to Saudi Nationals



Supporting documents :

- Local Manufacturing is evidenced by Certificate of Origin (Ministry of Commerce) or by Certificate of Quality (SASO).
- Localized value shall be documented by invoices.
- Localized value can be achieved through local manufacturing OR through local (Saudi) components used in Out of Kingdom manufacturing.
- In the case of the Project Management costs, only the salaries paid to Saudi Nationals employed in relation to the Project can be considered as part of the Localized Value.
- The NSCM shall be periodically updated during project execution, and Compliance Report shall be audited by the NSCM Auditors.

Saudization Strategy – Operation phase

- During the operation phase, The Project Company shall employ qualified Saudi Arabian Nationals, so that the total number of Saudi Arabian nationals shall be at least:
 - 25% within five years from PCOD
 - 50% within ten years from PCOD
 - 75% within fifteen years from PCOD
- Documentation to be provided to the Offtaker at the beginning of each Contract Year.
 1. Certificate of Compliance with Decision 50
 2. Annual Employment Programme written Report
 3. Annual Training Programme (transfer of knowledge to SA nationals)

Localization – ACWA Power overseas experience

- ACWA Power has seen several success stories in its overseas renewable projects mainly in Morocco and South Africa achieving even more than the targeted metrics fixed in the RFPs or the local regulations.
- In Morocco Noor II CSP Project, ACWA Power achieved the following:

Localization:

32%

Industrial integration (Exceeded target of 30%)

\$250M

Directly invested into Moroccan Economy

Job creation and sustainability:

1,800

Workers on site as direct job creation

80%

Local and National

95%

Permanent, Local and Skilled Jobs for O&M

15%

Lower tariff than Noor I, and 10% lower tariff than competition

50%

Solar Field local integration

40%

Integration for HTF and Thermal Energy Storage systems



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Example of Industry created Locally:

- The torque tube is a key element of the solar collector for Structural strength and integrity of the solar collector
- NOOR I key achievement
- 90% of the torque tubes – over 17,000 units - manufactured in Morocco**
- Localization of 100% of the value chain**
 - Local steel plates production
 - High precision manufacturing – joint venture between Moroccan and Spanish companies
 - Transportation – ca. 2,000 trucks
 - Assembly on site, installation and erection with local companies and local employees
- Delivery on time, with international quality standards and competitive pricing vs. global market**

Key localized activities and way forward - Morocco

- Engineering and technical studies
- Solar Field
 - **Civil and electrical works**
 - **Manufacturing of solar collectors structural elements (torque tubes, pylons), assembly and installation**
 - **Piping manufacturing and assembly**
 - **Thermal insulation**
- Heat Transfer Fluid system
 - **Civil and electrical works**
 - **Tanks and piping - manufacturing & mechanical erection**
- Thermal Energy Storage
 - **Civil and electrical works**
 - **Tanks and piping – manufacturing & mechanical erection**
 - **Thermal insulation**
- Power Block and BoP
 - **Civil and electrical works**
 - **Mechanical erection of the key equipment**
- Labour intensive construction phase
 - **Direct job creation - over 1,800 workers on site at peak, with ca. 80% local and national employees**
 - **Indirect job creation – throughout the value chain of the production and transportation of locally and internationally manufactured components**
- Sustainability of the jobs and the local integration to be ensured by the project
 - **Acquisition of skills and nationally recognized certifications during the construction period for better long term job market integration**
 - Mobile unit to train and certify local worker for welding
 - **Creation of ca. 70 permanent, local and skilled jobs for the operation and maintenance of the plant for the 25 years lifetime of the plant**
- Long term development of the region
 - **Project related infrastructure for better access**
 - **Support to local population on sustainable revenue generating activities (agriculture, traditional crafts,)**
 - **Increased attractiveness of the region for industrial activities (available skills) and tourism**

Conclusion

- ACWA Power believes that there is a huge existing local industrial potentialities and a lot of opportunities in creating local actors through the NRP. The following actions might be considered in having a strong local competitive and reliable suppliers that will enhance the Kingdom capabilities in the renewable technologies:
 - **Valuing the experience from the first project and implementing the lesson learnt in the next rounds;**
 - **Detailed cost analysis of the overall supply chain vs. international procurement**
 - **Educating the local industrial players on the potential of their integration into the value chain**
 - **Adapting the design and manufacturing processes of components for better integration with locally available capabilities**

THANK YOU