

Knowledge Sharing Report

Local Procurement – Nyngan Solar Plant

Project Name:	<i>AGL Energy Solar Project (Nyngan Solar Plant)</i>
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Knowledge Category:	Technical
Knowledge Type:	Supply Chain

KEY LEARNING

The delivery of a utility scale solar project requires supply of equipment and materials from numerous specialty and commodity suppliers. The establishment of an in-country supply chain was deemed the most effective way to support project delivery at the scale of the Nyngan Solar Plant project.

IMPLICATIONS FOR FUTURE PROJECTS

Having an established in-country supply chain will assist in the planning of future projects in three areas: (1) scheduling (2) cost estimates and (3) quality.

Development of an in-country supply chain will assist project developers and engineering, procurement and construction (EPC) contractors to better understand lead times for order and delivery of materials and equipment to a project site. This will ensure that project schedules accurately reflect expected delivery times, which reduces project execution risk. Furthermore, the development of relationships between project developers, EPC contractors, and supply chain providers will likely reduce delivery lead times and improve suppliers' response times and flexibility when design or schedules changes arise.

As the supply chain develops in Australia, and suppliers better understand the requirements of developers and contractors, the cost estimates for equipment and materials will become more precise. Where suppliers have been used on previous projects, economies of scale may develop as suppliers are able to invest in new capital or processes that drive down unit prices.

Quality control processes can be more tightly managed with a local supply chain. Local standards are better understood and quality control audits are more easily done.

KNOWLEDGE GAP

Prior to the Nyngan and Broken Hill projects, there was no significant supply chain for utility scale solar in Australia. It is crucial for Australia to develop and maintain the local procurement knowledge base required to supply the commodities required to deliver solar projects. With the ever increasing pressure of low-cost global competition, the establishment and encouragement of local procurement will safeguard Australian industry and job creation.

BACKGROUND

Objectives or Project Requirements

The Nyngan Solar Plant project requires the local procurement of cables, transformers, power conversion equipment, switch gears, mounting structures and other miscellaneous equipment.

These commodities will be sourced through a number of suppliers within Australia, including suppliers who are new to supporting the solar industry.

Process undertaken:

First Solar underwent a thorough evaluation of the availability of local procurement suppliers. First Solar collaborated with industry bodies such as the Industry Capability Network (ICN) to locate contractors and suppliers within the project regions, as well as across multiple Australian states. RFIs and RFPs were issued to gain additional information related to supplier interest and capability.

Potential suppliers' responses were reviewed by cross-functional teams and then shortlisted. Subject matter experts confirmed that the scale and technical requirements of the project could be met. Final determinations were made based upon cost competitiveness and level of quality. Supplier mentoring has been put in place for those companies who have transitioned from supporting other industries to now supply the solar industry.

SUPPORTING INFORMATION

IXL Manufacturing Launch May 2014





ATTACHMENTS

- Press Release: IXL Group Opens Structure Manufacturing Plant in Adelaide to Supply First Solar Australian Projects
- Industry Development and Job Creation in Australia