

# SUCCESS STORIES



## First Solar Rio Tinto Weipa Solar Farm Stage 1

### Background

As Australia's first commercial diesel displacement solar plant, the Weipa Solar Farm will generate electricity for Rio Tinto's Weipa bauxite mine, processing facilities and township located on the western side of Cape York Peninsula in Queensland, Australia.

Stage 1 of the solar plant, a 1.7MW Solar Farm, is expected to produce an average of 2800 megawatt hours of electricity per year. This is the first of its kind for Australia's mining sector and will serve as a platform to demonstrate the benefits of renewable energy in remote locations.

The second phase would include a storage component and increase the capacity to 6.7MW. The expanded plant would have the potential to save approximately 2,300,000 litres of diesel on average each year, and reducing Weipa's greenhouse gas emissions by around 6,100 tonnes per year.

### Project Specifics

Client	Rio Tinto (via MPower)
Location	Weipa, QLD
Year Completed	2015
Size / Quantities	22kV Kiosk Sub, 1.7MW Solar Farm
Services Provided	<ul style="list-style-type: none"><li>• Primary Design and Layouts</li><li>• Switchyard Materials Selection</li><li>• Earthing &amp; Lightning Design</li><li>• Protection Scheme</li><li>• Auxiliary Power Systems</li><li>• Detailed Drawings</li><li>• Protection Relay Settings</li><li>• Review of Panel Schematics and Drawings Prior to Manufacture</li></ul>
Delivery Method	Design Consultant for Constructor