

Project Name		Solar Water Protection in Kiribati	Status at Sept -14
PROJECT SUMMARY	Implementing Agency	Public Utilities Board (PUB) - Ministry of Public Works and Utilities	
	Lead Partner	Masdar, UAE	
	Financing	Project total USD m 5.00	
	Duration	1 yr	Feb-14 to Dec - 14
	Development Objective	Renewable energy generation in Kiribati.	
	Outputs	A. Investment in Grid-connected Solar Photovoltaic Equipment – Investment in 400kW peak capacity of solar photovoltaic without storage, installed and managed at the Bonriki aquifer.	
		B. Expand government experience in designing, implementing and managing renewable energy projects	
Project Background	<p>The Project will be located on a threatened aquifer near Bonriki International Airport on Tarawa. Locating the Project on this particular site fulfils an environmental protection dimension by restraining human migration and pollution of the aquifer. The Project will include building a fence that is distant from the modules to maximise the protected area. The Project will be connected to the South Tarawa grid at an available connection point near the water treatment plant. There are two other solar projects under development by the World Bank and the PEC fund, with capacities of respectively 500 kW and 400 kW, planned to be connected to the grid. Masdar has conducted a preliminary grid impact analysis considering the introduction of a total of 1.1 MW to the grid in Tarawa, with 1.1 MW representing the estimated total peak electricity production of the three projects. The assessment confirms that there will be no impact on the grid while maximizing fuel saving.</p> <p>The Project is expected to achieve an annual average performance ratio of 81.5% during the first year period. Supplying 680 MWh of solar energy to the grid, 3.93% of the annual energy consumption in Tarawa. The 400 kWp project will constitute 7.34% of the installed conventional generation capacity on the grid in Tarawa. It is foreseen that the Project will also reduce fuel consumption by 180,306 L1 of diesel per year, resulting in estimated savings of 211,090 USD/year². The plants' annual emissions reductions amount up to 569</p>		

		tons of CO2 per year.		
STATUS	Progress Overall	Preparation: 100%	Procurement: 50%	Implementation: 0%
		<p>Preparation: The UAE system will be installed at the Bonriki aquifer. The feasibility study for a ground mounted system has been done.</p> <p>Procurement: The tender is still open as one of the bidding companies, Ingenero, went bankrupt which affected the tender.</p> <p>Implementation: Delivery and installation will be finalized once the Contractor is selected</p>		
	General	With 69% of the project period elapsed, the overall progress is about 30%. Considering the delay in selecting the contractor, the project is expected to be in operational in Q1, 2015.		
MONITORING	Monitoring Indicators	<ul style="list-style-type: none"> • Energy from renewables (0%; target 7%) • Solar energy kWh/yr (0; target 680,000) • Reduction in diesel use L/yr (0; target 180,000) • Savings \$/yr (0; target 211,000) • CO2 reductions ton/yr (0; target 569) • Training for local capacity 		