

# UAE-Pacific Partnership Fund

The UAE-Pacific Partnership Fund (UAE-PPF) is a US\$50 million initiative that delivered grant-funded renewable energy projects across 11 Pacific Island nations. All projects were delivered by Masdar in cooperation with each nation's government, with grant funding provided by the Abu Dhabi Fund for Development (ADFD). The solar and wind projects were developed and delivered in two cycles.

## CYCLE 1

### Kiribati: 500 kW Solar PV & Water Protection

The project is helping to meet the needs of 17 percent of Kiribati's population who live off-grid. The 500 kW solar PV plant is also protecting an endangered freshwater aquifer by restricting access and limiting contamination. The project also features a state-of-the-art control system.



### Fiji: LaKaRo 525 kW Solar PV

Three solar PV micro-grid implemented in conjunction with Fiji official now enable the provision of 24-hour electricity to citizens on three Fijian islands that previously averaged only 16-18 hours of electricity a day. The projects included 150 kW LakeBA Island, 225 kW plant on Kadavu Island and 150 kW plant on Rotuma Island



### Samoa: 550 kW Cyclone-Proof Wind Farm

Samoa depends on imported diesel to meet 70 percent of its energy demand. The 550 kW Cyclone-Proof Wind Farm is the first wind power project in the country and is designed as a cyclone-proof facility with two 55 meter-tall turbines that pivot at the base, enabling them to be lowered and locked in place in less than one hour.



### Tonga: Vava'u 512 kW Solar PV

Masdar has helped reduce fuel consumption on the Tongan island of Vava'u by installing a 512 kW solar PV plant along with advanced control systems. These systems ensure a maximum of 70 percent of the solar energy is efficiently fed into the grid at peak hours, with any surplus stored in a battery bank for later use.



### Tuvalu: 500 kW Rooftop Solar PV

A series of rooftop solar PV installations has delivered a combined generating capacity of approximately 755 MWh per year. The rooftop deployments included 270 kW on two steel structures built one storey above ground to create 1,840 sqm of shaded space; 150 kW of solar panels on the roof of the islands hospital and nearby wharf buildings and 80 kW on the workshop and storage facility for the local utility company.



## Vanuatu: Port Vila 767 kW Solar PV

Port Vila, the capital city of the island state of Vanuatu, has a population of 44,000, of which only 27 percent have access to electricity. While the island already has some local renewable generation capacity – including PV, wind, and hydro – the majority of energy demand is still met by diesel generators. Masdar installed three solar PV plants to help increase the share of renewable energy in the energy mix in addition to providing shading for 112 parking spaces at the country's key civic areas (Parliament House and Meteorology and Geo-Hazard Department Building).



## CYCLE 2

### Solomon Islands: Solar PV Plant in Honiara

The Republic of the Solomon Islands consists of over 1,000 islands inhabited by a total population of 609,883. Approximately 90 percent of the electricity produced is diesel generated. The 1 MW plant, which was expanded from 600 kW following a grant from the New Zealand Ministry of Foreign Affairs and Trade, bolsters energy resilience and reduces costs associated with diesel imports.



### Marshall Islands: Solar Water Collection in Majuro

The Republic of the Marshall Islands is made up of 29 low-lying atolls and five elevated islands inhabited by 71,000 citizens. The nation is dependent on diesel for more than 90 percent of its electricity. A 600 kW PV plant in Majuro was built on an existing water reservoir. The plant provides power to the existing grid and increases the rain water yield of the reservoir through increased run-off.



### Republic of Nauru: Nauru Solar

The Republic of Nauru is an island of just 21 square kilometers with more than 9,500 citizens that is highly dependent on imported fossil fuels for transport and power generation. The 500 kW solar PV plant bolsters energy resilience by contributing electricity to the national grid.



### Palau: Solar Penetration and Water Access

The Republic of Palau consists of over 250 islands inhabited by a total population of 21,186 citizens, the majority located on four main islands. The three projects in Palau consist of a 100 kW PV / 150 kW low-load diesel hybrid generation plant on Peleliu; a 100 kW PV / 100 kW diesel hybrid plant on Angaur, which powers a water treatment facility capable of supplying 50 cubic meters of clean water per day; and 100 1.7 kW solar home systems on the island of Koror provided through a subsidy loan program by the National Development Bank of Palau.



## Federated States of Micronesia (FSM): Solar in Pohnpei

The Pohnpei Island State is one of the four main groups of islands in FSM. The 600 kW solar plant, the largest PV project in FSM, supplies up to 10 percent of the peak demand of Pohnpei's 34,000 residents.

