

UAE-Caribbean Renewable Energy Fund

The UAE-Caribbean Renewable Energy Fund (UAE-CREF) is a US\$50 million initiative that aims to deliver renewable energy projects across 16 Caribbean Island nations to help reduce reliance on fossil-fuel imports, increase energy access, and enhance climate change resilience. The UAE-CREF is the largest renewable energy initiative of its kind in the Caribbean region. It is fully financed by the Abu Dhabi Fund for Development (ADFD), the UAE's leading national entity for international development aid. The fund is a partnership between the Ministry of Foreign Affairs and Cooperation (MoFAIC), ADFD, and Masdar, who is leading the design and implementation of the projects.

The projects are being developed and delivered over three cycles. Project details for the projects completed as part of cycle 1 and 2 are below:

CYCLE 1

Bahamas: Thomas A. Robinson National Stadium 925 kW Solar PV Carport Power Plant

The 925 kilowatt (kW) solar photovoltaic (PV) plant at the national stadium, which also serves as a carport with 342 parking spaces including 4 spots for families and 2 spots with fast charging electric vehicle (EV) charging stations, is the country's first large-scale solar energy project. Developed in partnership with the Bahamas Ministry of Environment and Housing, it sets a regulatory precedent for new renewable energy plants to feed into the grid.



Barbados: Bridgetown 350 kW Solar PV Carport Power Plant & Bowmanston 500 kW Solar PV Power Plant

This project has two elements: a 350 kW solar PV carport with 124 parking spaces, which include six level 2 EV charging stations, and a 500 kW ground-mounted PV plant. Both projects were developed in partnership with the Barbados Water Authority and are built on sites operated by the authority. The project supports BWA operations at their water treatment plant and the water pumping station.



Saint Vincent & the Grenadines: Union Island 600 kW Solar PV Battery Hybrid Power Plant

Developed in partnership with St Vincent Electricity Services Limited (VINLEC), the project sets a strong precedent for using renewable energy to drive down energy costs on outer islands. Located on Union Island, the 600 kW solar PV plant and 637 kilowatt-hour (kWh) lithium-ion battery project supplies all of the island's daytime power needs, and represents Masdar's first fully implemented grid-connected battery energy storage system.



CYCLE 2

Antigua and Barbuda: 720 kW Solar PV Battery Hybrid Green Barbuda Project

With support from the Government of Antigua and Barbuda, the CARICOM Development Fund, and the New Zealand Ministry of Foreign Affairs and Trade, Green Barbuda was designed to be a climate-resistant hybrid diesel and solar plant. The project includes an 800-kilowatt diesel power station, 720 kilowatt-peak of solar PV panels, and a 863-kilowatt-hour (kWh) battery, to reliably produce and store electricity. The energy produced from this plant will save Barbuda 406,000 liters of diesel and offset 1,055,600 kg of carbon emissions. It will also enhance capacity building through training and employment of local people and women, who make up 30% of contractor staff.

Belize: 400 kW Solar PV Battery Hybrid Belize Rural Electrification Project

With 400 kW of solar photovoltaic panels, 600 kWh of battery storage, and 184 kW backup diesel generation, the system will mainly be powered by solar energy, with a standby diesel generator to provide power during the wet season. Powering homes, schools, clinics, water pumping facilities and tourist operations, the climate-resistant project will transform lives in Belize's native Mayan villages of Indian Creek, Golden Stream and Medina Bank, through improved energy independence and resilience. The plant will save Belize almost 200,000 liters of diesel fuel and avoid around 500 tonnes of CO2 emissions yearly.