

BLUE PLANET ENERGY PARTNERSHIP

Water Mission restores clean water with clean energy in Puerto Rico

PROJECT DETAILS

Project Partner Sector Location

Corozal Clean Water System Water Mission Disaster Relief; Infrastructure n Corozal, Puerto Rico

Project Background

Water Mission is a non-profit organization that works with leading non-government agencies including World Bank, UNICEF and FEMA. They provide safe water and sanitation for disaster areas to overcome the water scarcity crisis through their team of engineers and global partners. Water Mission took action to restore clean water to remote communities in Puerto Rico that also lacked electricity post-Hurricane Maria. Water Mission partnered with Blue Planet Energy to integrate batteries to their pumping systems and create reliable, long-term solutions for those most in need. Whereas they have installed many pumping systems with generators, fuel costs and availability are prohibitive and they desired a clean energy solution. Corozal, where the population quickly fell from 120 families to 60 with lack of drinking water, is one of many communities where BPE and Water Mission have implemented solutions in Puerto Rico.

The Blue Planet Energy Solution

Adding the Blue Ion energy storage system and solar delivered immediate benefits to the families in Corozal. Water availability went from only a few hours a week to 12 hours per day. Blue Planet Energy deployed a 16-kilowatt hour (kWh) Blue Ion 2.0 battery unit at a well pumping system in Corozal in collaboration with Water Mission and Blue Ion dealers who installed a 7 kW solar array. The clean energy solution provides resilient off-grid power for the water pump station in Corozal's remote Palos Blancos neighborhood and eliminates the expensive and tedious dependence on fossil fuels for a generator. For the people of rural Puerto Rico, these solutions mean that next time a storm hits, they won't have to wait for more than six months to have power restored and safe water flowing.

- WATER MISSION





OUTCOMES

- · Immediate restoration of electricity and clean water
- · Reliable off-grid storage installed with 20-year life cycle
- Installation process facilitated with local installers
- · Clean sustainable energy solution and no longer dependent on diesel generators
- Blue Ion battery system will require less maintenance and supervision as well as provide extended on-demand pumping services for the community

CHALLENGES

- Remote areas of Puerto Rico did not get grid services restored after hurricanes, leaving many communities without access to electricity or clean water
- Reliance on a gas generator cost over \$1,200/month and fuel was difficult to obtain
- Poor infrastructure, road access and urgent need for restoration made a local, long-term solution a priority for quality of life