

SimpliPhi & Footprint Deploy Mobile Microgrid for Covid-19 Clinic



PROJECT OVERVIEW

Location: Matamoros, MX

Application: Pop-up Intensive Care Unit to treat COVID-19 Patients

System Rating: 2.5 kW Solar PV Array with 10 kWh of Energy Storage using PHI 3.8 kWh Batteries

Partners: Footprint Project and Global Response Management Inc.

BACKGROUND

Just south of the U.S. border below Texas lies Matamoros, Mexico. Home to over 500,000 Mexican citizens, Matamoros additionally hosts a migrant camp of 3,000 refugees, most of whom are from Central America and Cuba, are seeking asylum in America. Living in close quarters with virtually no access to basic hygiene products or medical care, this community was at severe risk of a deadly COVID-19 outbreak spreading through the camp and surely claiming the lives of many. In collaboration with the Footprint Project and Rent.Solar were able to deploy a microgrid capable of supporting a fully functional pop-up COVID-19 clinic.



CHALLENGE

Given the remote location of the refugee camp, access to reliable power and medical resources combined with the contagious nature of COVID-19 put the refugees of Matamoros in the middle of what could have been disastrous.

In order to provide a properly functioning medical clinic, the team needed renewable energy with enough energy storage to power lights, ventilators and other essential medical equipment.



SOLUTION

SimpliPhi's 3.8kWh PHI batteries were part of a containerized mobile, solar and energy storage trailer that served as a primary power source for the pop-up ICU.

The ICU provided 20 beds with both diagnostic and treatment-ready medical equipment, including ventilators and an HVAC system to deliver temperature control for the two-tent clinic.



BENEFIT

The mobile clean energy microgrid also supports significant savings for the Global Response Management (GRM) team, the NGO that is operating the facility and providing free medical care to the migrants. As first responders coordinating care, the solar + PHI storage allows GRM to dedicate its resources to providing critical and quality medical care instead of deferring precious funding to monthly fuel costs averaging \$2,000 that would have been necessary if the ICU was powered by a diesel generator.



3 GOOD HEALTH AND WELL-BEING
Provided enough power to support 20 hospital beds, an X-ray Machine, Heart Monitors and Lighting



7 AFFORDABLE AND CLEAN ENERGY
\$2,000 in fuel savings per month



13 CLIMATE ACTION
Up to 20,000 lbs of CO₂ carbon avoidance per month