Cooperativa Jesus Obrero: Leveraging Solar Power to Withstand Hurricanes

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Even before Hurricane María devastated Puerto Rico in 2017, causing \$90 billion in damage, frequent climate events motivated Cooperativa Jesús Obrero to build resilient infrastructure that can provide lower utility bills and alternative power to its members. Its President Aurelio Arroyo González describes that the cooperativa is part of the "critical infrastructure" helping the community to function on a day-to-day basis as well as prepare for and recover from natural disasters.

Located in Guaynabo, San Juan's metro area, Cooperativa Jesús Obrero was an early adapter of solar-generated energy, exploring the possibilities of using solar as an alternative energy source in 2011, running a pilot solar loan program in 2013, and creating solar loan lending guidelines for the Cooperativa in 2014. In 2015, the Cooperativa installed a 96.5 kW solar array at its branch in Guaynabo, PR. There, solar car ports provide shaded parking structures that reduce the branch's energy costs by 86% annually. In total, the solar system has generated 831 mwH since 2015 and offset 649 tons of CO2 emissions. Spurred further by Hurricane María and the blackouts it created; Cooperativa Jesús Obrero expanded its solar loan program to support commercial solar development. The goal is for solar to be able to provide decentralized and consistent access to electricity if the electrical grid is impacted by a natural disaster.

Since 2011, Cooperativa Jesús Obrero has financed 450 photovoltaic (PV) solar systems in 26 municipalities across the island, and its renewable energy financing makes up 10% of its total loan

portfolio. These solar loans have the potential to reduce energy costs for the Cooperativa's members. For example, a residential PV system installed in Guaynabo and financed by Cooperativa Jesús Obrero in 2016 reduced the customer's monthly energy bill from \$250 to just \$3.

As part of expanding their solar loan program, the Cooperativa's President took the Inclusiv-University of New Hampshire virtual Consumer Solar Lending Professional Training and Certificate Program and earned the Solar Lending Professional Certificate. While in the class, he shared his solar lending expertise with executives from other enrolled financial institutions.

Looking towards the future, at the current rate of sea level rise almost 50% of Puerto Rico's coastline is projected to disappear within 30 years, impacting 60% of Puerto Rico's coastal residents. "[The] communities we know will change drastically," and CDCUs and cooperativas will continue to play a critical role in supporting their communities as they adapt to climate change, Arroyo reflects.