Energy Profiles accelerate Community Energy Resilience

Team Name: Data Miners for the Mountains

Short Description

Using statistical analysis from a 100 sample-size testing program, the Team will create electricity load profiles to serve as a proxy for electrical studies that will enable the accelerated and efficient deployment of clean energy microgrid designs in remote low-income communities in Puerto Rico. The Cooperativa Hidroeléctrica de la Montaña (the Cooperativa), in partnership with Fundación Borincana (Fundación) and Pecan Street is bringing reliable, clean energy to rural villages scattered across the interior mountains of Puerto Rico. Many villages in the Cordillera Central went without grid-supplied power for months following Hurricane Maria and continue to struggle with disruptions caused by regular grid failures. This project will lay the foundation to equip businesses and community service centers that are the hubs of daily life with solar and energy storage to create resiliency during future natural disasters and other grid failures, ensuring that food, water, medical, educational, communications, and other essential services remain online or can recover quickly. Grid-tied solar generation will demonstrate that stable, fixed-priced clean energy is within reach for remote villages, implemented in ways that are responsive to community values. The first step is collecting data from representative establishments to develop load profiles to guide cost-effective system design.

Link to three-minute, online video

Team Leaders

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Strategic Partners: Municipalities of Adjuntas, Jayuya, Lares and Utuado; Edison Electrical Engineering; Unidos por Utuado

Project based and managed from Utuado in the Cordillera Central of Puerto Rico