

Building a Resilient Puerto Rico

"With political will and the right policies, programs and projects, Puerto Rico can meet its mandate to source 40% of its electricity from renewables by 2025 and 100% by 2050."

Even after five years since Hurricane Maria, Puerto Rico remains highly vulnerable to electricity service disruptions that create public health emergencies and threaten access to clean drinking water, medical services, food, and other basic needs. Many residents are still struggling with the aftermath of prolonged service disruptions. Blackouts occur regularly, and sky-high electricity prices have hampered well-being and economic growth for years. Puerto Rico must transform its electric grid into a resilient system that can bring communities clean, affordable and reliable power for years to come.

With an initial grant from Fundación Colibrí Puerto Rico, Environmental Defense Fund began working in Puerto Rico in 2018. We seek to identify effective, equitable and long-lasting energy solutions that can bring clean, community-centered electricity to the archipelago and can meet the daily needs of residents, while making Puerto Rico more resilient to climate change.

Our work centers on advancing a community-driven solar and storage project on the island municipality of Culebra and supporting a range of partners who are driving systemic change to the energy system across the entire territory. With political will, the right policies, programs and projects, Puerto Rico can meet its mandate to source 40% of its electricity from renewables by 2025 and 100% by 2050. We approach this work holistically, leveraging our technical expertise, sustainable financing tools and energy reform experience to help develop long-term solutions to the island's energy crisis.

SUPPORTING CULEBRA IN BECOMING A RESILIENT ISLAND

The island municipality of Culebra is on the frontline of climate change. Due to its remote location, it is often the first place to be hit by hurricanes ravaging Puerto Rico. Residents received a one-two punch in 2017 when Hurricanes Irma and Maria struck just a week apart and decimated the electric grid, leaving everyone without power for months. And even five years on Culebra's electricity system remains vulnerable.

Culebra has a vision to become a "resilient island" powered by solar energy and supported by of innovative initiatives on agroecology and food security, health case, waste management, biodiversity conservation, restoration of coastal zones, sustainable tourism and environmental education.

EDF is committed to supporting this vision by bringing clean, affordable and resilient power to the island municipality with a community-based solar and storage project. In partnership with three local organizations - Mujeres de Islas, Fundación de Culebra, and the Foundation for a Better Puerto Rico - we are working with Genesis Solar to install solar panels and batteries in at least 40 low- and moderate- income residencies, giving priority to the elderly, single parents and those with health and other special needs.

EDF is also working with the community of Culebra to support its residents by installing a model that suits them best and build their capacity to operate and maintain the systems once construction is complete. We are also ensuring that our project is well integrated with other ongoing renewable energy and sustainability initiatives led by others, including efforts aimed at providing solar power to businesses and critical facilities and a utility-led plan to modernize grid infrastructure in Culebra and service residents who are still not connected to the grid.

In addition to this energy project, EDF is supporting other priority programs in Culebra, including educational offerings for school children and their families. We are also exploring opportunities to solicit additional federal funds that may be

available to support Culebra's long-term plan to transition to clean energy.

ENERGY REFORM

Puerto Rico's Integrated Resource Plan, modified and approved with stakeholder and public input by Puerto Rico's energy regulator in August 2020, provides a roadmap for the archipelago to achieve 100% renewable energy by 2050. It also includes recommendations that EDF and our partners made to prioritize clean and distributed energy, while rejecting major new investments in natural gas infrastructure. Our work in Culebra will both benefit from and reinforce this new ruling, offering a tangible example to regulators and the utility of how clean, distributed energy can benefit communities and the larger grid infrastructure.

Clean Energy and Climate Resilience in the Caribbean



EDF's work in Puerto Rico is guiding the development of a new plan to advance clean energy access and climate resilience throughout the Caribbean, which we expect to launch in 2022. By helping to foster a growing network of communities, government officials, scientists, NGOs and private sector leaders, we are planning to help develop and secure policies, private and public funding, plans and programs that advance climate resilience throughout the Caribbean in an equitable manner. This way we can support countries throughout the region to transition to clean, resilient and equitable energy, and improve livelihoods.

Our team

We have an experienced team of staff and consultants with experience in energy policy, electrical engineering, community engagement, project development, and finance. A majority of our team is based in Puerto Rico. Daniel Whittle, Senior Director, Caribbean dwhittle@edf.org / 919-881-2914

Agustín F. Carbó, Senior Director, Energy Transition acarbo@edf.org / 214-620-7650