

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." In the fall of 2017 Hurricane Maria decimated Puerto Rico's electric grid, creating a public health emergency and threatening access to clean drinking water, medical services, food security, and other basic needs. Many parts of the archipelago were without electricity for months. Maria revealed deep-rooted vulnerabilities in Puerto Rico's grid. Blackouts occur regularly, and sky-high electricity prices have hampered public health and economic growth for years.

With an initial grant from the Fundación Colibrí Puerto Rico, Environmental Defense Fund began working in Puerto Rico in 2018. We seek to identify effective and equitable energy solutions that can bring clean, communitycentered 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 communitydriven solar and storage project on the island of Culebra and supporting a range of partners who are driving systemic change to the energy system across the entire territory. 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. We approach this work holistically, leveraging our technical expertise, sustainable financing tools and energy reform experience to help develop longterm solutions to the island's energy crisis.

ENERGY REFORM

The 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 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 both communities and the larger grid infrastructure.

SUPPORTING CULEBRA IN BECOMING A RESILIENT ISLAND

Culebra is on the front-line of climate change. Hurricane Hugo left an enduring mark when it devastated the island in 1989. Residents received a one-two punch in 2017 when Hurricanes Irma and Maria left residents without power for months and exposed how vulnerable Culebra's electricity system is.

Culebra has a vision to become a "resilient island." Residents are taking the long view and have banded together to launch a variety of initiatives on energy, food security, public health, waste management, reforestation, restoration of coastal zones, sustainable tourism and environmental education. EDF is committed to supporting this vision by bringing clean and resilient power to Culebra 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 – our goal is to provide solar panels and batteries to low- and moderateincome residents, giving priority to the elderly, single parents and those with health and other special needs. We anticipate being able to include approximately 40 households in this project and hope to begin construction in early 2022.

The key to the project's success will be to build the capacity of participants to operate and maintain the systems once construction is complete. We will draw on the experiences of other communities across Puerto Rico to support Culebra's residents in designing the model that suits them best. We are also working to ensure 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.

Clean energy 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 early 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 coastal resilience throughout the Caribbean in an equitable manner. This way we can support countries throughout the region transition to clean, resilient and equitable electricity, and improve livelihoods.

Contact 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
 <u>dwhittle@edf.org</u> / 919-881-2914
- Agustín F. Carbó, Senior Director, Energy Transition acarbo@edf.org / 214-620-7650

Environmental Defense Fund 257 Park Avenue South New York, NY 10010 T 212 505 2100 F 212 505 2375 edf.org Environmental Defense Fund works around the world from offices in New York / Washington / San Francisco / London / Beijing / La Paz, Mexico / and other cities