

Fact Sheet: Toward Electrical System Sustainability in Puerto Rico

A new report by ICSE-PR and IEEFA shows that **Puerto Rico could achieve 34-40% of its electricity from renewable energy sources by 2028**. The proposed generation mix includes:

- 21-25% of generation from utility-scale renewable energy sources.
- 9-11% of generation from distributed renewable energy sources (rooftop solar.)
- 8-9% of generation from renewable energy-based microgrids and combined heat and power.
- 46-54% of generation from existing natural gas and new high efficiency dual fuel diesel/natural gas generation.
- Retirement or limited use designation of existing oil-fired power plants.

This would set Puerto Rico on a path towards achieving 50% renewable energy by 2035, and 100% renewable energy by 2050.

The re-design of Puerto Rico's electricity system should be based on the Puerto Rico Energy Commission's long-term integrated resource planning process, which, for the first time, requires PREPA to adhere to uniform, professional standards of energy planning.

Renewable energy development presents a tremendous economic development opportunity for Puerto Rico. Currently the Puerto Rico Electric Power Authority (PREPA) pays more than \$1 billion a year for off-island oil and gas to fuel its outdated power plants. Developing domestic renewable energy resources will keep more money in the Puerto Rican economy. As a result of the devastation caused by Hurricane Maria, renewable energy companies have expressed greater interest in developing microgrids and other distributed energy projects in Puerto Rico. The Puerto Rico Energy Commission is facilitating this process by crafting regulations to clarify the regulatory environment for microgrids.

Achieving the proposed 2028 generation mix would require:

- **Prioritizing a resilient approach towards the development of renewable energy, demand response and energy efficiency**, in lieu of the traditional approach on development of new fossil fuel infrastructure.
- **Updating the 2016 integrated resource plan which was approved by the Puerto Rico Energy Commission**, with the participation of key stakeholders.
- **Retiring PREPA's old, inefficient oil-fired units** and partially replacing that capacity with more flexible and efficient units that can facilitate the integration of renewable energy into the grid.
- **Aggressive development of demand response resources** to reduce peak demand.
- **Planning for the uncertainty of declining demand for electricity from PREPA** as a result of poor economic conditions as well as customers installing distributed energy resources.
- **Maintaining strong, independent regulation by the Puerto Rico Energy Commission.** The Energy Commission has the legal authority to develop a long-term vision for the island's electrical system and to oversee the necessary transformation. Comprehensive state and federal oversight over PREPA by the Energy Commission and the Financial Oversight and Management Board will provide certainty to consumers and investors.