Island Microgrids: Trends and Opportunities Symposium on Microgrids Kaitlyn Bunker, Ph.D., P.E. 10 August 2019

# The Rocky Mountain Institute Islands Energy Program supports islands in the Caribbean in their clean energy transitions

PLANNING	PROJECTS	KNOWLEDGE EXCHANGE
Developing a blueprint for an island's energy future through Resilient National Energy Transition Strategies (R-NETS)	Identifying and advancing low risk and first-ever renewable energy & energy efficiency projects	Fostering knowledge sharing through communities of practice and mentoring programs

#### Signing of R-NETS document in Turks & Caicos Islands

Groundbreaking of PV project in Saint Lucia

Convening leading island women in energy



### The Islands Team currently works in 15 Caribbean countries



# Microgrids are being implemented more and more on islands, and providing key insights for other geographies.

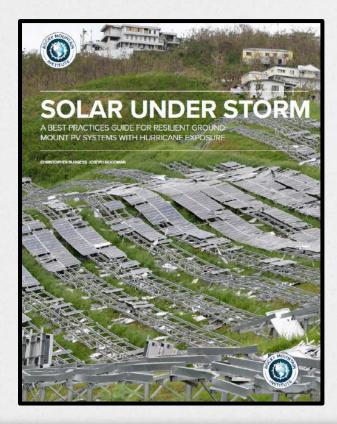






#### Whole-Island Example: Mayreau

Population: 300 Land Size: 1.5 mi<sup>2</sup> Peak Load: 79 kW









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### Whole-Island Example: Sint Eustatius

Population: 3,200 Land Size: 8.1 mi<sup>2</sup> Peak Load: 2.3 MW







### **Sub-Island Example: Saint Lucia**

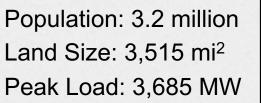
Population: 180,000 Land Size: 238 mi<sup>2</sup> Peak Load: 60 MW





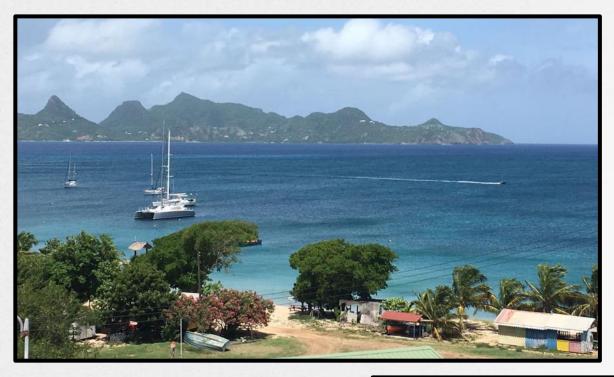


## **Sub-Island Example: Puerto Rico**









The lessons learned in collaboratively transitioning island grids to utilize renewable energy will benefit other isolated grids, other connected microgrids, and larger grid systems.











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