



Building Back Better: A Call to Action for a Resilient and Renewable Future for The Bahamas

Call to Action. Rocky Mountain Institute is building a coalition that spans private sector and philanthropic partners to quickly mobilize funds to help the Bahamas rebuild a stronger, more resilient energy system. **We initially seek to mobilize \$2 million to implement these strategies across the affected islands.** The required capital expense for project funding per island will vary greatly based on the degree of destruction, size of the electrical grid, and stakeholder complexity. However, there is conservatively over \$100 million in near-term project capital requirements for energy transition infrastructure and new renewable energy generation.

Background/Context: On Sunday September 3, Hurricane Dorian struck the northern Bahamas islands of Abaco and Grand Bahama with devastating fury. Prior to landfall, Dorian generated a storm surge measuring 25 feet, turning streets into raging rivers that flooded entire communities. One of the strongest Atlantic hurricanes on record, Dorian's 185+-mph winds leveled buildings, downed trees and power lines, overturned trucks, and tossed boats ashore. The category 5 hurricane killed at least 7 people—a death toll that is likely to [rise significantly](#) in the coming days—and caused staggering amounts of damage. On Abaco, Dorian destroyed 90 percent of homes and other infrastructure, including the entire electrical grid and most of the transportation system. Moving as slowly as 1 mph, Dorian wiped out power to the nation's capital and the rest of New Providence, the country's most populous island. Prime Minister Minnis said in a [press conference](#) Monday afternoon, "We are in the midst of a historic tragedy in parts of our northern Bahamas."

Dorian hit the Caribbean just two years after Hurricanes Maria and Irma struck the region within two weeks of each other in 2017. Both storms—also category 5 hurricanes—were considered "1-in-250-year" events, which is unprecedented. Many islands were directly affected, including Anguilla, Antigua and Barbuda, The Bahamas, Dominica, the Dominican Republic, Puerto Rico, the Turks and Caicos Islands, and the British and US Virgin Islands. Collectively, it is estimated that the two hurricanes caused \$30 billion in damage. It is impossible to quantify the terrible personal and societal tolls these storms cause on the small economies of the Caribbean, setting these countries back decades overnight.

These catastrophic events highlight how vulnerable Caribbean countries are to power disruption. Nowhere is this more evident than in their electricity grids, which are centralized and predominantly powered by fossil fuels. **If a storm shuts down an island's power plant, the entire island goes dark.**

Damage to vulnerable seaports cuts off the delivery of desperately needed fuel for central generators. The many miles of power lines that deliver power from these generators to customers are both highly vulnerable and expensive to rebuild. Diesel fuel shipments for backup generation can be limited and unreliable, particularly if both ports and roads are compromised. After Hurricane Maria, rebuilding Dominica's electrical grid was estimated to cost \$81 million (16 percent of GDP). Disruptions to power supply led to follow-on disruptions to health facilities, water infrastructure, telecommunications, community service organizations, shelters, businesses, first responders, schools, and other critical facilities.

Opportunity: The crucial first response to Dorian is tackling the humanitarian crisis by bringing in water, food, medical and other essential supplies; ensuring the safety of residents; reestablishing basic services including the electrical grid and electricity-dependent health services; and helping families and businesses get back on their feet.

The government and utility of The Bahamas—with which RMI already partners—have requested our assistance to rebuild their energy systems cleaner, stronger, and ultimately in a less costly way. Instead of reconstructing the existing 20th-century electricity grid based on old technology, we can leapfrog ahead with 21st-century energy systems that will make The Bahamas and the entire Caribbean region more resilient and far less vulnerable to future storms.

Fortunately, there is a practical, cost-effective way to do this. Cost declines in the last decade for solar PV and recent plunging costs of battery storage have allowed decentralized, renewable-based microgrids to be cost-competitive with the electricity grid. Deploying distributed solar-plus-storage microgrids at critical facilities would reduce economic losses and lives lost during and after major storms since these facilities would be able to continue functioning when the central grid is disrupted. [Solar PV can be built to be physically resilient as well](#); reports from Fortis, the utility in the Turks and Caicos Islands, confirm the uninterrupted operation of its solar assets on the island of Providenciales during and after Hurricane Irma whipped 165 mph+ winds through the territory.

Seizing this moment to rebuild smarter and better would be eminently worth doing even in a world without climate change. But with the certainty of rising seas and more severe storms, along with the urgent need to slash greenhouse gas emissions, the task becomes even more vital. It offers the Caribbean islands their very best hope for surviving future climate challenges while also cutting costs and boosting their economies. In the process, a plethora of new jobs will be created, improving the entire region's competitiveness. The Caribbean islands have the potential to be the vanguards for a new sustainable economy and lead the world to a low-carbon future.

The tragedy of Hurricanes Irma, Maria, and now Dorian can be a catalyst for the leaders and people of affected countries, together with international partners and the private sector, to transform destruction into opportunity. This is an opportune time to build back better and cleaner through the establishment of a sustainable, low-carbon, and resilient power system.

Proposed Approach: The proposed approach builds on the experience of and lessons learned from RMI Islands Energy Program and looks to rapidly scale its proven energy transition model in The Bahamas and select Caribbean countries. The approach includes: 1) rapid project identification, 2) resilient development, and 3) project financing and construction. View the [proposed approach](#).

Conclusion/Next Steps: Hurricane Dorian is a deadly and devastating storm. It has already brought an enormous toll in lives lost, human suffering, and both short-term and longer-term economic damage. But now we have an opportunity, perhaps even a moral responsibility, to bolster our partnership with governments and utilities in affected countries to rebuild in ways that make people safer and build stronger communities that are more resilient in the face of future threats. This "call to action" can deliver results.

RMI has a proven track record of success using the approach outlined above and we are already working in The Bahamas. We are supporting the national utility, Bahamas Power and Light, in undertaking a transition of the Family Islands to resilient renewable microgrids. We are also working with the Bahamian Government to deliver the first distributed solar and storage assets. RMI has the staff, relationships, and technical capacity to lead this effort. Together we can facilitate the creation of an inclusive, technology-agnostic, and detailed action plan for rebuilding the affected islands to support resilient and clean economies. RMI has the capabilities to prepare a cohort of investment-ready renewable energy and energy efficiency projects. Realizing this opportunity, however, will require a suite of development and financial partners. Equally important, it will require strong engagement with the private sector to help catalyze the necessary investment.

Contact: For more information or to partner with us in this call to action to rebuild The Bahamas and select Caribbean countries for a resilient and renewable future, please contact Justin Locke.

View the [Building Back Better: A Call to Action for a Resilient and Renewable Future for The Bahamas landing page](#).

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