

United States-Cuba: Relations in a New Global Scenario

Climate Focused US Foreign Policy: New Opportunities for US-Cuba cooperation on renewable energy and climate resilience

New opportunities for bi-lateral cooperation on expanding the use of renewable energy in Cuba

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Shortly after taking office, President Biden made clear that fighting climate change would be a top priority. Upon signing an executive order on climate change on January 27, 2021, Biden said his was a “whole-of-government approach to put climate change at the center of our domestic, national security, and foreign policy.” At the COP 26 in Glasgow, Scotland later in the year, the Biden Administration reasserted the United States’ leadership on climate and, together with leaders from the European Union, launched the Global Methane Pledge, which aims to reduce global methane emissions by at least 30 percent from 2020 levels by 2030. Cuba signed the pledge shortly after the COP. In April 2022, Vice President Harris announced the new U.S.-Caribbean Partnership to Address the Climate Crisis 2030 (PACC 2030) as the principal initiative for supporting Caribbean countries in climate adaptation and energy security.

In September, Hurricane Fiona ripped through Puerto Rico causing widespread flooding, landslides, and power outages. Shortly thereafter, Hurricane Ian devastated parts of Cuba and Florida, and massive and prolonged power outages underscored the need to accelerate the transition to clean and reliable energy in both the United States and Cuba. This panel will examine work underway in Puerto Rico to accelerate the island’s transition to renewable energy, and also assess current status of Cuba’s electric grid and opportunities to modernize it. In particular, the panel will explore new opportunities for US-Cuba cooperation on renewable energy and climate resilience, including potential partnerships between renewable energy companies in the US and counterparts in the private and public sectors in Cuba.

I. Puerto Rico

- I want to talk about three things. First, I want to talk about Puerto Rico’ path to a renewable energy future. Second, the situation here in Cuba with respect to clean

energy and energy security, and third, new opportunities for cooperation between the US and Cuba on clean energy.

- Let's start with Puerto Rico.
- On September 18 Hurricane Fiona made landfall in Puerto Rico, almost five years to the day since Hurricane Maria struck; in 2017 Hurricane Maria destroyed the electric grid and caused more than 3,000 deaths.
- Fiona was not as powerful as Maria--a category one versus category five hurricane--but it still caused significant damage. After Fiona, Puerto Rico experienced a total blackout for a period of time, and many communities had to wait weeks for power and water to be restored.
- Fiona underscored what residents of Puerto Rico already knew-- the island's centralized electric grid was still fragile and that efforts to rebuild and modernize it were too slow. Billions of dollars that the US Congress allocated after Maria had still not been spent, largely because of bureaucratic red tape and a lack of commitment from the Trump Administration.
- Notwithstanding the tragedy of Maria and Fiona, there are reasons to be hopeful in Puerto Rico. For instance, Maria spawned important changes in policy. In 2019 the PR legislature enacted a new law that requires that PR generate 40% of its electricity needs from renewable energy by 2025, and 100% by 2050. The PR Energy Bureau in 2020 ordered the utility to revise its plan to ensure that these targets could be met and to ensure that the utility began to phase out dirty fossil fuel power plants.
- Since Hurricane Maria, people and communities have also begun acting on their own. Since 2017 the number of homes with solar panels has grown by 400%, and private businesses that install solar energy in people's homes and in businesses are thriving.
- PR has a policy called net metering which allows residents who generate their own power with solar to sell excess energy back to the grid. This makes solar systems more affordable.

- There are other bright spots. Consider the small island of Culebra off the northeast coast of Puerto Rico. After Hurricanes Irma and Maria, Culebra's 1,700 residents waited 13 months for full electric service to be restored. Many residents in Culebra are low income, many are elderly, and many have special medical requirements. A lack of access to reliable energy is a serious threat to their health and well-being.
- There is a strong sustainability ethic in Culebra and a strong desire to be energy secure. For that reason people there want Culebra to become the first solar island in the US.
- EDF has been supporting them in that effort and this summer we completed a project that brought solar panels and batteries to 45 homes, most of which are owned by low-income residents or those with special needs. We finished the project in early September—so when Fiona hit, and most of Puerto Rico was in the dark, participants in our project kept the lights on.
- Culebra is not alone. Other small communities are taking steps to become more resilient and more independent of the centralized grid by developing their own distributed energy generation projects. These projects cost money and financing for low-income residents is hard to come by. The good news is that the Biden Administration has made a new commitment to spend billions of dollars to provide solar energy to tens of thousands of low income residents.
- A successful energy transition in PR will depend upon good policies and political will, financing, and leadership from communities.

II. Cuba

- Now let's shift our focus to Cuba. Like the rest of the Caribbean, Cuba is overly dependent upon expensive, imported fossil fuels, which seriously compromises the country's energy security and economic development, and its citizens well-being.
- Aging power plants and transmission lines are in serious need of repair, are not capable of providing reliable electricity to citizens, and are extremely vulnerable to hurricanes.

- You don't need me to tell you this. When the category 3 Hurricane Ian hit the island this fall, Cuba experienced an island-wide blackout, just like PR did following Fiona. Since Ian, power outages continue across the island. The situation is indeed a complex one.
- Fortunately, there are opportunities in Cuba as well. On the policy front, the government has adopted ambitious clean/renewable energy goals -- 37% by 2030; and increasingly there is a discussion around an "energy transition" in Cuba and setting a 100% goal for the future, in line with the direction many Caribbean island nations are taking.
- This makes perfect sense—the cost of solar, wind and other renewable energy technologies has been decreasing, making transition the economically smart and sensible thing to do. And with the global trend towards decarbonization, it will be increasingly difficult to obtain financing for fossil fuel generation.
- It's important to note that many are advocating natural gas as the solution for Cuba and the rest of the Caribbean b/c it's cleaner and cheaper than oil. While gas can be a bridge fuel, investing too much in natural gas infrastructure will undermine efforts to transition to renewables in the future.
- As we point out in our 2017 report on Cuba's electric grid, Cuba has more distributed energy generation than every other country in the world, except Denmark. The decentralized system provides resilience in the face of hurricanes. Though these "microgrids" are not mostly diesel generators, they can be converted to low carbon microgrids, powered by solar and other renewables.
- Finally, pursuant to recent policy changes, private sector businesses in Cuba are now able to import solar panels, batteries, and other renewable technologies. A new legal framework is also emerging where consumers can "buy" electricity generated by renewables.
- In summary, Cuba is charting an energy transition path through new policies and legal frameworks and strong political will. What it needs most now is financing and international cooperation.

III. Biden's Climate and clean energy agenda.

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The PACC 2030 initiative has four pillars—1) improving access to development financing, 2) facilitating clean energy project development and investment, 3) enhancing local capacity building, and 4) deepening collaboration between the U.S. and Caribbean partners. These pillars aim to address key concerns of Caribbean nations, and commitments and projects are outlined within the framework of these pillars.