

CASE STUDY

# SUPPORTING THE ENERGY TRANSITION

# IN BARBADOS

**2022 – ONGOING** 

A new government-backed Energy Transition and Investment Plan will lay out strategies and policies needed to reach Barbados' climate and economic objectives in concert.

**OUR PARTNERS** 



Bloomberg Philanthropies







#### **OBJECTIVE**

A small island state in the eastern Caribbean. Barbados has a population of just 287,000 but an important role in international climate politics, in part through Prime Minister Mia Amor Mottley's recent campaign to reform international development finance, spearheaded by the Bridgetown Initiative named after the island's capital. Barbadians already enjoy universal access to electricity and clean cooking, but the economy remains heavily dependent upon imported fossil fuels to meet its energy needs. In 2019, imported fuel accounted for almost 95 percent of the energy mix, with additional domestic oil and gas making up the remainder alongside limited biomass and solar energy. Eighty-five percent of power generation from Barbados' national utility relies on heavy fuel oil and the remainder on diesel, holding back the country's sustainable development and exposing it to risk from fluctuations in the oil and gas market. The COVID-19 pandemic put tremendous strain on the country's economy and pushed many families into poverty and unemployment levels to 40 percent, sparked by a virtual collapse in international tourism that forms a cornerstone of the economy.

To help set out a path for the island's recovery, and its move away from fossil fuels, Sustainable Energy for All (SEforALL) is supporting Barbados' Ministry of Energy and Business to develop an Energy Transition and Investment Plan (ETIP). Building on lessons learned from SEforALL's recent work with the Nigerian government, the plan will lay out strategies and policies needed to reach Barbados' climate and economic objectives in concert, based on a comprehensive analysis of major sectors including oil and gas, power, buildings, industry, transport, and agriculture. Importantly, it will also outline the immediate investment priorities for the island's energy transition. Key targets are reaching 100 percent renewable energy and full electrification of the island's transport sector as put forwards in Barbados' current National Energy Plan for 2019-2030. Longer-term, the goal is to achieve energy independence with greatly reduced reliance on fossil-fuel imports and exposure to associate price volatility.

Building on the government's current 2019-2030 energy plan, and the island's nationally determined contribution (NDC) to the United Nations Framework Convention on Climate Change, we will assess the technological, market, and human capital needed, and investigate the socio-economic benefits and costs associated with transition. Ensuring justice and equity are maintained across the communities and sectors involved will be a priority, particularly in the light of post-COVID economic recovery.

#### **PARTNERS**

The project is being developed in partnership with the Ministry of Energy and Business Development in Barbados, with support from Bloomberg Philanthropies

### **TECHNOLOGIES SUPPORTED**

Our work is being conducted in service of Barbados's economy-wide energy transition, including centralized and decentralized solar and wind solutions, alternative fuel technologies (e.g. hydrogen, biofuels), electric mobility, and battery storage.

#### **OUR ROLE**

SEforALL will support the Government of Barbados by evaluating energy transition pathways for all sectors of the economy, to identify the technologies needed to meet the country's national 100 percent renewable energy target and a 'Net-Zero' greenhouse gas emissions deadline by mid-century. We will also scope the investment needs and macroeconomic benefits of the shift.



This a long-term partnership (with SEforALL) to make sure that Barbados is an exemplar for green growth and energy transition. We are looking not just to import the things required for this transition, but to partner with international entities to set up plants here in Barbados that bring jobs, local production capacity and export (opportunities).



#### **SENATOR THE HON. LISA CUMMINS**

Minister of Energy and Business Development of Barbados





#### **RESULTS**

With the Ministry of Energy, we hosted the project's first stakeholder engagement workshop in April 2023. The discussion established the importance of building on existing policies, plans and legislation while addressing critical areas yet to be explored, such as biofuels and hydrogen. The workshop built a holistic 'snapshot' of the challenges that the energy sector will face, including key needs such as planning for disposal and circularity of technologies, increasing progress on innovation, and fostering collaboration.

The sessions also highlighted the need for the ETIP to account for the wealth of current transition activities already taking place without reducing

momentum on these activities. Examples include the updating of electricity supply Acts, ongoing integrated resource and resilience planning, storage technology deployment, and new energy policies and reports in production. Sessions touched on new technological advancements underway in robotics, biofuels, hydrogen and grid modernization, and the shape of financial and regulatory enablers of the large-ticket investments that will be needed.

Finally, human capacity gaps emerged as a major consideration for the plan, looking at opportunities to build capacity 'from the ground up' in partnership with educational institutions, and to account for impacts and opportunities related to women and youth in the Barbadian context.

GG

This plan will form the foundation of next steps to achieve access to affordable, reliable, sustainable energy, and contribute to climate action. I must commend the Government on this swift and decisive action, reflecting the growing urgency to protect the economy from energy market volatility. In the long run, this will protect our fragile environment and ecosystems, which are already highly vulnerable to climate-related disasters.



**DIDIER TREBUCQ** 

United Nations Resident Coordinator for Barbados and the Eastern Caribbean

#### **NEXT STEPS**

SEforALL and the Ministry of Energy and Business Development will continue to work together to develop the Energy Transition and Investment Plan based on insights and recommendations from workshop participants. We will work with a core team of experts from various ministries and associations to collect, validate and verify the data needed for modelling across sectors.

As part of the partnership, SEforALL will also second two Barbadian energy and finance experts to the Ministry, to support the plan's implementation into national policy and regulations, and to assist in seeking domestic and international investment.

# **FURTHER INFORMATION**

• Our CEO's meeting with Prime Minister Mottley (LinkedIn)





# **ABOUT SEFORALL**

Sustainable Energy for All (SEforALL) is an independent international organization that works in partnership with the United Nations and leaders in government, the private sector, financial institutions, civil society and philanthropies to drive faster action on Sustainable Development Goal 7 (SDG7) - access to affordable, reliable, sustainable and modern energy for all by 2030 - in line with the Paris Agreement on climate change.

SEforALL works to ensure a clean energy transition that leaves no one behind and brings new opportunities for everyone to fulfil their potential. Learn more about our work at www.SEforALL.org.











