

Input from the Government of Barbados for the report of the Secretary-General for the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at its twenty-fifth meeting - June 16 to 20, 2025

Barbados, as a small island developing state (SIDS) remains fully committed to the protection of the world's oceans and marine conservation in general.

The world's oceans are increasingly under threat, and in Barbados the impacts of climate change, illustrated by sea-level rise, ocean acidification, and warmer waters that fuel stronger and more frequent natural hazards, present daily challenges for our population. For these reasons, Barbados is resolute in its commitment to the achievement of the 2030 Development Agenda and the Sustainable Development Goals (SDGs), and specifically the achievement of SDGs 2 and 14 related to ending hunger and achieving food security, and the conservation of oceans, seas and marine resources, respectively.

Barbados fully supports the theme of ICP25, "Capacity building and the transfer of marine technology: New Developments, approaches and challenges", as these practices are essential to the long-term health and well-being of our oceans and crucial for SIDS.

In keeping with the theme, Barbados has championed the leveraging of the Caribbean's abundant Sargassum seaweed and wastewater from rum distilleries to produce biomethane to power vehicles, reducing dependence on imported fossil fuels. This important work has been undertaken by Rum and Sargassum Inc., a Barbados-based renewable energy startup company that transforms oceanic waste and industrial byproducts into 100% renewable natural gas, and which had its genesis at the University of the West Indies, Cave Hill Campus. The company is also pioneering the conversion of gasoline and diesel vehicles to run on renewable compressed natural gas (RNG) in Barbados, providing an affordable and eco-friendly alternative for local transportation. With a long-term vision to scale its biogas infrastructure, Rum and Sargassum Inc. aims to drive economic and environmental transformation across the region.

The company has secured funding in the amount of \$650,000 USD via multiple grants and investments. This funding has supported the development of over 400,000 data points, Test Drive zero - where an EV using renewable biogas was demonstrated, and other key infrastructure, including a pilot biogas station at Guinea Plantation, Barbados, and the conversion of initial test vehicles. With strategic backing, the company continues to refine its technology and scale operations toward a commercially viable biogas supply chain.

Test Drive Zero marked a major milestone in demonstrating the viability of biogas as a transport fuel. In this initiative, 2 electric vehicles were successfully charged using a generator powered by Rum and Sargassum's renewable natural gas made from biogas, proving that locally produced renewable energy can support transportation needs. This achievement showcased the potential for a decentralized clean energy system, reducing reliance on imported fossil fuels. Test Drive Zero served as a crucial proof of concept, setting the stage for the next phase—directly fueling converted gasoline vehicles with renewable natural gas from biomethane.

The Planned Bajan Shores Project

The next phase, the Bajan Shores Project, aims to scale up biogas production and establish a full-fledged commercial RNG production facility. This initiative will provide fuel to an initial fleet of 9000 drivers in Barbados, significantly lowering their fuel costs and carbon footprint. The project will also introduce 6 MW of electric power to the national electric grid. With an eye toward regional expansion, Bajan Shores will serve as a blueprint for future facilities, enabling the Caribbean to harness its natural resources for energy independence while strengthening local economies.