

TC ABSTRACT

I. Basic Project Data

▪ Country/Region:	BARBADOS/CCB - Caribbean Group
▪ TC Name:	Accelerating the transition to electromobility in Barbados
▪ TC Number:	BA-T1089
▪ Team Leader/Members:	ECHEVERRIA, CARLOS BLADIMIR (INE/ENE) Team Leader; DOHERTY BIGARA RODRIGUEZ, JENNIFER (CSD/CCS) Alternate Team Leader; PERSAUD, CHRISTOPHER (INE/TSP); KIM, JONGWOO (INE/ENE); BLENMAN, SHAMAR (CCB/CBA); PELAEZ RESTREPO, JOHANNA (VPC/FMP); JAINAUTH-UMRAO, NAVEEN (VPC/FMP); JIMENEZ MOSQUERA, JAVIER I. (LEG/SGO); LOANA VEGA (INE/ENE); IRATI JIMENEZ DORRONSORO (INE/ENE)
▪ Taxonomy:	Client Support
▪ Number and name of operation supported by the TC:	N/A
▪ Date of TC Abstract:	15 Jul 2022
▪ Beneficiary:	Government of Barbados, represented by the Ministry of Energy and Business Development
▪ Executing Agency:	INTER-AMERICAN DEVELOPMENT BANK (BA-ETD-MINISTRY OF ENERGY AND WATER RESOURCES (MEWR))
▪ IDB funding requested:	US\$450,000.00
▪ Local counterpart funding:	US\$0.00
▪ Disbursement period:	24 months
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	INE/ENE - Energy
▪ Unit of Disbursement Responsibility:	CCB/CBA - Country Office Barbados
▪ TC included in Country Strategy (y/n):	Yes
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Environmental sustainability

II. Objective and Justification

- 2.1 The objective of this technical cooperation is to support the Government of Barbados in advancing the transition to electromobility by creating an enabling environment for the ample penetration of electric vehicles in Barbados, supporting: (i) regulatory framework development; (ii) set in place national strategies and plans; (iii) preparation of investment-ready projects and investment plans; and (iv) knowledge and dissemination.
- 2.2 At present, in terms of electric mobility, the island has one of the largest Electric Vehicles (EV) fleet and charging stations networks per capita. There are over 500 private EVs and 49 electric buses, plus 10 additional buses that will be delivered before the end of 2022. This, in a country with 166 square miles, which makes Barbados one of the region's largest electric vehicular fleets. Nevertheless, even with the recent progress, the transport sector share in greenhouse gasses emissions remains high. The large stock of private vehicles, combined with the overall public transportation sector are still heavily dependent on fossil fuels and consumes about 3,500 barrels of oil per day. Therefore, to address these fuel consumption issue, electrifying the transportation sector is a much-needed step to reduce emissions, while supporting also the

achievement of Barbados National Energy Policy (BNEP) 2019-2030 targets and independence of imported fossil fuels.

- 2.3 However, a greener transport sector still faces barriers, such as the low penetration of EVs. Currently in Barbados car dealerships have a limited availability of EV makes and models carmakers available for passenger use, which could discourage customer's decision of purchasing EVs. In addition, the upfront cost of EVs is much higher than for regular fossil fuel-based cars. The higher cost of EVs relative to traditional fossil fuel vehicles restricts access to loans and leases to potential buyers. One of the biggest hindrances to decarbonization of transport is the comparative sales price of brand-new electric vehicles compared to imported (lightly used) vehicles, given that the majority of vehicles sold in Barbados are imported used cars. Another barrier is the limited development of charging infrastructure. Currently, there is only one firm that provides charging stations in public spaces, which has proven to be insufficient to absorb the current demand. Moreover, another major barrier is the lack of regulation. Nowadays the sector doesn't have a regulatory framework or tariff scheme that allows an increase in adoption rates of electric vehicles in the country. A roadmap for improving the existing legal and regulatory framework to foster the development of electromobility is needed. Finally, the last important barrier is the lack of national plans for this sector. Although Barbados has a nascent environment for EV, including support, capacity and limited charging infrastructure, the absence of an overarching national plan to support electromobility deployment, brings the opportunity to develop a policy framework to support the transition towards a more efficient economy.
- 2.4 Under this TC's objective, the Government of Barbados will be able to develop an holistic framework needed for electromobility transition. Activities to be financed under the TC will support, among others, to analyze feasible low-carbon and resilient transportation measures as well as regulatory, financial, and behavioral changes required for a green mobility system in Barbados. It will have a direct positive impact on the consideration of fleet renovation directives, payment systems, charging infrastructure deployment, change-out plans, tracking systems, waste and demand management, alternate connectivity, accessibility measures, as well as parking management.

III. Description of Activities and Outputs

- 3.1 **Component I: Component I. Policy and regulatory framework development..** The objective of this component is to develop a policy and regulatory framework which will allow to increase the adoption rates of electric vehicles in Barbados. The component will finance 2 activities: (1) Regulatory framework development: roadmap for improving the existing legal and regulatory framework for electromobility; (2) Strategies and Plans: development of a national plan, aimed at both, public and private sectors,
- 3.2 **Component II: Component II. Foster electromobility project development.** This component will finance 2 activities: (1) Vehicle to "X" (V2X) scalability plan. Financing support to develop a nation-wide strategy to foster the implementation of V2X projects, which mitigates the risk of disruption to the provision of power services; (2) Preparation of tender documents for a Vehicle to Building integration project. It includes financial and technical feasibility studies, as well as preparation of tender documents for the bidding of V2X projects.
- 3.3 **Component III: Component III. Capacity building and knowledge dissemination.** This component enables effective knowledge sharing activities between Barbadian and South Korean governments. It will finance 2 activities: (1) Capacity building: training of adequate management of EV equipment fostering green jobs, mindful of gender empowerment, charging operations and maintenance, safety trainings; (2) Knowledge Dissemination: preparation of technical information to systemize lessons learned, share experience with the Republic of South Korea and other leading countries.

3.4 Component IV: Administrative support. Local coordination

IV. Budget

Indicative Budget

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Component I. Policy and regulatory framework development.	US\$250,000.00	US\$0.00	US\$250,000.00
Component II. Foster electromobility project development	US\$100,000.00	US\$0.00	US\$100,000.00
Component III. Capacity building and knowledge dissemination	US\$80,000.00	US\$0.00	US\$80,000.00
Administrative support	US\$20,000.00	US\$0.00	US\$20,000.00
Total	US\$450,000.00	US\$0.00	US\$450,000.00

V. Executing Agency and Execution Structure

- 5.1 At the request of the Government of Barbados (GoB), the Bank will act as the Executing Agency (EA) through the Energy Division (INE/ENE). The designated focal point for this TC will be Carlos Echeverria, who is the sector specialist for the Country Office of Barbados (CBA). The beneficiary of this TC is the GoB, represented by the Ministry of Energy and Business Development. The IDB will be responsible for the selection and contracting of consulting firms and individual consultants, to be carried out in close coordination with the beneficiary. The activities to be executed have been included in the Procurement Plan and will be carried out in accordance with the Bank's established procurement methods, namely: (i) hiring of individual consultants, as established in the regulations AM-650; (ii) contracting of consulting firms for services of an intellectual nature according to GN-2765-4 and its associated Operational Guidelines (OP-1155-4); and (iii) contracting of logistics services and other services other than consulting, according to the policy GN-2303-20.
- 5.2 The Bank will be the Executing Agency due to its experience in this type of operations, addressing technical and environmental aspects in a timely manner, and guaranteeing the technical coordination for the development of products. Moreover, the bank's designation as EA is justified under Appendix 10 of the Operational Guidelines for Technical Cooperation Products (GN-2629-2).

VI. Project Risks and Issues

- 6.1 The main risk in the TC is the potential delay arising from the coordination with multiple stakeholders. Risks related to capacity within government agencies to coordinate energy, transport and fiscal objectives/incentives with potentially disparate timetables and coordination capacity.

VII. Environmental and Social Classification

- 7.1 The ESG classification expected for this operation is (C). This TC will not finance prefeasibility or feasibility studies for investment projects with social or environmental associated studies, as such, the TC is excluded from the scope of the Social and Environmental Policy Framework of the Bank.