

# GOVERNMENT OF ANTIGUA AND BARBUDA DEPARTMENT OF ENVIRONMENT (DoE)

#### REQUEST FOR PROPOSALS FOR THE PROCUREMENT OF ELECTRIC SCHOOL BUSES AND CHARGING STATIONS

Title	Request for Proposals (RFP)Procurement of Electric Schoo Bus(es) and Charging Stations for the Department of			
	Environment, in collaboration with the Antigua and Barbuda Transport Board			
Date of Issue	October 6 2017			
Deadline	November 13 2017			
Notes	This Request for Proposals serves to provide the technical and other requirements necessary for the procurement of the two electric buses.			
To Apply	Please email the Procurement Officer, Department of			
	Environment at <u>antiguaenvironmentdivision@gmail.com</u> copied			
	to diann.black-layne@ab.gov.ag and dcblack11@gmail.com and			
	the subject line shall be clearly marked "Procurement of Electric			
	School Buses and Charging Stations for the Department of			
	Environment"			
	<ul> <li>The following information must be submitted for the RFP:</li> <li>Technical Proposal - Statement of the applicant's ability to deliver the requirements listed in the Scope of Work; and</li> <li>Financial proposal;</li> </ul>			

#### 1. Background:

The transportation sector in Latin America and Caribbean (LAC) is a major contributor to greenhouse gas emissions, especially with respect to carbon dioxide, noting that carbon dioxide is just one of the greenhouse gases (GHG) correlated with climate change. Carbon dioxide (CO<sub>2</sub>) emissions released from fossil fuel consumption increased from 760 million tons in 1980 to 1,327 million tons in 2005 in LAC, and the transport sector is one of the main contributors to  $CO_2$  emissions in the LAC region.<sup>1</sup>In addition, the transportation sector is a source of localized air and noise pollution, traffic congestion, it affects the public's health and safety, as well as a major contributor to climate change. Poor air quality is now a major health concern in increasingly urbanized areas worldwide, and with the development and implementation of integrated adaptation and mitigation strategies to address this issue, especially in developing nations, the estimated net costs of climate policies would be substantially reduced if the cost and benefits of improved air quality were fully valued.<sup>2</sup>

In the Caribbean Community (CARICOM), transportation initiatives have strong sustainable development co-benefits, for example in Antigua and Barbuda importation of fossil fuels was USD 165 M in 2013, equivalent to 13.7% of the country's GDP – and transportation accounted for approximately 30% (USD 49 M) of total fossil fuel imports.<sup>3</sup>

Green technology solutions are readily available to achieve emissions reductions in the transport sector in the Caribbean and other islands, where the size of many Small Island Developing States (SIDS) is well suited to the 100–200 mile (160–320 kilometer) range of currently available electric vehicles.<sup>4</sup>

Antigua and Barbuda, through this initiative, will pilot green technology electric school buses to improve data collection and capture lessons learned for upscaling nationally and across the region. Key transferrable outcomes expected from this project include verification of electric vehicle suitability in a SIDS context; opportunities for coupling electric vehicles with renewable energy installations; transferrable feasibility assessment outcomes; approaches for mitigation environmental and social risks of new electric vehicle technologies; and best practices for full life cycle assessments and decommissioning of non-compliant fossil fuel vehicles.

This *Electric School Bus Pilot in Antigua* initiative will be one of the first public sector electric vehicle initiatives in the Caribbean region. With implementation and future upscaling, this initiative will be a first step towards reversing current trends of gasoline

<sup>&</sup>lt;sup>1</sup> Govinda R. Timilsina; Ashish Shrestha. The Growth of Transport Sector CO2 Emissions and Underlying Factors in

Latin America and the Caribbean

<sup>&</sup>lt;sup>2</sup> Harlan S.L., and D.M. Ruddell (2011). Climate change and health in cities: impacts of heat and air pollution and potential co-benefits from mitigation and adaptation. Current Opinion in Environmental Sustainability 3, 126–134. (DOI: 10.1016/j.cosust.2011.01.001).

<sup>&</sup>lt;sup>3</sup> IRENA, 2016. Renewables Readiness Assessment (RRA) for Antigua and Barbuda. International Renewable Energy Authority (IRENA).

<sup>&</sup>lt;sup>4</sup> Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS) Baseline Report and Assessment, 2015. http://www.worldwatch.org/system/files/C-SERMS\_Baseline\_10.29.2015.pdf

vehicle growth of 5.8% and diesel vehicle growth rate increases of 4.2% (2000 and 2009 trends).

# 2. Scope of Agreement of Cooperation

The Department of Environment (DoE) is requesting proposals from entities that are able to meet the scope of work as listed below.

#### 3. Scope of Work:

- 1. Proposed cost of purchasing two (2) electric school buses with 40-seater capacity and driving range greater than 60 miles;
- 2. Proposed cost of purchasing and installing two (2) charging stations (i.e. level 2 and/or level 3) for the buses; to be installed at the East Bus Station and the Antigua and Barbuda Transport Board in Herbert's Estate. Charging stations should have a built-in meter for ease of data collection;
- 3. Proposed annual maintenance schedule and operational cost for the vehicles, inclusive of life expectancy of battery life;
- 4. Proposed cost of training mechanics within the Government service or relevant Ministry for the maintenance of the vehicles; and
- 5. Proposed cost of training bus drivers on management of the vehicles.

# 4. Selection Process and Criteria:

The proposals (technical and financial) will be reviewed by an Evaluation Committee with the technical knowledge and/or expertise to evaluate the technical merits and reasonableness of the proposed costs under applicable cost principles. The DoE will inform all applicants on the outcome of the evaluation process.

The DoE will use the following selection criteria to evaluate and score proposals out of a total of 100 points:

Item #	Selection Criteria	Description	Maximum Score
1	Qualifications and	Proven arrangements with	60
	availability	dealership for purchase and	
		maintenance of vehicles. 30	
		points	
		Technical and Financial	
		proposal with detailed	
		implementation and	
		maintenance plan 30 points	
2	Experience with	Proven track record of	15
	training	training individuals in vehicle	
		maintenance. 10 points	
		Fluency in written and	
		spoken English and strong	

		analytical and communication skills. <b>5</b> <b>points</b>	
3	Adherence to TOR's specifications and	Quality of proposed work plan and methodology. <b>5</b>	15
	requirements.	Points	
		Identification of risks and	
		proposed management	
		measures. 5 Points	
		Clear understanding of TOR	
		deliverables, including listing	
		of 3 references. 5 Points	
4	Cost Feasibility	Are costs reasonable and	10
		within market costs. 10 Points	
TOTAL			100