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Response to the Stakeholders Consultation Document

PROPOSALS FOR A REGULATORY FRAMEWORK TO FACILITATE THE

PENETRATION OF ELECTRIC VEHICLES IN JAMAICA

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Introduction

This document represents the collective response of the Project Steering Committee for the IDB / JPS Foundation project, Building a Sustainable Electric Mobility Ecosystem for Inclusion and Access. This project aims to build an enabling environment for electric mobility by creating opportunities for Small and Medium-Sized Enterprises (SMEs) and their employees in the EV value chain. The Project Steering Committee comprises specialists and management representatives from key stakeholder groups, whose responsibilities include addressing technical details that may arise from activities relating to the project design and implementation and external developments that could affect the project objectives.

General Observations

1. The document does not address the roadside recovery/assistance requirements for EVs. Our opinion is that the requirement for the training of first responders must be considered in the proposed policy. The policy should include roadside assistance and should have measures that speak to the impact on Occupational Health and Safety Standards in the (EV) Motor Vehicle industry.
2. There has to be a significant publicity effort to change the perception that EVs are only for the higher income groups.
3. The following may be considered as barriers to EV Uptake
    1. Nonexistence of Training and Certification Standards to upskill/retool existing mechanics to treat with technical and other related EV issues.
    2. Lack of maintenance and safety standards infrastructure in Jamaica.
    3. The document does not address concerns regarding the vandalization of electrical supplies for persons who do not possess a secured driveway/carport. Also, dedicated parking allocations and security concerns in strata residences (apartments/townhouses) may limit the number of EVs purchased. Gated charging ports may be out of the line of sight for EV owners and prove a disincentive.
4. We cannot overstate the health benefits of EVs in Jamaica, where there is a high incidence of respiratory diseases. The Ministry of Environment measures particulate emissions in Jamaica. This data is helpful in the identification of areas that consistently produce bad results and should be used to inform the public relations efforts as identified by the OUR working group.

Comments and Questions

Electric Vehicle Market Status

1. Since public charging infrastructure expenditure (works and services) is predominantly a one-time expense to the installer (JPS or other private sector interest), what is the rationale for a residential rate +5% (or other %) at public chargers? Why wouldn't the existing tariff already charged at the public location at the time for charging be applicable? **(Pages 12 & 40)**
2. Is there any provision under law or regulations for persons converting from ICE to an EV using a retrofitting kit for conversion to EV for their currently owned vehicle? Issues for considerations include VIN numbers, Engine numbers, Applicable taxes, Registration, Fitness Certificates, and Insurance. **(Pages 12 & 14)**

3. Are there regulations/provisions for a private property/business installing standalone EV chargers and offering charging on a zero-cost service basis to clients or alternatively at a cost/charge?

Recommended actions to overcoming barriers to EVs deployment in Jamaica

Specific policies and regulatory recommendations – Table ES 1 - Recommended approach for EV uptake policy development

4. Agree with the amendment of the Electricity Act to expressly exclude the activities of an EV charging station by the owner, using a standalone RE system of the same owner, from being considered as a "supply" of electricity. **Pg. 18**
5. Agreed - Allow non-utilities to own and operate charging stations. In the case of a grid-connected charger, the utility will be remunerated for power delivered. The charger operator should be able to charge a service fee for the services of access and convenience to EV owners, with free-market conditions favouring lower fees. Charges should not be pegged to electricity tariffs. **Pg. 19**
6. The utility should invest in its current infrastructure to accommodate the additional EV load on its system as part of its CBA analysis on the value of additional electricity sales vs. capital costs. Cost recovery should be allocated to the EV users. **Pg. 19**

Specific policies and regulatory recommendations - Table ES- 2: Recommended short term strategies

7. Agreed - GoJ procurement should enable acceleration of EV sales.
8. Agreed - GoJ should mandate the charging infrastructure types/specifications in the short-term, e.g., uniformity of charging ports to reduce range anxiety.
9. If the GOJ moves to introduce EVs in various Government fleets, one such organization that may be targeted is the JUTC. In many cases, a major barrier to initiating or furthering e-bus projects was the lack of Institutional capacity. (Barriers for Adopting Electric Buses-World Resources Institute-2019)

Specific policies and regulatory recommendations - Table ES- 3: Recommended Fiscal Incentives

10. Agreed - GoJ should lower import duty on BEVs and PHEVs. **Pg. 21**
11. Agreed – GoJ should consider waiving the environmental protection levy of 0.5% of the CIF value to import BEVs and PHEVs. **Pg. 21**
12. The recommendation/proposal for GoJ tax credits for the entities that acquire BEVs as part of owned fleets is supported. **Pg. 21 & 53**
13. The recommended/proposed reduction or waiver of the annual compulsory License fees on EVs is not supported. **Pg. 21**
14. The recommended/proposed grant towards the purchase of EVs is not supported. The economic burden should not be transferred to non-EV owners. In addition, various other incentives are adequate for personal or corporate decision-making. Furthermore, the current bureaucracy regarding taxes and duties for vehicle importers is very involved and tedious. The proposal would add another layer of complexity to this. **Pg. 21 & 53**

Specific policies and regulatory recommendations -Recommended Non- Fiscal Incentives

15. Vehicle emission standards are useful; however, they will require significant administration at testing depots, training, appropriation of penalties, to name a few activities. Moreover, it may be challenging to implement in the short term. It may be more efficient, traceable, and equitable to assign "emission charge" at the time of annual vehicle registration based on the type of propulsion (ICE/BEV/PEV/PHEV) and "engine" capacity **Pg. 22**
16. The recommendation/proposal for granting EV users access to bus lanes is not supported. Bus lanes have not worked in Jamaica and are unlikely to in the future. This recommendation will only add an unnecessary burden on law enforcement personnel to effect monitoring and prosecution. **Pg. 23**

Overview of Electric Vehicle Technology

17. HEV definition should also consider that batteries may be charged by regenerative braking or from the alternator/electrical generator, which can recharge the battery or directly and partially power the electric drive motors (motor–generator). **Pg. 30**

Advantages and Barriers to EV Ownership – Lack of Consumer Information

18. For greater clarity, references to global EV statistics should state clearly if the only PEV are in the reference in keeping with only 23% of the respondents being extremely aware of EVs and 34% of respondents moderately aware of EVs. **Pg. 35**

Business models for charging infrastructure ownership

19. Regarding the business model for the build-out of EV charging stations, the utility should not be excluded from investing in and benefiting from the market; however, other private sector interests should also be allowed to invest where they see viable. The regulator could then determine the criteria for issuing licenses, including standards, standardization of infrastructure for safety, and interoperability amongst different EV charging station network owners. **Pg. 54**

Regulatory Approaches and Incentives

20. The GoJ should mandate EV Targets for its own fleet.

The debate on utility ownership of EV charging infrastructure

21. Is this the correct reference to the "Arizona Public Utilities Commission"? "The state of Oregon took an approach much different from California and Arizona from the outset. The Oregon Public Utilities Commission in Order 12 013 considered the matter of utility investment and operation of Electric Vehicle Service Equipment (EVSE). In deciding that utilities should be allowed to participate in the market, the Arizona Public Utilities Commission stated,".

Possibilities under the current Framework

22. Would a residential strata be charged the relevant TOU tariff on its JPS bill for common areas, or would each EV owner be charged separately? What would be the mechanism (see page 79 on

the definition of "supplier")? Can residential strata, therefore, install a solar PV carport for EV owners and charge directly for battery charging?

Table 9: Recommended strategies for early implementation

23. The recommendation/proposal for the GOJ to consider encouraging commercial entities with a fiscal incentive (e.g., tax breaks/ credits) to provide free EV charging to their customers is supported.

Other Questions/Comments

24. Will the downtime (time to repair) be longer for the Electric Vehicles in comparison to Internal Combustion Engine (ICE) Vehicles? If so, what systems will be implemented to mitigate against extended delays?
25. Are there considerations for vehicle-to-grid technology (V2G) allowance?

Specific Response to Stakeholder Barriers to EV Ownership & Measures Questions

1. What are your views on the relevance of the identified barriers to EV ownership?
    a. The 3 most relevant barriers are relative price to ICE, consumer awareness, and available charging infrastructure.
    b. Disagree with the other identified barriers as being pertinent to consumer choice.

2. Are there other relevant barriers not contemplated?
    a. The lack of available RHD EV models that are approved for sale in this region.
    b. Price competition from ICE vehicles driven by policy bias to price over emissions:
        i. Motor vehicle import policy which favours low-cost used imports with age limits of 5 to 25 years.
        ii. The absence of tailpipe emission standards in Jamaica makes Jamaica a dumping ground for older used vehicles suppressing ICE prices.
    c. The lack of a national charging standard plays to range anxiety because there is no certainty that your car can be charged.

3. What measures to surmount these barriers?
    a. GOJ needs to signal to the manufacturers that Jamaica is open for business by
        i. Setting charging standards [see point 3c below]
        ii. Reduce import duties on EVs to close the price gap. A 5 year, 0% duty window would go a long way to show commitment.
        iii. Reduce duties on Chargers to enable infrastructure build-out.
        iv. Focus on commercial vehicle adoption in the public and private sectors.
        v. Begin the conversion of their fleet by setting a procurement policy and a target.
        vi. Implementing EV training for technicians and first responders
        vii. Setting targets on fleet adoption

b. GOJ needs to review the contradiction between promoting climate-friendly EVs and the pursuit of cheap used vehicle imports.
    i. Reduce the age of used imports over time.
    ii. Implement tailpipe emission standards that keep the worst polluting units off the road.
    iii. Get ready to prevent the dumping of used cars from overseas markets as EVs take hold abroad.
c. GOJ needs to define Mennekes/CCS2 as the Jamaican charging standard as this has been adopted for the early charging stations. This decision will give market certainty to manufacturers, importers, and consumers.

Recommendations

Recommended actions to overcoming barriers to EVs deployment in Jamaica

1. Permitting retrofits may be a potential solution for alleviating the number of stranded ICE vehicles in the short term (especially for new ICE purchases). **Page 14**
2. Could a small single-digit "emission charge" (as a %) be applied to ICE? The emission charge should then be allocated to EV imports to facilitate lower duties on PHEV/EVs to reduce greenhouse gas (GHG) emissions, reduce engine size and air pollution caused by ICE motor vehicles, and realize the value/benefits of EVs on the environment (e.g., normal MV Certificate of Registration fee for CC rating and vehicle class, etc. + %)? **(Pages 15 - 16)**

Economic Incentives for EV Take Up

3. Included in the proposed economic incentives can be the following:
    a. Coordination with sectors that already provide some duty incentives for the importation of vehicles. These sectors include the Bauxite Mining, Tourism, and Agricultural Sectors. As these three sectors also contribute significantly to the country's GDP and Agriculture will feature prominently in improving the country's food security, these could form the basis for expedited discussions.
4. Other incentives for businesses could also include an adjustment in the amount allowed for yearly depreciation calculations for EV's vs. ICE vehicles.
5. The Government could consider lowering the toll charges on our highways for EVs.
6. We must consider the fact that EVs require more time to charge. Consequently, efforts should be made to build or incentivize the construction and maintenance of recreation/shopping areas adjacent to charging stations.
7. The GoJ should consider the revenue generated by carbon trading. An investment in EVs is equivalent to an investment in forests, and if quantified, the contribution to greenhouse gas reduction could be traded on international carbon markets.

Capacity Building

8. The OUR study also references the 2019 Economic and Social Survey of Jamaica (ESSJ), which indicated that the Jamaican transportation sector is a major consumer of petroleum fuels, accounting for approximately 33 percent of the country's fuel consumption. (**Pg. 27).** As such, a more coordinated approach to transforming the transportation fuel sector could include an Alternative Fuel Vehicle policy Coordinator or officer's appointment. This position could then review the integration of EVs in the transportation sector and work with personnel in the Ministries of Energy and Transportation in this regard.
9. Institutional Capacity will also have to be developed in the Bureau of Standards and the National Compliance Regulatory Agency. The roles of the Electrical Regulator should also be determined.