Draft to the Term of Reference – IABS – Transition to Electromobility in Brazilian Cities – Executor nº 02/2020

Elaboration of Technical Material to the Project "Transition to Electromobility in Brazilian Cities - Grant Agreement (TF0A9650)"

Specialized Technical Services, in product modality

This document refers to the Draft of the Term of Reference 2, the full version will be made available in the next step.

1. CONTEXT AND OBJECTIVES

1. Some countries are going through a transition to electromobility in order to reduce emissions and stimulate the development of more sustainable cities. With the escalation of climate change, the scarcity of resources, and in order to comply with international agreements and NDC, it is necessary that Brazil be prepared at the technical and institutional level in the public and private spheres to achieve an efficient and effective transition to electromobility.

2. Thus, some Brazilian cities have already started to implementing electric buses, through pilot projects with the intention to advance on the understanding technical, financial and operational requirements before moving on to mass adoption across the country. Therefore, the purpose of this Term of Reference is to **contract a specialized technical of a consulting firm to develop guidelines, technical and legal mechanisms and financing models of electric buses projects in Brazil.** Thus, it aims to comply with the objectives of the Transition to Electromobility in Brazilian Cities - the result of the commitment entered into in the Grant Agreement (TF0A9650) between the World Bank and the Brazilian Institute of Development and Sustainability (IABS), with donated resources by the CTF - Clean Technology Fund. The Ministry of Regional Development is the main client of the project that will support its implementation and will safeguard alignment with government policies.

3. This consulting has the main objective of **enabling the improvement of managers and technical staff of urban mobility in the public, private and civil society spheres on electromobility financing, developing/strengthening financing structures for the introduction of electric buses in Brazil, and verifying the need to increase the infrastructure for the transition to electromobility, including the development of a project financing mechanism (Facility) for Brazilian cities.** Its specific objectives are focused on i) create guidelines for the elaboration of concession and/or PPP projects; ii) structure financing model(s) of the proposed business strategy; iii) develop technical, financial and legal elements to support the creation of funds and credit lines with a focus on

electromobility; iv) create guidelines for the improvement of public policies; and v) develop mechanisms to select and evaluate electric buses financial projects.

2. SCOPE OF THE PROJECT AND LIMITS OF THE PROJECT

4. This analysis on **financing the electromobility, developing/strengthening financing structures for the introduction of electric buses in Brazil**, it must present, through its structure and content development, activity proposals targeted at the public, private and civil society spheres, outlining financing and planning paths to achieve electric buses. The elaboration of these documents/studies should present measures aimed at the transition to electromobility, including the creation of guidelines for the elaboration/preparation of concession and/or PPP projects for cities and states, the new business and financing models of the concession and/or PPP, also incorporating the participation of new actors. It should also present the development of technical, financial and legal elements to support the creation of funds and credit lines for the federal government, with a view to improving public policies and the mechanisms for selecting and evaluating electric bus projects in Brazilian cities, considering the transparency and access of information to society.

5. Also, must understand the intersections and political demands to be identified, normative instruments, national and international regulations and laws related to the transition to electromobility, as well as considering infrastructure, energy transition, sustainable development, research and innovation, technology and the good practices applied in Brazil and outside. The documents must also consider the different realities of Brazilian cities with their specificities, including social, economic and environmental aspects from the transition to electromobility, as well as in the production of content and bibliographic references that allow theoretical and methodological support.

6. Thus, the following products must be prepared:

2.1. Product 1 – Elaboration of the Inception Report

7. The preparation of the Inception Report consists of detailing the technical proposal, which must contain the contractor's understanding of the activities and products to be developed, with their respective methodological techniques applied to achieve the intended results. In addition, must present the detailed schedule, those responsible for development, the delivery times to the products, and the meetings by videoconference with the Project Coordination.

- **Product 1 – Inception Report**

2.2. Product 2 – Guidelines for electric buses financing in Brazilian cities and states

8. **Product 2** consists of the development of guidelines to structure concession and/or PPP projects Brazilian cities and states, presenting the new financing models for the concession and/or PPP, for example the separation of operations from assets (vehicles and batteries), and also incorporating the participation of new actors, such as electric energy companies and vehicles manufacturers. The development of this Product must consider the definition of criteria and characteristics that enable the grouping of similar/equivalent municipalities in the national territory, considering strategic, institutional and contractual, operational and financial issues, in addition to the main public policies.

9. It is extremely important to consider the specificities contained throughout the national territory, as well as to study pilot projects for electric buses implemented in the national territory, understanding the local context, the results and the lessons learned, identifying institutional aspects (concessions and/or PPP), arrangements between actors (city hall, operators, manufacturers, electricity companies, among others) financial, social and political to understand gaps and suggestions for improving the guidelines that will be proposed.

10. This product will bring a market impact analysis (offer), in other words, what exists and what it means for future electric buses projects. Thus, some topics need to be addressed in this research/study, such as: i) governance and market; ii) public transport operations; iii) energy and infrastructure; iv) environment and energy security; v) existing credit lines; vi) national products; vii) analysis and attractiveness of the offer; viii) business models for implementing electric buses (for example, considering bus or battery leasing); among other relevant and pertinent subjects.

11. In this study, the conclusions of the studies and researches available in "Plataforma Nacional de Mobilidade Elétrica – PNME" and others indicated in the Term of Reference, should also be considered.

12. It is important to said that this Product will produce inputs for Product 4 - Technical Reference Guide for Electromobility in Brazilian Cities (Volume II), being necessary for the construction of planning and procedures for the transition to electromobility.

- **Product 2 – Guidelines for electric bus financing in Brazil, in Portuguese**

2.3. Product 3 – Development of a Financial facility proposal for electromobility projects in Brazil

13. **Product 3** is the creation of a program to optimize the services of the financial system for electromobility associated with the Federal Government (Financial Hub), with the objective of becoming a reference for those interested in seeking financing and/or resources in national and

international markets in order to enable electromobility projects within the scope of public policies under the management of subnational entities, expanding their possibilities for social and environmental return.

14. This program should analyze the financing lines, credit lines, guarantee fund, criteria for new investments existing and/or in planning, as well as international models that can be replicated and/or adapted to the national context. Thus, forming a place for investment capable of promoting the development and implementation of electromobility projects in Brazil.

15. Thus, the contractor must create this space, with a set of criteria, incorporating not only technical, business, environmental elements, but also governance (legal and regulatory aspects) and social aspects. The main objective of this product is to structure a place (Financial facility) for those interested in finding financing in order to make electromobility projects feasible throughout the national territory.

- **Product 3 – Financial facility proposal for electromobility projects in Brazil, in Portuguese**

2.4. Product 4 – Development Technical Reference Guide for Electromobility in Brazilian Cities (Volume II)

16. **Product 4** consists of the development of the Technical Reference Guide for Electromobility in Brazilian Cities (Volume II), structuring in steps the guidelines (procedures) found in Product 2, at the three governments levels, as well as the inputs from the themes developed in Product 3, in other words, Product 4 will be oriented by a Technical Reference Guide with focus on financing the transition to electromobility, presenting the mechanisms for evaluation and selection of your financial projects.

17. This product also will present a framework of criteria for structuring financial projects for electric buses in Brazil, including, at least: i) subsidies on the benefits of adopting recognized parameters for the framing of sustainable projects from the environmental, social and governance; ii) proposition of elements for the e-bus area incorporating their respective specificities in a compatible way with the technical and financial feasibility; iii) identify the specificities of the municipalities, the eligibility criteria, the paths (step by step) that cities/municipalities need to take in order to present the best financing model to be implemented or chosen by each municipality. This structuring of project criteria, whether public or private, will serve to qualify electric bus projects, considering the best national/international practices of sustainable projects from an environmental, social and governance point of view, also expanding the opportunities for attracting investments international.

18. The Guide should also include its institutional and technical criteria, presenting the

changes/adjustments that the municipalities need to make to finance/implement their projects (for example, elements of remuneration, technical, institutional, legal and normative, social, among others).

19. It is important that the contractor consider the cost-benefit analysis and explore the financing options, based on the initial analysis and the operational data collected. Different financing options must also be researched and analyzed to ensure the transition to a sustainable electric bus in the long term. Moreover, the environmental benefits, mainly the externalities related to the reduction of pollution, emissions and noise in the public transport sector, and the consequent improvement in the quality of life and health of the population, are often not considered by public and private agents, industries and society, so the results of cost-benefit analysis and financial analysis must include innovative financing mechanisms.

20. The general objective of this Guide is to present financing models for electric buses, in order to subsidize the transition to electromobility, at the three government levels, with the definition of standard and characteristics that allow the grouping of similar/equivalent municipalities in the national territory, considering institutional, financial, social and political aspects.

- **Product 4 – Technical Reference Guide for Electromobility in Brazilian Cities (Volume II), in Portuguese and English**

3. OUTCOMES AND EXPECTED PRODUCTS

21. During the execution of the activities, the products must be delivered according to Table 1 below.

Table 1 – Deadline and payment percentages per Product

Product	Percentages	Deadline (calendar days after signing the contract)
Product 1 – Inception Report	5%	10 calendar days after signing the contract
Product 2 – Structure of Guidelines for the electric bus financing in Brazil	10%	30 calendar days after signing the contract
Product 2 – Guidelines for the electric bus financing in Brazil, in Portuguese	15%	90 calendar days after signing the contract
Product 3 – Proposal structure of Financial facility for electromobility projects in Brazil	10%	60 calendar days after signing the contract
Product 3 – Financial facility proposal for electromobility projects in Brazil, in Portuguese	15%	120 calendar days after signing the contract
Product 4 – Framework of the Technical Reference Guide for Electromobility in Brazilian Cities (Volume II)	10%	80 calendar days after signing the contract
Product 4 – Draft Technical Reference Guide for Electromobility in Brazilian Cities (Volume II), in Portuguese	15%	180 calendar days after signing the contract
Product 4 – Technical Reference Guide for Electromobility in Brazilian Cities (Volume II), in Portuguese and English	20%	220 calendar days after signing the contract

Supervision

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