Resolution No. 13 / 2019

from February 1st 2019

Cabo Verde's Strategic Plan for Sustainable Development (PEDS), horizon 2017-2021, includes for the energy sector a National Program for Sustainable Energy (PNSE), whose long-term goal is to transition to an efficient, safe and sustainable energy sector, thus reducing reliance on fossil fuels and ensuring universal access and energy security.

Road transport has an impact on the country's external dependence on fuels, and in 2017 this sector absorbed approximately 30% of the total domestic consumption of imported fossil fuels. Electric Mobility (EM) is a recent, but growing reality that could catalyze greater diversification of energy sources and the valorization of intermittent renewable energies in Cabo Verde, with anticipated gains in energy security, price stability, greenhouse gases emission reductions (GHG) and noise pollution.

The substantial reduction in the cost of batteries in recent years, car manufacturers' shared commitment to this technology with the growing numbers of new models in the market, makes this mobility option increasingly accessible. Therefore, the arrival of EM in Cabo Verde emerges as a strategic path, in alignment with the national objectives stipulated in the Electric Sector Master Plan (PDSE 2018-2040) and technological advances. Besides, the EM can be linked to all the 5 axes of intervention of the PNSE and has great potential for the decarbonization of the country, the transport sector in particular.

It should be highlighted that the application of sustainability concepts to mobility, demands EM to be seen as a means to reach equitable development of the society, respecting the functioning of the existing ecosystems and the economic growth objectives.

In order to support the Government in matters related to fostering the sustainable uptake of Electric Mobility, an Interinstitutional Commission for Electric Mobility in Cabo Verde, hereinafter referred to as CIME, was created through the Resolution 58/2018, of June 22nd, as a governance instrument to secure holistic alignment of this new endeavor with existing policies, in order to facilitate the introduction of novel areas of knowledge and intervention, among other tasks.

The planning, the monitoring and evaluation of the communicated efforts therein will be reflected into an Action Plan to be approved by the Government, with short (up to 2021), medium (by 2025) and long-term (by 2035) measures.

Without discarding the possibility of future extensions to other sectors where electric mobility is already beginning to emerge as an option, this document will focus only on the electric road mobility, taking into account the embryonic state of the other technologies.

In this context, the Electric Mobility Policy Charter is framed as an instrument to establish the country's strategic vision in this matter and to communicate the main measures that will guide the creation of the necessary conditions for the initial phase, followed by the long term massification of electric vehicles (EV) in the country, assuring the adequate development of necessary infrastructures, regulatory framework, and services offerings that allow any citizen or organization to have access to electric mobility solutions.

Therefore,

In the exercise of the power conferred by paragraph 2 of article 265 of the Constitution, the Government hereby approves the following resolution.

Article 1

Object

This Resolution approves the Electric Mobility Policy Charter, abbreviated as CPME, attached to this decree-law and of which it forms an integral part.

Article 2

Action plan

The Plan of Action of the CPME is approved by the Council of Ministers, within 60 days after the date of publication of this Resolution.

Article 3

Implementation, Monitoring, and Evaluation

1. The Ministry of Industry, Commerce and Energy, in consultation with the Interinstitutional Commission for Electric Mobility (CIME), is responsible for implementing the CPME.

2. Without prejudice to other monitoring and evaluation instruments, the Minister of Industry, Commerce and Energy shall inform the Council of Ministers, every 12 months, of the status of implementation of the CPME and its Plan of Action.

Article 4

Entry into force

This resolution shall enter into force on the day following its publication.

Approved in the Council of Ministers of January 24th, 2019. - The Prime Minister, *José Ulisses de Pina Correia e Silva*

ANNEX I

(referred to in Article 1)

ELECTRIC MOBILITY POLICY CHARTER (CPME)

Within the framework of the Strategic Program for Sustainable Development (PEDS)

1. Background:

The purpose of the Electric Mobility Policy Charter (CPME) is to establish the country's strategic vision in this area and to communicate the main measures to guide the creation of the necessary conditions for the initial start-up phase, followed by the long-term massification of electric vehicles (EV) in the country, assuring the adequate development of the necessary infrastructures, regulatory framework, and of services offerings, which allow any citizen or organization the access to electric mobility solutions.

The CPME is also intended to be an **instrument of dialogue with internal and external partners** regarding Cabo Verde's commitments towards materializing the objectives of the National Program for Sustainable Energy, and to achieve internationally adopted goals under the Paris Agreement.

The Electric Mobility Policy Charter will guide the Government's actions, essentially through the Ministry of Industry, Trade and Energy, which is responsible for the energy sector, seeking for coherent alignment with the energy policy and the policy of the environmental, road transport, and public finance vectors.

CPME takes as a premise the participatory involvement of other ministries, in particular the Ministry of Agriculture and Environment, responsible for environmental aspects, including the decarbonization of the country, the Ministry of Internal Administration, responsible for road transport, and the Ministry of Finance, responsible for the arbitration of public funds, for fiscal policy and the mobilization of resources from international partners, as well as the involvement of organizations representing local authorities and civic organizations.

This Policy document will be equipped with an Action Plan for Electric Mobility in Cabo Verde, aligned with the overarching goals and the strategic axes of intervention.

1. Global Vision and Objectives:

The strategic vision of the Government's policy for Electric Mobility in Cabo Verde is to achieve the gradual replacement of the current fleet of vehicles equipped with internal combustion engine (gasoline or diesel based) by clean electric vehicles, without GHG emission, by 2050, in alignment with the country's energy transition and according to the Electricity Sector Master Plan (2018-2040).

The aim is to gradually develop, in a timeline 2019-2035-2050, a fleet of electric vehicles (EV) for public transportation, (urban and interurban public transportation, taxis, rental vehicles, tourist

transportation), and private transportation (transportation for private use, private and public companies, and Public Administration).

Main goals:

(i) Integral replacement of all vehicles equipped with internal combustion engine for EV by 2050;

(ii) National Recharge Infrastructure fully implemented by 2030; and

(iii) Public Administration with a fleet of 100% EV in 2030.

The evolution of electric mobility will be contemplated in two distinct stages, an initial start-up phase focusing on stimuli and incentives, and a second massification phase based on market mechanisms, organized in three horizons:

Short-term (by 2021):

- Develop appropriate legislation and regulation for the electric mobility market in Cabo Verde;

- Qualify human resources and organizations in the electric mobility sector and technologies;

- Indicate the first installations that will be part of the National Recharge Infrastructure (INR) accessible to any EV user;

- Purchase (or lease) EV for the Public Administration;

- Establish incentives for the use of EV and recharge systems (investment incentives, tax incentives and customs incentives);

- Encourage the development of EV for Public Transportation (urban, interurban, taxis);

- Boost the distribution of EV in the islands with greater penetration of renewable energies;

- Support municipalities in the planning of electrical mobility infrastructures in public spaces.

Medium Term (by 2025):

- Gradually implement, and have in operation, the entire INR for EV in the main urban centers of Cabo Verde, along the strategic road corridors;

- Have all conditions necessary to allow the transition from vehicles with internal combustion engine to EV;

- Establish rules that require new vehicles acquisitions by the Public Administration to be 100% EV, aiming for the complete replacement by 2030, under the commitment made under the Paris Agreement, through the Nationally Determined Contributions (NDC) of Cabo Verde;

- Have at least 50% of EV in the new acquisitions for Urban Transportation;

- Modernize the electrical system and adopt intelligent technologies to ensure the smooth operation of grids with high penetration of intermittent renewable energies, taking into account the holistic integration of the recharge system for EV;

- Promote and encourage &D Pilot projects applied to the Vehicle-to-Grid (V2G) system in Cabo Verde, taking advantage of the national research and innovation competencies.

Long-term (**up to 2035**):

- Have the entire national INR for EV in operation by 2030;

- Adopt technological solutions for grid support and the market mechanisms that allow the V2G system;

- Adapt the legislation to enable the "resale" of energy in private spaces of public access, according to the V2G system;

- Starting in 2035, prohibit the importation of vehicles equipped with internal combustion engines that use fossil fuel (gasoline or diesel).

1. Guiding principles:

The strategic vision defined in the CPME is based on a set of principles:

- Give priority to mechanisms that stimulate electric mobility, which does not burden taxpayers and does not create an imbalance in public accounts;

- Align the transition to EM with the country's energy transition efforts;

- Develop a national charging infrastructure that intelligently manages requests imposed by charges in various types of locations, without any obstacles to interoperability, identification or billing;

- Ensure free and non-discriminatory access to the EM infrastructure;

- The establishment and operation of charging points for electric vehicles must take place within a competitive market;

- Establish economic regulations to ensure the recovery of private investments (particularly in infrastructure) and associated reasonable profitability;

- Ensure, particularly at the initial stage, robust sectoral coordination aiming for energy policies that are coherence with those from the environmental, mobility, and public finances vectors;

- Promote information and public education campaigns that highlight the positive attributes and benefits of the EM.

4. Strategic Goals and Measures:

Tables 1 and 2 summarize the absolute and relative targets, by category, for new EV acquisitions in relation to the existing fleet of vehicles, and for the development of the charging infrastructure, based on the ascribed short, medium, and long-term political vision.

- *Table 1 Global goals for new EV acquisitions by category*

Vehicles	2019	2020	2021	2025	2030	2035
Passenger cars (private)	22	113	217 (5%)	35%	70%	100 %
Taxi	5	5	5 (2%)	50%	100%	100 %
Minibus	0	0	5 (2%)	16%	35 %	100 %
Bus for public transportation	0	5	5 (25%)	50%	75%	100 %
Other buses	-	-	0 %	10 %	25 %	100 %
Medium Trucks	-	-	0 %	15 %	35%	100 %
Heavy trucks	-	-	0 %	0 %	25 %	100 %
Two wheels	-	-	2 %	25 %	50 %	100 %

- *Table 2 Global goals for new EV acquisitions by category*

Vehicles	2019	2020	2021	2025	2030	2035
Passenger cars (private)	22	113	217 (5%)	35%	70%	100 %
Taxi	5	5	5 (2%)	50%	100%	100 %
Minibus	0	0	5 (2%)	16%	35 %	100 %
Buses for public transportation	0	5	5 (25%)	50%	75%	100 %
Other buses	-	-	0 %	10 %	25 %	100 %
Medium Trucks	-	-	0 %	15 %	35%	100 %
Heavy trucks	-	-	0 %	0 %	25 %	100 %
Two wheels	-	-	2 %	25 %	50 %	100 %

With the support of the international partners, these goals can be anticipated, enabling the country can reach new heights.

In pursuance of these targets, the following measures were selected, grouped by three priority axes of intervention: vehicle axis, energy axis, and infrastructure axis.

4.1. Vehicle Axis

4.1.1. Updating the legal framework to stimulate use of EV;

4.1.1.1. Amendment of Decree-Law 11/2018 and the Decree 20/2006.

Decree-Law No. 11/2018 of March 1st (approving the General Legal Regime of Transportation in Motor Vehicles) and Ordinance No. 20/2006 of August 28th (which defines the conditions and technical requirements of vehicles for the regular urban transportation of passengers) will be changed so that the current prerequisites, in terms of engine capacity, become applicable only to thermal vehicles, and to define new requirements to apply to electric vehicles.

The expected impact is to allow greater use of electric vehicles for professional transportations (taxis, urban and interurban collective, tourist, among others).

4.1.2. Development of legislation and guidelines to ensure a balanced development of EV;

4.1.2.1. Obligation of technical assistance.

Include in the new proposal of the Road Code Regulation, the obligation to ensure availability of technical assistance for each vehicle model, before the model can be approved for importation, according to Article 4 of the Road Code Regulation.

The expected impact is to guarantee EV users the existence of maintenance for their vehicles in Cabo Verde.

4.1.2.2. Obligation to recycle or reuse EV batteries.

Make explicit in the applications of Article 9 of Decree-Law No. 56/2015 of October 17th (establishing the general rule applicable to the prevention, production and management of waste) that the entity responsible for "the act of introduction of the vehicle in the national territory" is responsible for managing the vehicle at its end-of-life. This proposal covers vehicles in general and specifically Electric Vehicles, and battery management thereof.

Concerning the battery, it must be recycled or reused at its end-of-life. Recycling should be done in Cabo Verde by an accredited company or outside Cabo Verde by a certified company that can guarantee of transportation safety. The vehicle importer shall be responsible for the recycling of the battery for the disposal of the cells to a proper collection company for reuse. In the case of transfer, the collection company should ensure the recycling of the battery at the end of the second life.

The expected impact is to avoid pollution of the environment by EV batteries in particular.

4.1.2.3. Favoring EV in public tenders

Establish in the law that the public institutions (Government and Municipalities) can favor the Electric Vehicles in tenders for acquisition of vehicles (purchase or leasing).

The expected impact is to have a legal framework for the acquisition of an EV to provide public services.

4.1.2.4. Favoring of the EV in tenders for the provision of public services

The Government will establish in the law that public institutions (Government and Municipalities) may favor the acquisition or preferential use of Electric Vehicles in tenders for the provision of public services. This includes in particular public urban transportation and maintenance of street lighting, but may include other services such as the post office and law enforcement intuitions.

The expected impact is to have a legal framework for the acquisition of an EV to provide public services.

4.1.2.5. Obligation of a minimum percentage of EV in the new acquisitions of vehicles by public urban transportation companies after 2025.

The Government defines the obligation for the purchase of new vehicles to respect a minimum percentage of vehicles without emission of pollutants for urban public transportation companies after 2025 and to purchase only vehicles without emission of pollutants after 2035. This obligation for each year between 2025 and 2035 is presented in the following table:

Table 2 Minimum percentage of EV in new acquisitions by the urban collective transportation company

Vehicles	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Minimum proportion of EV in new acquisitions by the urban collective transportation company	50 %	55 %	60 %	65 %	70 %	75 %	80 %	85 %	90 %	95 %	100 %

The expected impact is to guarantee urban collective transportation without emission of pollutants in the long term.

4.1.3. Financial incentives;

To achieve the EV targets in the Cabo Verde, a first start-up phase will require investment incentives, tax incentives, and customs incentives to increase the economic competitiveness of the technology, compared to thermal vehicles, for public transportation operators (bus, minibus, taxi), for businesses and individuals.

In a second phase of massification - where scale will enable the emergence of economically sustainable business models – the market logic must prevail.

4.1.3.1. Customs incentives.

Modernize the tariff to contemplate the Electric Vehicles and define the Import Duty (DI) and Special Consumption Tax (ICE) rates of the different types of Electric Vehicles after 2019 and study the possibility of introducing Exemptions of import duties on the new electric vehicles, their recharging stations and the renewable energy production equipment associated with the recharging stations.

Study the possibility of removing, in 2025, the exemptions of import duties for the following vehicles, with internal combustion engines, that are currently exempt: taxis, vehicles for transportation of people for collective transportation, vehicles for tourist transportation or vehicles for the transportation of merchandise.

The expected impact of these measures is to improve the competitiveness of the EV in relation to the thermal vehicle for all users, with a reduction in the price of the vehicles, spare parts and equipment, and with a price increase of the thermal vehicle for the users previously exempt of DI.

4.1.3.2. Investment Incentives

Implement a support system, through mobilization of climate financing, to encourage the first investments in EM.

The expected impact is to facilitate the purchase of EVs by the first users, who will face high prices, and facilitate capacity building of the stakeholders of electric mobility.

4.1.4. Participation of the public administration in the promotion of the electric mobility market;

4.1.4.1. Purchase or leasing of the EV by the Government.

Acquire at least the number of EVs indicated in the table below between 2019 and 2024, and vehicles without emission of pollutants beginning in 2025.

Table 3 Indicative values for EV acquisition by the government from 2019-2025

Vehicles	2019	2020	2021	2022	2023	2024	2025
Acquisition of new electric vehicles by the Government	4	20	20	40	60	80	After 2025
Percentage of EVs in the global acquisitions by the Government	20 %	25 %	25 %	45 %	70 %	90 %	-

The expected impact is:
- To stimulate the supply of the EV in Cabo Verde;

- To increase the visibility of the EVs, through greater circulation of said vehicles;

- To accumulate experience on electric mobility in Government and by the users of these vehicles;

- To encourage the development of a second-hand market when reselling or returning (in case of leasing) the EVs.

The acquisition of 100% of the EV after 2025 will contribute to the fact that by 2030, 100% of Government Vehicles will be electric, in line with the Cabo Verde's NDC.

4.1.4.2. State financing of the extra cost of the EM for public transportation, in relation to the thermal equivalent.

Initially, mobilize resources to finance the overhead cost of the EV and the necessary recharging stations in relation to the thermal equivalent, according to the indicative values in Table 4.

- *Table 4 Indicative value of the EV benefiting from extra costs subsidies in the timeline of 2025*

	2019	2020	2021	2022	2023	2024	2025
Bus for urban public transportation	-	5 (Sal)	5(Praia)	6 (SV)	7(Praia)	8 (SV)	9(Praia)
Minibus for collective intercity transportation	-	-	5 (SV)	5(Praia)	5 (Sal)	-	-
Taxi	5 (Praia)	5 (SV)	5 (Sal)	-	-	-	-

Approved in the Council of Ministers on January 24, 2019. – *The Prime Minister, José Ulisses de Pina Correia e Silva*

The expected impact is to promote the use of the EV for public transportation, in addition to supporting the training and accumulation of EV knowledge of the involved stakeholders.

4.1.4.3. Incentive for other public institutions

Encourage the adoption of EM in Municipalities and other public institutions (Public Companies, National Police, Post Office, among others):

- The purchase of vehicles for their own fleet, heavy vehicles used for the provision of services, namely, school transportation, garbage collection, maintenance of public lighting, and for the employees' use;

- The promotion of incentives for electric vehicles, namely, reserved parking spaces, free parking for the EV, advantages for taxis and collective long-distance electric cars (e.g. passenger pickup priority).

The expected impact is to develop the use of EVs in municipalities and public institutions.

4.1.4.4. Preparation and implementation of a communication plan on Electric Mobility

Prepare and implement a communication and information plan on Electric Mobility focused on:

- Improving the population's understanding of the technology and its advances in the international arena;

- Communicating the economic and environmental benefits of electric vehicles, explaining how their use may be cheaper than the thermal vehicles, even with a high electricity price and showing the ecological, health, and noise benefits;

- Sensitizing public and private institutions on electric mobility, and available incentives.

The expected impact is to share knowledge about the EV to cover all potential users and increase the potential market for EVs.

4.1.4.5. Promotion of training and qualification on electric mobility.

Stimulate training and capacity building of staff for the electric mobility market with:

- The inclusion of materials on electric mobility in courses that deal with transportation, energy, and the environment in universities;

- The implementation of technical courses on the maintenance of the EV.

The expected impact is to train technicians and engineers capable of responding to the needs of the EM market.

4.2. Recharge Infrastructure Axis:

4.2.1. Definition of standards to be adopted in Cabo Verde;

The standards to be used in Cabo Verde for recharging electric vehicles will include:

- In the short term, the plugs for charging;

- In the medium term, the communication protocols between the vehicles and the recharging infrastructure, as well as the communication between the recharging infrastructure and the computerized control systems;

- In the long term, intelligent and bidirectional (V2G) recharging systems.

The expected impact is to ensure the interoperability and safety of vehicles, and recharging points in Cabo Verde.

4.2.2. Management of the implementation of the National Recharge Infrastructure (INR).

Gradual development of a public National Recharge Infrastructure (RNI) throughout the Cabo Verdean territory, where the first stations will be in service between 2020 and 2024, with full implementation by 2030. The development of this infrastructure will follow a General Implementation Plan (PIG) to be defined by the Government.

The expected impact is to facilitate the decision to purchase the EV by potential buyers who will be assured of a place to recharge the EV when necessary and to meet the short-term needs of the priority users, EV for occasional recharging and to foster the EV in the fleets of professional vehicles.

4.2.3 Private infrastructure;

4.2.3.1. Support for the acquisition of private recharging stations.

Mobilize resources to support the purchase of recharge stations for the private sector, favoring facilities powered by renewable energies.

The expected impact is to ensure a safe recharge of the EVs in homes and companies, and to promote the supply of the stations by renewable energy.

4.2.3.2. Access rights to recharge points (right-to-plugs).

Guarantee the right of access to recharge points (right-to-plug):

- For individuals: to allow those living in multifamily housing, to install recharge points in common spaces;
- In parking lots in new buildings: obligation of pre-powered installations (cables);
- In new parking lots: obligation to install a number of recharging points.

The expected impact is to ensure and facilitate the possibility of installing recharging points in multifamily housing, as well as guarantee availability of parking spaces with recharging points.

4.3. Energy axis:

4.3.1. Technical regulation;

4.3.1.1. Safety regulations of electrical installations for use.

Elaborate and publish the technical regulation that defines the technical characteristics to which the project and the construction must comply, together with the supervision by the inspection of the electrical installations of the EV public recharge station.

The expected impact is to prevent the recharge operation of the EV from causing overheating and possible damage to the facilities

4.3.2. Economic regulation;

4.3.2.1. Regulation of the Quality of Service.

Approval of a quality of service regulation that establishes the voltage, frequency and respective tolerances to be observed by the concessionaire and sub-concessionaire of the electric power grids on the delivery to the consumers' premises, at the different voltage levels, as well as the indicators to be observed for continuity of service.

The expected impact is to give professional EV users confidence that their EV will not fail to be recharged in a timely manner.

4.3.2.2. Modernization of the tariff structure

The tariff structure will be adequate to accommodate the electric mobility and its characteristics.

The expected impact is to encourage the recharge of the EV, at certain hours, by means of tariff signaling.

4.3.2.3. Publication of a commercial relations regulation.

Publication of a commercial relations regulation, where, in addition to setting the obligations to be contractually observed by the parties (concessionaire and sub-concessionaire of the grids on the one hand and domestic, commercial, industrial and agricultural consumers on the other), it is established the creation of a new type of consumer, EV's public recharge station operator, whose economic activity is very clear in light of the activity of electricity distributors.

The expected impact is to give confidence to the private and professional users of the EV in the management of the electric sector.

Approved in the Council of Ministers on January 24, 2019. – *The Prime Minister, José Ulisses de Pina Correia e Silva*