# SEVENTEENTH CONGRESS OF THE REPUBLIC OF THE PHILIPPINES

Third Regular Session

**SENATE** 

s.b. No. 2137

## Introduced by SEN. WIN GATCHALIAN

# 18 NEC (3 P6:21

### AN ACT

# PROVIDING THE NATIONAL ENERGY POLICY AND REGULATORY FRAMEWORK FOR THE USE OF ELECTRIC AND HYBRID VEHICLES, AND THE ESTABLISHMENT OF ELECTRIC CHARGING STATIONS

### EXPLANATORY NOTE

A cursory survey of existing policy instruments governing the country's energy sector reveals twin mandates that are consistent across various legislative measures. First, the mandate for the government to reduce the country's dependence on imported fuel through the promotion of locally sourced energy. Second, the directive for the government to utilize and promote environmentally clean and ecologically safe energy sources to address the country's energy needs.

Based on a 2017 report prepared by the Department of Energy (DOE), the country sources 55.3% of its energy needs locally. The rest of its energy requirements, at 44.7%, is imported from abroad.<sup>3</sup> Bulk of the country's imported energy is used to address the energy requirements of the local transportation sector accounting for 37.2% of the total energy consumption of the country.<sup>4</sup>

The local transportation sector is highly dependent on foreign energy sources, with the country importing around 98% of its crude oil requirements.<sup>5</sup> This in turn makes the commuting and driving public highly vulnerable to price

Republic Act No. 7156, otherwise known as "Mini-Hydroelectric Power Incentive Act," declares as policy of the State to enhance the development of the country's indigenous resources to minimize dependence on outside sources of energy. Republic Act No. 7638, otherwise known as the "Department of Energy Act of 1992," declares as part of the State's goal to achieve self-reliance in the country's energy requirements. Republic Act No. 9136, otherwise known as the "Electric Power Industry Reform Act of 2001," declares as State policy the utilization of indigenous and renewable energy resources in power generation in order to reduce dependence on imported energy. Republic Act No. 9367, otherwise known as the "Biofuels Act of 2006," and Republic Act No. 9513, otherwise known as the "Renewable Energy Act of 2008," declare as part of the policy of State the reduction of the country's dependence on imported fuel, and the lessening of the country's exposure to price fluctuations in international markets.

lessening of the country's exposure to price fluctuations in international markets.

<sup>2</sup> Republic Act No. 8479, otherwise known as the "Downstream Oil Industry Deregulation Act of 1998," declares as State policy the promotion of environmentally clean petroleum products. Republic Act No. 9367, otherwise known as the "Biofuels Act of 2006," declares as State policy the protection of environment and public health. Republic Act No. 9136, otherwise known as the "Electric Power Industry Reform Act of 2001," declares as State policy the assurance of socially and environmentally compatible energy sources and infrastructure.

<sup>&</sup>lt;sup>3</sup> Philippine Energy Plan 2017-2040.

<sup>&</sup>lt;sup>4</sup> Philippine Energy Plan 2017-2040.

<sup>&</sup>lt;sup>5</sup> Based on https://www.doe.gov.ph/downstream-oil.

movements in the global marketplace. In May 2018 alone, the increase in international oil prices contributed 0.5% to the country's highest inflation rate in five years.6

Similarly, this same amount of imported energy consumed by the local transportation sector results to around 23.5 million metric tons of carbon dioxide being released into the country's atmosphere, affecting the health and well-being of the population. This number is estimated to further increase to 48.8 million metric tons by 2030.7

Electric vehicles are likewise more cost-effective for the riding public. A 2018 study shows that it costs merely Php 2.75 per kilometer to operate an electric jeepney compared to Php 4.50 per kilometer using a diesel powered jeepney.8 Similarly, a 2017 Toyota Prius Prime that runs on 100% electric is estimated to cost Php 1.40 per kilometer, while a similar vehicle running on 100% gasoline costs Php 2.30 per kilometer to operate. Since electric engines use fewer fluids and involve less moving parts than an ICE, maintaining an electric vehicle is likewise more cost-effective. 10

Notwithstanding the contribution of electric vehicles to energy secuity, sustainability, and savings, barriers still remain for the development of the industry, specifically the high upfront costs of owning an electric vehicle,11 and the limited charging infrastructure. Thus, it is crucial that a policy and regulatory framework is in place to usher in the uptake of electric vehicles in This bill addresses the challenges to the development of the electric vehicle industry by (1) instructing the Department of Energy to create an Electric Vehicle Roadmap and distribution utilities to incorporate a Charging Infrastructure Development Plan in their Power Development Plan, (2) requiring private and public buildings and establishments to have dedicated parking slots with charging stations, (3) mandating open access for the installation of charging stations in gasoline stations, (4) expanding non-fiscal incentives such as exemption from number coding and prioritization in registration, and (5) institutionalizing time-bound fiscal incentives for manufacturers and importers of electric vehicles. Given the foregoing, the immediate passage of this measure is sought.

<sup>&</sup>lt;sup>6</sup> Joint Statement on the May 2018 Inflation Report. Available at: http://www.neda.gov.ph/2018/06/05/neda-dbmdof-joint-statement-on-the-may-2018-inflation-report/

Pathways to Low-Carbon Development for the Philippines. Asian Development Bank. 2017. p. 13

<sup>9</sup> Based on simulations on www.fueleconomy.gov using the following February 2018 prices: PhP 52 per liter for cost of gasoline in Metro Manila, and PhP 9 per kWh cost of electricity within the franchise area of MERALCO.

O Charging Smart: Drivers and Utilities Can Both Benefit from Well-Integrated Electric Vehicles and Clean Energy. May 2017. p. 1

<sup>11</sup> EV Policy Compared: An International Comparison of Governments' Policy Strategy Towards E-Mobility. E-Mobility in Europe, Green Energy and Technology. 2015. p. 49

# SEVENTEENTH CONGRESS OF THE REPUBLIC OF THE PHILIPPINES

Third Regular Session

3

6

8

10

11

12

13

14

15

**SENATE** 

)

s.b. No. 2137

18 DEC 13 P6:21

## Introduced by SEN. WIN GATCHALIAN

#### AN ACT

# PROVIDING THE NATIONAL ENERGY POLICY AND REGULATORY FRAMEWORK FOR THE USE OF ELECTRIC AND HYBRID VEHICLES, AND THE ESTABLISHMENT OF ELECTRIC CHARGING STATIONS

Be it enacted by the Senate and the House of Representatives of the Philippines in Congress assembled:

- SECTION 1. Short Title. This Act shall be referred to as the "Electric Vehicles and Charging Stations Act of 2018."
- SECTION 2. Declaration of Policy. It is hereby declared the policy of the State to:
  - (a) Ensure the country's energy security and independence by reducing reliance on imported fuel for the transportation sector;
  - (b) Promote and support innovation in clean, sustainable, and efficient energy to accelerate social progress and human development by encouraging public and private use of new and alternative technologies; and
  - (c) Safeguard and improve the integrity, reliability, and stability of the country's electric power grid by optimizing the location of energy sources relative to demand.
- SECTION 3. Scope and Application. This Act shall apply to the manufacture, importation, installation, and use of electric vehicles and charging stations.

- (a) **Battery electric vehicle** refers to a private, government-owned, or public utility vehicle which is propelled by an electric motor engine, and powered by energy stored in an on-board battery pack which is charged through a charging station and used on public highways;
- (b) **Battery pack** refers to a completely functional system that includes battery modules, battery support systems, and battery-specific controls used to store and discharge electrical energy in an electric vehicle;
- (c) **Board of Investments (BOI)** refers to the government agency created under Republic Act No. 5186, otherwise known as An Act Prescribing Incentives and Guarantees to Investments in the Philippines, Creating A Board of Investments, Appropriating the Necessary Funds Therefor and for Other Purposes, and whose expanded functions are provided in Executive Order No. 226, otherwise known as the Omnibus Investments Code of 1987;
- (d) **Charging fee** refers to the amount imposed upon electric vehicle users in exchange for the use of facilities of for-fee charging stations. Its individual components shall be unbundled pursuant to regulations issued by the Energy Regulatory Commission;
- (e) **Charging station** refers to the physical infrastructure built and designed to deliver electrical energy from an electricity source to a battery pack. Its components shall include connectors, conductors, fittings, and other associated equipment;
- (f) Charging station service provider refers to a natural or juridical person, duly registered with the Energy Regulatory Commission, who sells, installs, maintains, owns, and/or operates charging stations or any of its components for a fee;
- (g) Charging Infrastructure Development Plan (CIDP) refers to the annual report incorporated in the Distribution Development Plan to be submitted by distribution utilities to the Department of Energy outlining, among others, the siting of existing and planned charging stations and synchronization of charging stations with the distribution system;
- (h) **Department of Energy (DOE)** refers to the government agency created pursuant to Republic Act No. 7638, otherwise known as the

Department of Energy Act of 1992, and whose expanded functions are provided in Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001;

- (i) **Department of Trade and Industry (DTI)** refers to the reorganized Ministry of Trade and Industry pursuant to Executive Order No. 133, otherwise known as Reorganizing the Department of Trade and Industry, Its Attached Agencies, and For Other Purposes, as amended, whose powers and functions are stated in Executive Order No. 292, otherwise known as the Administrative Code of 1987;
- (j) **Department of Transportation (DOTr)** refers to the government agency whose powers and functions are stated in Executive Order No. 292, otherwise known as the Administrative Code of 1987, as amended by Republic Act No. 10844, otherwise known as the Department of Information and Communications Technology Act of 2015;
- (k) **Distribution Development Plan (DDP)** refers to the expansion, reinforcement, and rehabilitation program of the distribution system, which is prepared by the distribution utility and submitted to the DOE for integration with the Power Development Plan and the Philippine Energy Plan. In the case of electric cooperatives, such plans shall be submitted through the National Electrification Administration for review and consolidation;
- (l) **Distribution system** refers to the system of wires and associated facilities belonging to a franchised distribution utility, extending between the delivery points on the transmission, sub-transmission system, or generating plant connection and the point of connection to the premises of the end-user;
- (m) Distribution utility (DU) refers to any electric cooperative, private corporation, or government-owned utility which has a franchise to operate a distribution system including those whose franchise covers economic zones;
- (n) **Electric vehicle** refers to either a battery electric vehicle or a plug-in hybrid electric vehicle as defined under this Act;
- (a) **Electric Vehicle Roadmap** refers to an annual plan incorporated in the Power Development Plan and Philippine Energy Plan to accelerate the electrification of transportation. It shall include strategies and measurable targets to increase electric vehicle adoption, hasten the build-out of charging infrastructure, support the electrification of

- public utility vehicles, incentivize alignment with grid needs, and coordinate with grid modernization and planning to maximize energy resources;
- (o) **Energy Regulatory Commission (ERC)** refers to the government agency created under Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001;

- (p) **Joint Congressional Power Commission (JCPC)** refers to the Commission created under Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001;
- (q) Investment Priorities Plan (IPP) refers to the annual over-all plan prepared by the BOI under Article 26 of Executive Order No. 226, otherwise known as the Omnibus Investments Code of 1987;
  - (r) Land Transportation Office (LTO) refers to the government agency created under Republic Act No. 4136, otherwise known as An Act to Compile the Laws Relative to Land Transportation and Traffic Rules to Create a Land Transportation Commission and for Other Purposes:
- (s) Land Transportation Franchising and Regulatory Board (LTFRB) refers to the government agency created under Executive Order No. 202, otherwise known as Creating the Land Transportation Franchising and Regulatory Board;
- (t) **National Electrification Administration** refers to the government agency created under Presidential Decree No. 269, otherwise known as the National Electrification Administration Decree, as amended by Republic Act No. 10531, otherwise known as the NEA Reform Act of 2013;
- (u) Metro Manila Development Authority (MMDA) refers to the government agency created under Republic Act No. 7924, otherwise known as An Act Creating the Metropolitan Manila Development Authority, Defining Its Powers and Functions, Providing Funding Therefor and for Other Purposes;
- (v) **Philippine Competition Commission** refers to the government agency created under Republic Act No. 10667, otherwise known as the Philippine Competition Act;
- (w) Philippine Distribution Code (PDC) refers to the set of rules that governs the distribution system in the country promulgated by the ERC pursuant to its mandate under Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001;

(x) **Philippine Electrical Code (PEC)** refers to the set of rules that ensures safety in electrical installation and construction mandated under Republic Act No. 7920, otherwise known as the New Electrical Engineering Law;

- (y) Philippine Grid Code (PGC) refers to the set of rules and regulations governing the reliable operation, maintenance, and development of the high-voltage backbone transmission system and its related facilities as promulgated by the ERC pursuant to its mandate under Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001;
- (z) **Power Development Plan (PDP)** refers to the indicative plan for managing electricity demand through energy-efficient programs and for the upgrading, expansion, rehabilitation, repair, and maintenance of power generation and transmission facilities, formulated and updated yearly by the DOE in coordination with the generation, transmission, and DU companies;
- (aa) **Philippine Energy Plan (PEP)** refers to the overall energy program formulated and updated yearly by the DOE and submitted to Congress pursuant to Republic Act No. 7638, otherwise known as the Department of Energy Act of 1992;
- (bb) **Plug-in hybrid electric vehicle** refers to a private, government-owned, or public utility vehicle which is propelled by a combination of a traditional internal combustion engine and an electric motor engine, and powered by energy stored in an on-board battery pack which is charged through a charging station and used on public highways;
- (cc) Private buildings and establishments refer to residential, commercial, and industrial structures owned or leased by private persons or juridical entities, whose goods and services are available to the public; and
- (dd) **Public buildings and establishments** refer to structures owned or leased by the government through its departments, agencies, bureaus, offices, corporations, and local government units.
- **Section 5. Role of the Department of Energy (DOE).** The DOE shall determine the general policy direction and specific policy measures required to promote the adoption of electric vehicles and charging stations in accordance with objectives of this Act. Furthermore, the DOE is tasked to:

1 (a) Aggregate and centralize data from ERC, DOTr, LTO, LTFRB, MMDA, and
2 other relevant government agencies in preparation of a comprehensive
3 Electric Vehicle Roadmap with measurable targets as part of the PDP and
4 PEP;

5

8

11

12

13

17

18

19

20

21

24

25

26

27

28

29

30

31

32

33

34

35

36

- (b) Require DUs to submit an annual CIDP which shall be consistent with the Electric Vehicle Roadmap;
- (c) Ensure compliance with mandatory open access as required under Section 14 of this Act;
- (d) Publish on its website a quarterly inventory of all charging stations in the
   country; and
  - (e) Perform all other acts analogous to the foregoing, which are necessary and incidental to accomplish the policy objectives of this Act.

SECTION 6. Role of the Energy Regulatory Commission. – In addition to its functions under Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001, the ERC shall:

- (a) Promulgate uniform and streamlined rules, requirements, and/or standards for accreditation and registration of charging station service providers, and connection of charging stations to the distribution system as well as requirements of DUs from charging station service providers;
- 22 (b) Ensure that charging stations are compliant with the PEC, PDC, PGC, and other relevant standards;
  - (c) Conduct regular inspections of charging stations to ensure their compliance with relevant standards, rules, and regulations;
  - (d) Exercise exclusive jurisdiction over all matters that pertain to rate setting in this Act;
    - (e) Regulate the rates charged by DUs to charging stations, taking into account, among others, the promotion of efficiency, the unique requirements of charging stations, and their impact on a DU's demand profile and distribution system;
      - (f) Mandate unbundling of charging fees imposed by for-fee charging stations on electric vehicle users; and
  - (g) Perform all other acts that are analogous to the foregoing, which are necessary and incidental to accomplish the policy objectives of this Act.

- SECTION 7. Role of the Department of Trade and Industry. The DTI shall
- 2 establish national quality and safety standards such as but not limited to
- 3 terminology, product, process, service, and interface for battery packs, electric
- 4 vehicles, charging stations, and other associated equipment.

- 6 SECTION 8. Role of the Department of Transportation. In addition to its
- 7 functions under Executive Order No. 292, otherwise known as the
- 8 Administrative Code of 1987, as amended by Republic Act No. 10844,
- 9 otherwise known as the Department of Information and Communications
- 10 Technology Act of 2015, the DOTr shall:
- 11 (a) Formulate a strategic framework for the roll-out of electric public utility 12 vehicles, which shall be included in the Electric Vehicle Roadmap;
  - (b) Assist the DOE in the preparation of an Electric Vehicle Roadmap; and
  - (c) Promulgate guidelines for the registration of electric vehicles.

15 16

17

18

19

20

21

22

23

24

25

26

27

28

29

13

14

- **SECTION 9. Manufacture and Importation.** The following activities shall be included in the IPP:
  - (a) The purchase and importation of capital equipment, spare parts, and components used in the manufacture or assembly of electric vehicles and the construction of charging stations;
  - (b) The manufacture and/or assembly of completely knocked-down parts, semi knocked-down parts, and semi-built units of electric vehicles and the construction of charging stations; and
  - (c) The importation of completely built units of electric vehicles and charging stations.
- Government financial institutions, in accordance with their respective charters, shall provide concessional financial packages for entities engaged in the foregoing activities: *Provided*, that such concessional financial packages shall be granted only to entities recommended and endorsed by the DOE.

- SECTION 10. Use of Electric Vehicles. Electric vehicles shall be granted the following incentives:
- 33 (a) Exemption from the payment of the Motor Vehicle User's Charge 34 imposed by the LTO under Republic Act No. 8794, otherwise known as 35 Motor Vehicle User's Charge Act;

- (b) Exemption from on-street parking fees imposed by local government units pursuant to local traffic and zoning ordinances, and other similar rules and regulations;
- (c) Prioritization in the registration and renewal of registration, and issuance of a special type of vehicle plate by the LTO;
- (d) Exemption from the mandatory Unified Vehicular Volume Reduction Program, Number-Coding Scheme, or other similar schemes implemented by the MMDA, other similar agencies, and local government units; and
- (e) Prioritization with the LTFRB in the approval of applications for franchise to operate, including its renewal, for public utility vehicle operators that are exclusively utilizing electric vehicles.

SECTION 11. Dedicated Parking Slots for Electric Vehicles. – Private and public buildings and establishments constructed after the effectivity of this Act and pursuant to Republic Act No. 6541, otherwise known as the National Building Code of the Philippines, shall designate dedicated parking slots for the exclusive use of electric vehicles: *Provided*, That the number of dedicated parking slots shall be proportional to the total number of parking slots within the building or establishment: *Provided further*, That the use of dedicated parking slots by vehicles other than electric vehicles shall be punishable under Section 20 of this Act: *Provided finally*, That existing private and public buildings and establishments upon the effectivity of this Act shall comply with the foregoing requirements within five (5) years from the effectivity of this Act.

No permit shall be issued for the construction or renovation of a building or establishment unless the owner submits to the building official of the concerned local government unit and the DOE a sworn affidavit that there are parking spaces dedicated for the exclusive use of electric vehicles, and a copy of the building plan incorporating the same.

# SECTION 12. Installation of Charging Stations in Dedicated Parking Slots.

- Dedicated parking slots for electric vehicles in private and public buildings and establishments shall be installed with charging stations. The owner of the private or public building or establishment shall allow a third party charging station service provider to install, operate, and/or maintain the charging station, or enter into any other contractual arrangement with such third party

- charging station service provider: Provided, That the owner of the private or
- 2 public building or establishment may act as its own charging station service
- 3 provider by constituting itself as such subject to the provisions of this Act:
- 4 Provided further, That if a engages in the business of a charging station service
- 5 provider, it shall do so in accordance with Section 26 of Republic Act No. 9136,
- otherwise known as the Electric Power Industry Reform Act of 2001.

SECTION 13. Use of Charging Stations. – Public buildings and establishments shall open the use of the charging stations to the general public. Private buildings and establishments may open the use of the charging stations to the general public, except as otherwise provided in Section 14 of this Act.

All charging stations open to the general public may be for-fee charging stations: *Provided*, that its owner shall comply with Section 16 of this Act.

Stations. Gasoline stations shall designate dedicated spaces for the installation of charging stations, which are open and accessible to the general public: *Provided*, That the owner of the gasoline station shall allow a third party charging station service provider to install, operate, and/or maintain the charging station, or enter into any other contractual arrangement with such third party charging station service provider: *Provided further*, That the owner of the gasoline station may act as its own charging station service provider by constituting itself as such subject to the provisions of this Act: *Provided finally*, That a gasoline station shall not be issued a Certificate of Compliance by the DOE unless the owner submits a sworn affidavit that there is ample space for the construction of charging stations within its establishment.

**SECTION 15. Permits for Charging Stations.** – All government agencies including local government units shall provide for a uniform and streamlined permitting process for the installation, operation, maintenance, replacement, and removal of charging stations.

SECTION 16. Duties and Responsibilities of Charging Station Service Providers. A charging station service provider shall have the following duties and responsibilities:

- (a) Comply with rules, requirements, and standards of the ERC in accordance with Section 6 of this Act, and permits and licenses of government agencies and local government units in accordance with Section 15 of this Act;
- (b) Pay the DU for electricity consumption from the use of the charging station in cases where that the charging station service provider is the owner and/or operator of the charging station; and
- (c) Regularly submit to the DOE an unbundled structure of the price charged to electric vehicle users, in the case of for-fee charging stations owned and/or operated by the charging station service provider.

**SECTION 17.** Sunset Clause for Fiscal Incentives. – Financial incentives provided under Section 9, and Section 10 (a) and (b) shall be available for nine (9) years from effectivity of this Act: *Provided*, That all other incentives shall remain in force from the effectivity of this Act until explicitly repealed: *Provided further*, That the BOI may decide to extend the financial incentives beyond nine (9) years as it may deem necessary.

SECTION 18. Public Access to Information. – The DOE, DOTr, DTI, ERC, LTO, LTFRB, MMDA, local government units, and other relevant government agencies shall allow public access to all data and information related to the implementation of this Act such as number of electric vehicles in the country, incentives available to electric vehicle users, locations of charging stations, rates imposed by DUs on charging stations, and rates imposed by charging Stations on electric vehicle users: *Provided however*, That such access is subject to Section 19 of this Act.

SECTION 19. Confidentiality. – The DOE, DOTr, DTI, ERC, LTO, LTFRB, MMDA, local government units, and other relevant government agencies shall not disclose any proprietary and confidential data unless prior consent of the source or owner of such data has been obtained by the requesting party, and that such disclosure is in accordance with Republic Act No. 10173, otherwise known as the "Data Privacy Act of 2012", and other relevant laws and regulations.

- SECTION 20. Penalties. Without prejudice to civil liability, the following penalties shall be imposed upon any person, both natural and juridical, found guilty of violating Sections 11, 12, and 14 of this Act:
  - (a) First Offense the penalty of *arresto mayor* or a fine of twenty thousand pesos (PhP 20,000.00), or both, at the discretion of the court;
    - (b) Second Offense the penalty of *prision correctional* or a fine of fifty thousand pesos (PhP 50,000.00), or both, at the discretion of the court; and
  - (c) Third Offense the penalty of *prision mayor* or a fine of eighty thousand pesos (PhP 80,000.00), or both, at the discretion of the court.

SECTION 21. Congressional Oversight. – The JCPC shall exercise oversight powers over implementation of this Act. The DOE, DOTr, DTI, ERC, LTO, LTFRB, MMDA, and other relevant government agencies shall submit annual reports, which shall include but not be limited to latest relevant data, implementation reports, and regulatory issuance, to the JCPC not later than the fifteenth day of September.

SECTION 22. Implementing Rules and Regulations. - The DOE, in consultation with DOTr, DTI, ERC, LTO, LTFRB, MMDA, PCC, and other relevant government agencies and electric power industry stakeholders, shall issue the implementing rules and regulations of this Act within sixty (60) days upon its effectivity.

**SECTION 23.** Separability Clause. – Any portion or provision of this Act, which may be declared unconstitutional or invalid shall not have the effect of nullifying other portions or provisions hereof.

**SECTION 24.** Repealing Clauses. – All laws, ordinances, rules, regulations and other issuance or parts thereof, which are inconsistent with this Act, are hereby amended, modified, or repealed accordingly.

**SECTION 25. Effectivity Clause.** – This Act shall take effect fifteen (15) days after its publication in at least two (2) newspaper of general circulation.

Approved,