

DEPARTMENT	CIRCULAR NO.	
	UIIVUULAIV IVU.	

## PROVIDING FOR A POLICY FRAMEWORK ON THE GUIDELINES FOR THE DEVELOPMENT, ESTABLISHMENT, AND OPERATION OF ELECTRIC VEHICLE CHARGING STATIONS (EVCS) IN THE PHILIPPINES

**WHEREAS,** Republic Act No. (RA) 7638 or the "Department of Energy (DOE) Act of 1992" declares as a policy of the State, among others, to ensure a continuous, adequate, and economic supply of energy with the end in view of ultimately achieving self-reliance in the country's energy requirements through the integrated and intensive exploration, production, management, and development of the country's indigenous energy sources;

**WHEREAS**, Sections 5 (e) and (h) of RA 7638 authorizes the DOE to regulate private sector activities as provided under existing laws providing therein an environment conducive to free and active private sector participation and investment in all energy activities, as well as to formulate and implement a program for the accelerated development of non-conventional energy systems and the promotion and commercialization on its applications;

**WHEREAS**, Sections 2 (g) and (k) of RA 9136 or the "Electric Power Industry Reform Act of 2001 (EPIRA)" states that it is the policy of the State to assure socially and environmentally compatible energy sources and infrastructures, and to encourage the efficient use of energy and other modalities of demand side management;

**WHEREAS**, Sections 37 (g) and (m) of EPIRA mandates the DOE to establish and administer programs for the exploration, transportation, marketing, distribution, utilization, conservation, stockpiling, and storage of energy resources of all forms, whether conventional or non-conventional, and formulate and implement a program for the accelerated development of non-conventional energy systems and the promotion and commercialization of its applications;

**WHEREAS**, RA 11285 or the "Energy Efficiency and Conservation (EEC) Act" declares that it is the policy of the Government to promote a judicious conservation and efficient utilization of energy resources including its use in the transport sector being one of the energy consuming sector;

**WHEREAS**, Section 3 of the EEC Act provides for the establishment of a framework for introducing and institutionalizing fundamental policies on energy efficiency and conservation, including the promotion of efficient and judicious utilization of energy, increase in the utilization of energy efficiency and renewable energy technologies, and the delineation of responsibilities among various government agencies and private entities;

**WHEREAS**, Sections 14 and 15 of the EEC Act mandates the DOE to develop minimum energy performance (MEP) and prescribe energy labels for all energy-consuming products, devices, and equipment, and enforce a mandatory energy efficiency labeling system for identified energy-consuming products to promote energy efficient products and raise public awareness on energy saving;

**WHEREAS**, Section 23 of the EEC Act authorizes the DOE to visit designated establishments to inspect energy-consuming facilities, evaluate energy management systems and procedures, identify areas for efficiency improvement, and verify energy monitoring records and reports;

**WHEREAS**, Section 29 of the EEC Act tasks the DOE to formulate policies, plans, and programs related to alternative fuels and new and advanced energy technologies' development towards socially and environmentally responsive and effective utilization of energy resources; and develop and manage alternative fuels and energy technology program;

**WHEREAS**, Section 32 of Department Circular No. DC2017-11-0011 or the "Revised Retail Rules" provides that taking into consideration public safety, the DOE reserves the right to issue appropriate and separate regulations relative to the conduct of electric vehicle (EV) charging stations, battery swapping and other similar activities. Any Retail Outlet may only engage in such activities after notification to the DOE.

**WHEREAS,** Rule VI, Section 33 of Department Circular No. DC2019-11-0014 or the Implementing Rules and Regulations (IRR) of RA 11285, mandates the DOE to issue corresponding guidelines in ensuring electrical safety standards and system reliability;

**WHEREAS**, Section 5.3.7.1 EV Charging Stations of Department Circular No. DC2020-02-0003 entitled "Providing a National Smart Grid Policy Framework for the Philippine Electric Power Industry and Roadmap for Distribution Utilities" allows for the installation of charging stations under non-regulatory pricing (prevailing rates) and market-based environment;

**WHEREAS**, Section 2 of Department Circular No. DC2020-10-0023 entitled "Policy Framework for the Development of Fuel Economy Rating, Fuel Economy Performance, and Related Energy Efficiency and Conservation Policies for the Transport Sector and Other Support Infrastructures" provides that the development and operation of EV and EV Charging Infrastructures shall be structured to facilitate the safe operation and growth while ensuring equitable non-discriminatory and open access for all;

**WHEREAS**, Section IX of the Annex of Department Circular No. DC2020-12-0026 or the "Adoption of the Guidelines on Energy Conserving Design of Buildings" provides for the guidance for EV Parking with Charging Stations in buildings and establishments covered by RA 6541 or the National Building Code of the Philippines;

WHEREAS, Memorandum Order No. 50 entitled "Approving the 2020 Investment Priorities Plan" grants incentives in the establishment of charging/refueling stations for alternative energy vehicles except LPG-run vehicles pursuant to Article 29 of Executive Order No. (EO) 226, series of 1987 or the "Omnibus Investments Code of 1987";

WHEREAS, the DOE adopts and confirms the Philippine EV Policy Analysis Report from the Department of Trade and Industry (DTI) showing that EVs have the lowest energy cost compared to internal combustion engine (ICE) vehicles, which are mostly gasoline-fueled. Also, EV charging stations are significant in managing the driving range anxiety and in supplying power for EV, wherein daily travel distance could exceed the vehicle range. In order to ensure the success of EV adoption programs and to maximize combined economic, social, energy security and environmental benefits, EV diffusion interventions should be streamlined through regulations, complimentary industry development and demonstration and Information Education Campaign (IEC), among other forms. Among the key strategies for the EV adoption is to formulate installation standards and permitting protocols for EV charging, and requirements on the adoption of EVs and EVCS;

WHEREAS, the DOE adopts the provisions of Part 1: General Requirements of Philippine National Standard - International Commission (PNS IEC) 61851-1:2017 on the subject of Scope, Terms and Definitions, Classifications, Charging Modes and IP Degrees;

**WHEREAS**, the emerging EV technology presents opportunities for improving energy efficiency of transportation in support of the government's energy independence agenda;

**WHEREAS**, the DOE solicited inputs from the stakeholders from xx March 2021, and conducted virtual public consultations xx April 20201 for Luzon, Visayas and Mindanao on the draft issuance; and

**WHEREAS**, there is a need to consolidate and harmonize all existing issuances to ensure the safe, efficient operations and system reliability, and to accelerate investments in EVCs in the country.

**NOW**, **THEREFORE**, for and consideration of the foregoing premises, the DOE hereby issues the following policy guidelines on the overall development and establishment of EVCS:

**Section 1. Title.** This Department Circular shall be known as "Providing for a Policy Framework on the Guidelines for the Development, Establishment, and Operation of Electric Vehicle Charging Stations (EVCS) in the Philippines" or "Electric Vehicle Charging Stations (EVCS) Policy Guidelines."

**Section 2. Scope and Coverage.** This Department Circular covers all activities related to the establishment, use, and the operation of EVCs.

**Section 3. Definition of Terms.** For purposes of this Department Circular, the definition of terms shall be as follows:

- a. **Charging fee** refers to the amount imposed on users in exchange for the use of facilities of charging stations.
- b. **Charging mode** refers to method for connection of an EV to the supply network to supply energy to EV.
- c. **Distribution utility (DU)** refers to any electric cooperative, private corporation, or government-owned utility which has a franchise or authority to operate a distribution system including those whose franchise or authority covers economic zones as provided under EPIRA.
- d. **Energy End User** refers to all individuals and entities which consume energy to include households, industrial and commercial customers, power plants, distribution utilities, and transmission utilities.
- e. **Energy Utilization Management Bureau (EUMB)** refers to the DOE bureau responsible for the plans, and programs related to emerging EV technology's development and its effective utilization.
- f. **Electric Vehicle (EV)** refers to a vehicle with at least one electric drive for vehicle propulsion. For the purpose of this Department Circular, it includes battery EV and plug-in hybrid EV (PHEV).
- g. Electric Vehicle Charging Station (EVCS) refers to all electric equipment for delivery of alternating current (AC), direct current (DC), or both DC and AC to EVs, installed in

- an enclosure with special control functions and communications, and may be located off the vehicles. This shall also refer to electric vehicle supply equipment. For the purpose of this Department Circular, EVCS shall include battery swapping stations.
- h. **EVCS Operator** refers to person/entity engaged in the EV fleet management and EVCS operation for private, commercial, and public use which are installed in private/public buildings, establishments, and retail outlets of liquid fuels that are available and may be used by the public for a fee.
- Indoor use refers to EVCS intended for operation in a building compliance to the minimum requirements of the national codes, and existing and future regulations issued by the DOE.
- j. Minimum Energy Performance (MEP) refers to a performance standard which prescribes a minimum level of energy performance for the commercial, industrial, and transport sectors, and energy-consuming products including appliances, lighting, electrical equipment, machinery, and transport vehicles that must be met or exceeded before they can be offered for sale or used for residential, commercial, transport, and industrial purposes.
- k. **Outdoor use** refers to EVCS capable of operating under specific range of outdoor conditions compliance to the minimum requirements of the national codes, and existing and future regulations issued by the DOE.
- Philippine National Standard (PNS) refers to a standard developed/adopted, established by consensus and published by the Bureau of Philippine Standards of the Department of Trade and Industry (DTI-BPS) that contains rules, guidelines or characteristics for products or related processes and production methods.
- m. **Private buildings and establishments** refer to residential, commercial, and industrial structures owned or leased by private persons or judicial entities, and in the case of commercial and industrial structures, whose goods and services are available to the public.
- n. **Private charging stations** refer to charging stations installed in private buildings and establishments which may be open for use by the public for a fee.
- o. **Public buildings and establishments** refer to structures owned or leased by the government through its departments, agencies, bureaus, offices, corporations, and local government units (LGUs).
- p. **Public charging stations** refer to charging stations installed in public buildings and establishments, and gasoline stations, which are available for use by the public for a fee.
- q. Retail outlet refers to a dispensing station, refilling station facility or business establishment which sells or dispense liquid fuels directly to motorist, end-users or other consumers as provided under the Revised Retail Rules.

Section 4. Notice Prior to Engagement in any Activity of Business in the operation and establishment of EVCS. Prior to initial engagement in the proposed activity or prior to the construction of the EVCS facilities, any person/entity who may own, establish, and operate EVCS and in any similar activities is to file a notice with the EUMB.

The written notice addressed to the EUMB (Annex A) is to be submitted with permits and licenses from relevant government agencies and Local Government Units (LGUs), to wit:

- a. SEC or DTI Registration;
- b. Business Permit issued by the LGU having jurisdiction of the place where the EVCS is located:
- c. Project or business plan indicating the scope of operation/activity;
- d. List of facilities and proof of the availability of such facilities to support the proposed business;
- e. Locational/zoning clearance;
- f. Fire Safety Inspection Certificate of facilities;
- g. Permit on the suitability of facilities for the proposed operation (Certificate of conformance of facilities to national or accepted international standards on health, safety and environment);
- h. Product Liability Insurance Certificate or Product Certificate of Quality; and
- i. Environmental Compliance Certificate issued by the Department of Environment and Natural Resources (DENR), whenever applicable

Any person/entity already legally engaged in any activity in the operation and establishment of EVCS upon the effectivity of this Department Circular is deemed to have complied with this notice requirement. However, they are still required to comply with Section 11 of this Department Circular.

**Section 5. Electric Vehicle Charging Station General Requirements.** The Building Code of the Philippines, the Philippine Electrical Code, and DC2020-12-0026 provide minimum requirement for on the location and installation of EVCS and its electrical-related components that cover the safety, accessibility, operability, sustainability, and integrity of the EVCS: *Provided That, all* subsequent regulations under any relevant government agency must be observed in the development and establishment of EVCS.

**Section 6. Electric Vehicle Charging Station Classification.** Pursuant to DTI-BPS issued PNS, Electric Vehicle Charging Station is classified as follows:

- 6.1 **EVCS Mode 1** refers to EVCS that has a method for the connection of an EV to a standard socket-outlet of an AC supply network. The plug and cable that will be used should comply to the existing Philippine National Standards (PNS) for electric plug and cable. EVCS classified as Mode 1 shall have rated values for current and voltage that shall not exceed 16 A and 250 V AC, single-phase and 16 A and 480 V AC, three-phase.
- 6.2 **EVCS Mode 2** refers to EVCS that has a method for the connection of an EV to a standard socket-outlet of an AC supply network with a control system for the protection against electric shock placed between the plug and the EV. EVCS classified as Mode 2 shall have rated values for current and voltage that shall not exceed 32 A and 250 V AC single-phase and 32 A and 480 V AC three-phase.
- 6.3 **EVCS Mode 3** refers to EVCS that has a method for the connection of an EV to an AC EVCS permanently connected to an AC supply network with a control system that extends from the AC EVCS to the EV. Protective earthing shall be provided.
- 6.4 **EVCS Mode 4** refers to EVCS that has a connection of an EV to an AC or DC supply network utilizing DC EVCS with a control system that extends from the DC EVCS to the EV.

**Section 7. Electric Vehicle Charging Station Safety Operation.** All electrical-related components of the EVCS shall be compliant to Section 5 of this Department Circular for the welfare of the user from any electrical-related incidents: *Provided That,* compliance includes a listed system of protection against electric shock of personnel and classification according to the charging modes and functions for energy transfer to EVs in accordance with the existing PNS: *Provided Further That,* a minimum ingress protection (IP) for the enclosures used indoor is at least IP41 and those used outdoor is at least IP44, to provide protection against solid foreign objects and water that may cause electric shock and abnormal operation of the EVCS.

Consistent with existing safety standards and regulations of the DTI-BPS, all components of the EVCS such as but not limited to plugs, sockets, cables etc. are to be certified with the Philippine Standard (PS) license and/or by the Import Commodity Clearance (ICC) certificate.

**Section 8. Electric Vehicle Charging Station Dedicated Locations.** Consistent with DC2017-11-0011 and DC2020-12-0026 private and public buildings and establishments including retail outlets may designate dedicated parking slots that will be installed with EVCS for the use and charging of EVs.

The owner of the private/public building, establishment, or retail outlets of liquid fuels may allow a third-party charging station provider to install, operate, and/or maintain the charging station, or enter any other contractual arrangement with such third-party charging station service provider in fair, reasonable, and nondiscriminatory terms: *Provided That*, the third-party charging station provider complies with the requirements of this Department Circular.

The location of the EVCS on dedicated parking slots and retail outlets shall display proper energy labels, road signs, protocol signs, and pavement marking pursuant to RA11285, DC2020-12-0026, and Highway Safety Design Standards Manual of the Department of Public Works and Highways (DPWH).

All public and private charging stations may be allowed to impose and collect reasonable charging fees, subject to future laws on EVCS and guidelines to be issued by the ERC and/or other relevant government agencies.

Section 9. Electric Vehicle Charging Station Basic Labeling and Marking Requirements. An EVCS energy label and markings shall contain the following information marked in a durable manner and located in place such that they are visible and legible during installation and maintenance:

- a. EVCS manufacturer's name, initials, trademark, or distinctive marking;
- b. Type designation of identification number or any other means of identification, making it possible to obtain relevant information from the EVCS manufacturer;
- c. Identification of the EVCS as DC/AC output;
- d. Rated voltage (input and output if different);
- e. Rated current (input and output if different);
- f. Power input and output;
- g. Protection grade;
- h. Electricity consumption (kWh);

- i. Frequency; and
- j. Charging interface

**Section 10. EVCS Operators.** All interested EVCS operators are enjoined to coordinate and cooperate with the DU within the area of operation prior to EVCS construction and to:

- a. Comply with the rules, requirements, and standards set forth in this Department Circular, and permits and licenses of government agencies and LGUs.
- b. Comply with all relevant health, safety, and environmental laws, rules, and regulations related to the development, establishment, and operation of EVCS in the Philippines.
- c. Ensure that information on restrictions on the use of charging points are made available in a transparent and non-discriminatory manner to all users at all times.
- d. Ensure that information on the geographical location of public recharging points is available to all users.

The EVCS operator, in order to ensure the integrity and sustainability in the operation of the charging station, shall have the following additional responsibilities:

- a. Costs for damage to the charging station, common area, exclusive use common area, or separate interests resulting from the installation, maintenance, repair, removal, or replacement of the charging station.
- b. Costs for the maintenance, repair, and replacement of the charging station until it has been removed and for the restoration of the common area after removal.
- c. Cost of electricity associated with the charging station.
- d. Disclose to prospective buyers the existence of any charging station of the owner and the related responsibilities of the EVCS operator under this section.

The DOE may issue separate issuances on the safe operation and performance of other EVCS infrastructure intended for charging/refueling fuel-cell vehicles powered by hydrogen or other non-conventional emerging fuels.

**Section 11. Reportorial Requirements.** The following reportorial requirements are for submission to the EUMB by any person/entity who will engage or intends in any activity in the EVCS:

- a. Prior to Operation in Proposed Business or Activity Compliance with Section 4 of this Department Circular
- b. Monitoring Reports. Energy performance monitoring reports shall comply with the requirements under Section 12 of this Department Circular.

**Section 12. Monitoring Energy Performance of EVCS Report Submission.** EVCS operator shall submit to EUMB monthly reports of their actual consumption from EVCS using the attached EVCS Operation and Specifications Report Form (Annex B) and MEP for EVCS Monitoring Report (Annex C). This will be used to develop the minimum energy performance

for EVCS subject to review and updates periodically by the DOE or as may arise as needed. Submissions are due on the fifteenth (15th) day of every month.

**Section 13. Enforcement, Monitoring, Verification, and Inspection.** Sections 6 to 11 of DC2020-10-0023 shall be observed in the conduct of enforcement, monitoring, and verification activities.

In the inspection of energy-consuming facilities, duly authorized inspectors from the EUMB or its authorized representatives shall undertake random and unannounced inspections to conduct, among others, checking of charging station and market monitoring to verify presence of EVCS' labeling and marking requirements as required in this Department Circular.

The EVCS shall maintain a responsible person who will be always present: *Provided That,* for this purpose, the EVCS operator or any person acting as such shall be considered as responsible person before whom the duly authorized inspectors can present their proper identifications and under whose authority the inspection shall proceed.

**Section 14. Regulatory Support.** Consistent with its mandate under EPIRA, the Energy Regulatory Commission (ERC) is encouraged to deregulate the rates of the cost of electricity for EVCS to create competition among EVCS operators, increase the industry participation in EVCS operations and assist the shift to more energy efficient mode of transportation.

**Section 15. Incentives.** The DOE through EUMB may certify and endorse to the DTI-BOI any person/entity that intends to engage in any activity related to the development, establishment, and operation of EVCS in the Philippines for the availment of fiscal incentives as provided under EO 226. Person/entities seeking endorsement for availment shall provide proof of project sustainability that include, but not limited to the following:

- a. Feasibility Study
- b. Cost Benefit Analysis.

Attached as Annex D are the template application letter and a copy of the flowchart showing the endorsement procedure and its timeline.

**Section 16. Reportorial Obligation of EUMB.** The EUMB shall provide an annual report on the implementation of this Department Circular.

**Section 17. Information, Education and Communication Activities.** Pursuant to Section 85 of the EEC IRR, the DOE shall develop and undertake a national awareness and advocacy program covering energy efficiency and conservation and pursue partnerships with relevant stakeholders for the appreciation of this Department Circular.

**Section 18. Review Clause.** In light of the dynamic nature of the industry, the DOE shall periodically review, update and issue the necessary rules relative to the operation of the EVCS.

**Section 19. Separability Clause.** If for any reason, any section or provision of this Department Circular is declared unconstitutional or invalid, the other parts or provision hereof which are not affected hereby shall continue to be in full force and effect.

**Section 20. Amendment Clause.** The DOE may revise and supplement and issue related guidelines, circulars and other subsidiary issuances as it deems necessary for the effective implementation of the various provisions of this Department Circular.

**Section 21. Repealing Clause.** The provisions of other circulars, orders, issuances, rules and regulations, which are inconsistent with the provisions of this Department Circular are hereby repealed, amended, modified or superseded accordingly.

**Section 22. Effectivity.** This Department Circular shall take effect immediately a day after its complete publication in at least two (2) national newspapers of general circulation. Copies of this Department Circular shall be filed with the University of the Philippines Law Center - Office of the National Administrative Register.

Issued at the Rizal Drive, Energy Center, Bonifacio Global City, Taguig City.

ALFONSO G. CUSI Secretary