Republic of the Philippines
DEPARTMENT OF ENERGY

DEPARTMENT CIRCULAR NO. _____

PROVIDING A NATIONAL POLICY AND GENERAL FRAMEWORK, ROADMAP, AND GUIDELINES FOR HYDROGEN IN THE ENERGY SECTOR

WHEREAS, Section 2 of Republic Act No. (RA) 7638, as amended, or the "Department of Energy (DOE) Act of 1992" declares it the 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, Section 4 of RA 7638, as amended, mandates the DOE to prepare, integrate, coordinate, supervise and control plans, programs, projects and activities of the Government related to energy exploration, development, utilization, distribution, and conservation;

WHEREAS, Section 5 of RA 7638, as amended, provides that the DOE shall have the power to, among others, "Establish and administer programs for the exploration, transportation, marketing, distribution, utilization, conservation, stockpiling and storage of energy resources of all forms, whether conventional or nonconventional; Assess the requirements of, determine priorities for, provide direction to, and disseminate information resulting from energy research and development programs for the optimal development of various forms of energy production and utilization technologies;

WHEREAS, Section 5 (g) of RA 7638 further authorized the DOE to formulate and implement programs, including a system of providing incentives and penalties, for the judicious and efficient use of energy in all energy consisting sectors of the economy;

WHEREAS, Section 2 of Presidential Decree No. 87, s. 1972 (PD 87), as amended, otherwise known as the "Oil Exploration and Development Act of 1972" declares it to be the policy of the State "To hasten the discovery and production of indigenous petroleum through the utilization of government and/or private resources, local and foreign, under the arrangements embodied in this Act which are calculated to yield the maximum benefit to the Filipino people and the revenues to the Philippine Government for use in furtherance of national economic development, and to assure just returns to participating private enterprises, particularly those that will provide the necessary services, financing, and technology and fully assume all exploration risks";

WHEREAS, Section 37 of RA 9136 or the "Electric Power Industry Reform Act of 2001 (EPIRA), provides that the DOE, in addition to its existing powers, shall among others, "Formulate policies for the planning and implementation of a comprehensive program for the efficient supply and economical use of energy consistent with the approved national economic plan and with policies on environmental protection and conservation and maintenance of ecological balance, and provide a mechanism for the integration, rationalization, and coordination of the various energy programs of Government and Ensure the reliability, quality, and security of supply of electric power;

WHEREAS, RA 9513 or the "Renewable Energy (RE) Act of 2008", declares it the policy of the State to "Increase the utilization of RE by institutionalizing the development of national and local capabilities in the use of RE systems, and promoting its efficient and cost-effective commercial application by providing fiscal and non-fiscal incentives";

WHEREAS, Section 15 of RA 9513, grants the incentives enumerated therein to RE developers of renewable energy facilities including hybrid systems, in proportion to and to the extent of the RE component, for both power and non-power applications, after securing a Certificate of Endorsement from the DOE and registration with the BOI;

WHEREAS, RA 11234 or the "Energy Virtual One Stop Shop (EVOSS) Act" provides for the streaming of the permitting process of power generation, transmission and distribution projects;

WHEREAS, Section 3 of RA 11285 or the "Energy Efficiency and Conservation (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, Section 3 of RA 11572 or the "Philippine Energy Research and Policy Institute (PERPI) Act", provides for the establishment of the PERPI for the enhancement of the country's capability for energy research and policy development;

WHEREAS, Section 2 of RA 11697 or the "Electric Vehicle Industry Development Act (EVIDA)" declares it the policy of the State to "Promote and support innovation in clean, sustainable, and efficient energy to accelerate social progress and human development by encouraging public and private use of low emission and other alternative energy technologies";

WHEREAS, the Philippine Energy Plan 2020-2040 considers the role of hydrogen, as another viable alternative and cleaner source of energy for the Philippines, as it has been globally recognized to provide a diverse range of energy applications, including distributed power, backup power, portable power, auxiliary power for passenger and freight vehicles, among others;

WHEREAS, on 25 November 2020, the DOE issued Special Order No. SO2020-11-0041 creating the Hydrogen and Fusion Energy Committee (HFEC), tasked to conduct a study on the impact of hydrogen to the country's energy mix as well as the possibility of hydrogen as an option for power and transport fuel supply;

WHEREAS, on 20 April 2023, the DOE issued Department Circular No. DC2023-04-0008, "Prescribing the Policy for Energy Storage System in the Electric Power Industry", in recognition of the applications and the benefits of energy storage system (ESS) as an emerging technology in the improvement of the electric power system;

WHEREAS, on ___, the DOE issued Department Circular No. DC_____ or the, "Guidelines on the Awarding of Service Contracts for the Exploration, Development, and Production of Native Hydrogen" recognizes that the exploration, development, and production of native hydrogen is governed by PD 87, as amended, and shall be implemented under the rules, regulations, issuances and procedures issued by the DOE relevant to the conduct of petroleum exploration, development and production;

WHEREAS, the potential of utilizing hydrogen resources, if optimally developed, will play a major role in improving the country's energy security by reducing dependence on imported fossil fuels, and in achieving the country's goal for a low-carbon future;

WHEREAS, there is a need to consolidate and harmonize all existing issuances to ensure the safe, effective, and efficient system operation to accelerate development and investments in hydrogen production and utilization; and

WHEREAS, the draft Circular was presented to, and comments solicited from the stakeholders on _____ in the National Capital Region, Luzon, Visayas and Mindanao.

NOW, THEREFORE, in consideration of all the foregoing premises, the DOE hereby issues, adopts and promulgates the following policy framework and roadmap for the development and utilization of hydrogen in the energy sector:

I. GENERAL PROVISIONS

Section 1. Title. This Department Circular shall be known as the "Hydrogen Energy Guidelines."

Section 2. Guiding Principles. As part of the country's efforts to achieve a more sustainable and low-carbon future in the energy sector and the reduction of greenhouse gas (GHG) emissions, the DOE recognizes the role of hydrogen in the energy transition as an innovation capable of meeting future energy demand with various applications in the power, transportation, commercial, and industrial sectors. The national policy framework is centered on four cornerstones:

2.1 Energy Security. Diversify energy sources and increase utilization of indigenous resources in the production of hydrogen and its derivatives thereby reducing dependence on imported oil mitigating the country's vulnerability to energy supply disruptions and fluctuations in the global energy market.

2.2 Environmental Sustainability. Promote the acceleration of RE, alternative fuels and emerging technologies and intensify EEC measures supporting the initiatives to mitigate GHG and the commitment to the Nationally Determined Contribution for the Paris Agreement.

2.3 Research and Technological Development. Drive innovation in the industry through collaboration with science and technology institutions in undertaking research and studies, implement technology demonstration and pilot projects, encourage technology transfer and adoption, and strengthen capacity-building programs.

2.4 Access to Financing and Investments. Accelerate the development of the industry through the formulation of sustainable financing program and investment roadmap including the establishment of fiscal and non-fiscal incentives and institution of government financial support mechanisms.

Section 3. Scope and Coverage. This Department Circular covers all activities related to the establishment, construction, operation, maintenance, decommissioning, and disposal of hydrogen projects or facilities which involves research, development, production, storage, transmission, distribution, and utilization of hydrogen energy resource: *Provided That*, all activities in relation to the exploration and development of native hydrogen and native hydrogen derivatives shall be governed by the applicable provisions implementing PD 87.

Section 4. Definition of Terms. For purposes of this Department Circular, the definition of terms shall be as follows:

a. Co-firing – refers to the combustion of two (2) or more kinds of fuels in the same combustion system;

b. Decommissioning – refers to the permanent retirement of a hydrogen energy facility or unit from operation upon reaching its maximum economic life or discontinued operation in the facility;

c. Disposal – refers to the physical removal of equipment or material used that are no longer needed including management and handling of waste generated in the operation of hydrogen energy industry activity;

d. Energy Storage System or "ESS" – refers to a facility capable of absorbing energy directly from the Grid or Distribution System, or from an RE Plant or from a Conventional Plant connected to the Grid or Distribution System and storing it for a time period, and injecting stored energy when prompted, needed to ensure reliability and balanced power system; ESS technologies shall include, but not limited to Battery Energy Storage System (BESS), Compressed Air Energy Storage (CAES), Flywheel Energy Storage (FES), and Pumped-Storage Hydropower;

e. EUMB – refers to the Energy Utilization Management Bureau of the DOE;

f. Energy Virtual One-Stop Shop or "EVOSS" – refers to an online system that allows the coordinated submission and synchronous processing of all required data and information, and provides a single decision-making portal for actions on applications for permits or certifications necessary for, or related to, an application of a proponent for new power generation, transmission, or distribution projects;

g. Fossil Fuel – refers to the non-RE sources such as coal, coal products, natural gas, derived gas, crude oil, and petroleum products;

h. Fuel cell – refers to the electrochemical device that directly produce electricity from the conversion of fuel (e.g., hydrogen) with an oxidant without any physical or chemical consumption of the electrodes or electrolyte;

i. Green Hydrogen – refers to the hydrogen produced through electrolysis by RE resources/facilities or through reforming of biogas or biochemical conversion of biomass;

j. Green Hydrogen Derivatives – refers to the hydrogen derivatives produced using RE;

k. Grid Electricity – refers to the electricity sourced from high voltage backbone system of interconnected transmission lines, substations and related facilities;

l. Hybrid System – refers to any power or energy generation facility which makes use of hydrogen energy together with other types of energy system (i.e., utilizing both conventional fuel/RE and hydrogen energy technologies) with a minimum of ten (10) megawatts or ten percent (10%) of the annual energy output provided by the RE component and provided further that hydrogen is sourced from RE in accordance with the provisions of the Renewable Energy Act of 2008;

m. Hydrogen – refers to clean alternative fuel with chemical formula H_2 that can be used as an energy carrier to store, move, and deliver energy from other sources;

it is also considered as the simplest and most abundant element and naturally exists in gas form and has a boiling point of -253 ^{o}C;

n. Hydrogen Derivative – refers to compounds or substances that contain hydrogen atoms and/or are produced through reactions involving hydrogen such as but not limited to ammonia (NH_3) and liquid organic hydrogen carriers, and may be considered as suitable hydrogen transport medium or hydrogen carrier;

o. Hydrogen Energy – refers to the generated energy from the use of hydrogen and/or hydrogen derivatives supplied to all practical uses needed with environmental, social, and economic benefits;

p. Hydrogen Energy Industry Activity – refers to activities related to the establishment, construction, operation, maintenance, decommissioning, and disposal of hydrogen facilities for production, storage, transmission, distribution, and utilization of hydrogen energy resource for power or non-power applications;

q. Hydrogen Energy Industry Committee or "HEIC" – refers to a committee established to spearhead the activities related to the development of the hydrogen energy industry;

r. Hydrogen Energy Industry Participant – refers to any person or entity, natural or juridical, engaged or intending to engage in any Hydrogen Energy Industry Activity, pursuant to this Department Circular;

s. Hydrogen Energy Project – refers to facility undertaking any hydrogen energy industry activity;

t. Hydrogen Fueling Station or "HFS" – refers to a facility with fuel dispenser equipment for the delivery of hydrogen as fuel for vehicles that run on hydrogen fuel;

u. Hydrogen Multigeneration Plant – refers to a facility which simultaneously produces hydrogen and/or its derivatives with other forms of energy;

v. Native Hydrogen or Natural Hydrogen– refers to hydrogen gas that occurs naturally in geological formations, and can be associated with methane and other hydrocarbon gases and can be considered as mineral gas;

w. LGU/LGUs – refers to the Local Government Unit or Local Government Units;

x. Nuclear Energy – refers to the form of energy released from the nucleus, the core of atoms which is made up of protons and neutrons;

y. Renewable Energy (RE) – refers to the energy obtained from natural resources that can be replenished over an indefinite period of time. This includes, among others, biomass, geothermal, solar, hydro, ocean, wind, and other emerging RE technologies; and

z. Renewable Energy Trust Fund or "RETF" – refers to the trust fund established to enhance the development and greater utilization of renewable energy.

II. ROLE OF HYDROGEN IN THE ENERGY SECTOR

Section 5. Exploration, Development, and Production of Native Hydrogen. Guidelines for the exploration, development, and production of native hydrogen shall be administered by the DOE, through its Energy Resources Development Bureau, in accordance with provisions of PD 87, as well as the rules and regulations issued implementing the same.

Section 6. Hydrogen Energy Value Chain. The hydrogen value chain involves facilities and activities in the fields of production, transmission, distribution and storage, utilization, import, and export of hydrogen in the energy sector as outlined in this Department Circular.

6.1 Production. Hydrogen production shall be classified according to its energy resource such as, but not limited to, RE, nuclear energy, fossil fuels, and electricity from the grid, chemical reactions, among others.

In recognition of its role in the energy transition, production of hydrogen and its derivatives from RE (green hydrogen and green hydrogen derivatives) shall be preferred and shall be considered as renewable energy projects.

Production of hydrogen and its derivatives using nuclear energy may be recognized as an energy efficiency project, in accordance with the Energy Efficiency and Conservation Act or RA11285, provided that the project shall be qualified under the Strategic Investment Priorities Plan of the BOI.

6.2 Transmission, Distribution, and Storage. From point of production, hydrogen can be transported, distributed, and stored in compressed gas or liquid form or by conversion to hydrogen derivatives, such as ammonia, liquid organic hydrogen carriers, solid carriers, among others. Storage systems refer to specialized storage tanks and underground storage systems, among others. Transmission and distribution of hydrogen and its derivatives can be done through dedicated pipelines, chemical carriers, rail, or maritime distribution systems, and fueling stations.

6.3 Utilization. Prospective uses of hydrogen in the energy sector shall be divided into power generation & electricity storage applications and non-power applications. Power generation and electricity storage shall include use of electricity produced from hydrogen energy supplied to the grid or as backup and off grid power supply, industrial scale energy storage, co-firing with hydrogen derivatives in existing fossil fuel power plants, and hydrogen and its derivatives multigeneration systems.

For the purposes of this Department Circular, a hydrogen storage facility shall be considered as an ESS and shall be referred to as a Hydrogen Energy Storage System (HESS). HESS is a technology that utilizes hydrogen gas to store energy for later use in power generation and shall observe the requirements outlined in Department Circular No. DC2023-04-0008: *Provided That*, the documentary requirements previously submitted shall no longer be submitted for this Department Circular: *Provided further That*, the said HESS facility will notify EUMB in writing of its previous registration under the RE law, the EPIRA, or under other rules and regulations of the Department. *Provided, finally*, that this excludes facilities that produce hydrogen and directly convert it to electricity for power generation in a linear process.

Meanwhile, non-power applications shall include the use of hydrogen as an alternative fuel for industrial, commercial, and transportation sectors.

6.4 Import and Export. Contributing to the global strategy towards decarbonization and exploration of energy solutions, importation and exportation of hydrogen and its derivatives shall be considered in the value chain acknowledging its significance in supplementing domestic demand and utilizing surplus RE.

Section 7. Hydrogen Energy Industry Committee (HEIC). For the implementation of this Department Circular, the DOE hereby organizes the Hydrogen Energy Industry Committee (HEIC).

7.1 Composition. The HEIC shall be composed of DOE Technical Bureaus and Services led by the Undersecretary and Assistant Secretary. The HEIC shall be assisted by the Technical Secretariat which is hereby designated to the EUMB. Likewise, designated members of the HEIC shall be of Director level who shall then appoint their respective alternates, preferably Division Chief and/or Supervisor, to ensure appropriate representation and continuity in the performance of their respective functions.

Chairperson:	Undersecretary
Vice Chairperson:	Assistant Secretary
Technical Secretariat:	EUMB – Alternative Fuels and Energy Technology Division (EUMB-AFETD)

Members:

Electric Power Industry Management Bureau (EPIMB)
Energy Policy and Planning Bureau (EPPB)
Energy Resource Development Bureau (ERDB)
Energy Research and Testing Laboratory Services (ERTLS)
Energy Utilization Management Bureau (EUMB)
Financial Services (FS)
Oil Industry Management Bureau (OIMB)
Renewable Energy Management Bureau (REMB)
Legal Services (LS)

7.2 Mandate and Functions. The HEIC shall oversee the implementation of this Department Circular and shall perform the following functions:

7.2.1 Develop, implement, supervise, monitor, and update the roadmap for hydrogen energy industry in the country;
7.2.2 Study the needed infrastructure for hydrogen energy industry adoption in the Philippines;
7.2.3 Establish hydrogen technical working group who will develop, review, adopt, and update applicable safety codes, environment, facility, and product quality standards for hydrogen energy industry activity;
7.2.4 Represent DOE in Memoranda of Understanding (MOUs), Memoranda of Agreement (MOAs), legislative initiatives, and other engagements related to the development of hydrogen energy industry;
7.2.5 Coordinate and seek assistance from relevant government agencies, international bodies or entities, and other experts on the subject matter, if necessary;
7.2.6 Collaborate with local and international organizations for the conduct of research and development (R&D) related to hydrogen energy industry activities;
7.2.7 Review and consolidate all studies and proposals related to hydrogen energy industry development;
7.2.8 Provide information and technical assistance to stakeholders involved in hydrogen energy industry development;

7.2.9 Prepare the budgetary requirements needed to support the plans and programs for the implementation of this Department Circular;
7.2.10 Select Team Members and Designated Team Leader for purposes of conducting an investigation relative to violations of prohibited acts under Section 23 of this Department Circular and recommend action for HEIC.
7.2.11 Impose fines and penalties upon persons or entities found violating Section 23 of this Department Circular; and
7.2.12 Exercise such other functions as may be necessary and incidental to attain the mandates under this Department Circular.

7.3 Capacity Building. The DOE, through HEIC, shall develop a capacity building and research plan for hydrogen development in the energy sector in collaboration with international counterparts, relevant Government Agencies, universities and colleges, research institutions, and private experts, for the effective implementation of the policy.

Members of the HEIC shall undergo a series of capacity building that will equip and train them particularly in the analysis and evaluation of the hydrogen energy industry data.

7.4 Conduct of HEIC Meetings. Given the advancement of the industry, the HEIC shall meet at least every quarter or as often as may be necessary. The mode of meeting will primarily be conducted physically at the DOE office but may also be conducted virtually.

In order to conduct official business, a quorum must be established which shall be defined by at least half of the Members. The quorum shall be determined at the beginning of each meeting or session, and the meeting shall not proceed without the requisite number of members present. In the absence of a quorum, no official actions or decisions shall take place.

Section 8. Hydrogen Technical Working Groups (TWGs). The HEIC, in collaboration with other relevant government agencies and concerned industry stakeholders, shall lead and establish respective TWG for the development, adoption, and updating of the following:

8.1 Facility Standards
8.2 Safety Codes
8.3 Product Quality
8.4 Environmental Standards
8.5 Waste Disposal Management
8.6 Hydrogen Energy Certification Mechanisms

The HEIC may establish other TWGs as may be deemed necessary. Furthermore, the DOE may issue further guidelines on the approved and issued standards by the TWG for compliance by hydrogen energy industry participants.

The TWG shall be composed of technical experts and representatives from relevant government agencies, industry, professional associations, research institutions, and academe. A separate guideline shall be issued on the composition and responsibilities of the TWG.

Section 9. Strategic Roadmap for Hydrogen. The utilization of hydrogen energy is a crucial measure of the Philippine government toward the long-term path of decarbonization. The DOE hereby adopts the activities for the development of hydrogen and its derivatives as an alternative fuel, outlined in Annex C, which primarily focuses on pursuing policy and research

development, establishing a national policy framework, institutionalizing development partnerships, and developing support infrastructure. Further, to provide direction for the industry, the DOE, through the HEIC, shall develop a comprehensive roadmap defining the overall vision and strategy, industry's milestone targets, and its needed support systems and resources.

Section 10. Research and Development (R&D). To monitor the innovation and development of the hydrogen energy industry, any person or entity engaged in or desiring to engage in the research, studies, experiments or other similar projects/activities involving hydrogen energy shall notify the DOE through the EUMB Director of such engagement, attaching therewith a copy of the Profile of R&D Activity on Hydrogen Energy (Annex D hereof). The DOE shall also coordinate and cooperate with the DOE-PERPI in the consolidation of energy research and policy development activities on hydrogen energy. Likewise, the person or entity conducting R&D Activity on Hydrogen Energy shall provide the DOE with a copy of the results of the aforementioned R&D activity for consolidation.

Further, if it shall be determined that the proposed research activity, study, or experiment addresses the challenges and opportunities in the energy sector, and eventually lead to the promotion and transfer of technologies and services that seeks solution to energy security, efficiency, and conservation, the proponent may be awarded grants or financial assistance in accordance with applicable DOE guidelines and subject to the HEIC's evaluation and approval. Financial grants for green hydrogen and green hydrogen derivatives shall be sourced from the RETF; otherwise, it shall be charged against DOE's appropriations. Thereafter, the amount necessary for the continued support for qualified research and development activities shall be included in the annual General Appropriations Act.

III. HYDROGEN ENERGY INDUSTRY ACTIVITY

Section 11. Notice Prior to Engagement in Hydrogen Energy Industry Activity. Any person or entity, natural or juridical, who intends to engage in any hydrogen energy industry activity shall file a notice with the EUMB prior to any such activity. The filing of the Notice Prior to Engagement shall be on a per project basis.

All notices shall be accomplished under oath in writing and shall contain the following information:

11.1 Letter of Intent addressed to EUMB Director on the Hydrogen Energy Industry Activity (Annex E);

11.2 Undertaking to Abide by the Terms and Conditions as Hydrogen Energy Industry Participant (Annex F);

11.3 Project Profile of Hydrogen Energy Industry Activity (Annex G); and

11.4 Copies of Certificate of Business Registration (DTI/SEC), Financial Statement for the last two (2) years, Partnership Agreements/Joint-Venture Agreements, BIR Registration, and/or LGU permits/licenses, as may be applicable.

The DOE, through the EUMB, shall have the authority to verify, validate, and inspect all information/documents pertaining to the technical, financial, and legal capacity of the hydrogen energy industry participant. Also, all information and other supporting documents may be requested to further verify the submission of the hydrogen energy industry participant.

Recognizing that the production of green hydrogen and green hydrogen derivatives is a renewable energy project, such project shall also comply with Department Circular No. DC2019-10-0013 and the amendments thereto.

Section 12. Procedure for Issuance of Acknowledgement Letter and Certificate of DTI-BOI Endorsement.

Prior to commencement of any hydrogen energy project, an acknowledgement letter must be secured. The procedure for the issuance of acknowledgement letter and Certificate of Endorsement to the BOI shall be as follows:

12.1 Procedure for Issuance of Acknowledgement Letter:

Upon submission of notice of engagement in hydrogen energy industry activity by the hydrogen energy industry participant, the EUMB shall, within three (3) working days, evaluate the submitted documents based, among others, on the following:

12.1.1 Completeness of the submitted required documents (refer to Annex H for the checklist of requirements); and
12.1.2 Legitimacy of the operation of the hydrogen energy industry participant.

An acknowledgement letter shall be issued to hydrogen energy industry participants within seven (7) days upon receipt of all required documents. Alternatively, incomplete documents shall be returned to the hydrogen energy industry participant with corresponding assessment from the DOE.

Likewise, all submissions shall be endorsed to and be acted upon by appropriate DOE Bureau, as specified in Annex I. EUMB shall notify the hydrogen energy industry participant of the endorsement. Upon endorsement, the hydrogen energy project shall be subjected to applicable DOE guidelines and their corresponding processing fees.

12.2 Procedure for Issuance of Certificate of DTI-BOI Endorsement:

For hydrogen energy projects soliciting incentives under RA11534, the hydrogen energy industry participant shall signify their intention to apply for endorsement through Application Letter for DTI-BOI Endorsement, herewith referred to as Annex J. EUMB shall then issue an order of payment to the hydrogen energy industry participant amounting to Twenty Thousand Pesos (Php20,000.00) as a non-refundable processing fee. Upon receipt of the proof of payment, EUMB shall evaluate the financial, legal, and technical capacity of the project. The issuance of the certificate of endorsement to BOI shall be done within twenty (20) days upon receipt of complete documents from the hydrogen energy industry participant.

Within a reasonable timeframe upon approval of this Department Circular, the processing of submissions shall be fully integrated in the EVOSS System pursuant to RA11234 and its Implementing Rules and Regulations. A separate guideline shall be issued outlining the processes and requirements for compliance of hydrogen energy participants. During the period of integration, the processing of submissions shall be acted upon by the EUMB according to the procedures specified above. Upon integration, all hydrogen energy industry participants shall lodge their notice of engagement, requests, and payment of applicable fees pertaining to hydrogen energy development in the EVOSS System.

Section 13. Requirements for Existing Hydrogen Energy Project. Any person or entity already engaged in any hydrogen energy industry activity, upon the effectivity of this

Department Circular, shall be given one hundred eighty (180) calendar days to comply with the requirement stated in Section 11.

Section 14. Reportorial Requirement. A report (Annex K) on the status of the development, operation, and maintenance of hydrogen energy project shall be submitted by any hydrogen energy industry participant duly acknowledged by EUMB, as follows:

14.1 For hydrogen energy projects on predevelopment, development, and construction stages, a semi-annual report on the project status every 30th day of January and July;
14.2 For hydrogen energy projects in commercial operation, a monthly report every 30th day of next month and a semi-annual report every 30th day of January and July.

Section 15. Safe Operation in the Hydrogen Energy Industry Activity. All hydrogen energy industry participants shall comply with facility standards, safety codes, and product quality requirements developed/adopted by the DOE.

Moreover, all hydrogen energy industry participants including those utilizing nonrenewable energy sources shall comply with the requirements listed in the Department Circular No. DC2012-11-0009: Renewable Energy Safety, Health, and Environment Rules and Regulations until a separate regulation on safety, health, and environment on hydrogen energy is issued by the DOE.

Section 16. Decommissioning of Facility and Disposal of Equipment. For hydrogen energy project intending to conduct facility decommissioning and disposal of equipment, machinery, and materials, the hydrogen energy industry participant must notify the DOE of such activity. Further, the DOE, in cooperation with DENR-EMB and other relevant government agencies, shall issue a separate guideline on the proper management of decommissioning and disposal activities related to hydrogen energy industry.

Section 17. Measurement of Hydrogen Energy. For uniformity in the industry and for the purpose of this Department Circular, energy produced from hydrogen shall be specified in the unit of kilojoule per kilogram of hydrogen (kJ/kgH_2).

Section 18. Responsibilities of the Hydrogen Energy Industry Participant. All hydrogen energy industry participants shall be responsible for the following:

18.1 Comply with the rules and requirements set forth in this Department Circular, and permits and licenses of other government agencies and LGUs;

18.2 Comply with all relevant health, safety, and environmental laws, rules, and regulations in the Philippines;

18.3 Cooperate fully with the DOE Monitoring Team during the conduct of enforcement, monitoring, and verification activities; and

18.4 Designate responsible personnel who shall represent the company/entity for coordination on matters related to their hydrogen energy industry activity.

Section 19. Enforcement, Monitoring, and Verification. The DOE shall conduct enforcement, monitoring, and verification on the compliance of hydrogen energy industry participants with the rules and requirements set forth in this Department Circular.

IV. INCENTIVES IN SUPPORT OF HYDROGEN IN THE ENERGY SECTOR

Section 20. Incentives. Any hydrogen energy project may avail of the following fiscal and nonfiscal incentives:

20.1 Projects with the primary purpose of producing, importing, and exporting green hydrogen and green hydrogen derivatives for power generation and other applications may avail of the following incentives under RE Act of 2008 and its IRR:

- 20.1.1 Income Tax Holiday
- 20.1.2 Exemption from Duties on RE Machinery, Equipment, and Materials
- 20.1.3 Special Realty Tax Rates on Equipment and Machinery
- 20.1.4 Net Operating Loss Carry-Over (NOLCO)
- 20.1.5 Corporate Tax Rate
- 20.1.6 Accelerated Depreciation
- 20.1.7 Zero Percent Value Added Tax Rate
- 20.1.8 Tax Exemption of Carbon Credits
- 20.1.9 Tax Credit on Domestic Capital Equipment and Services Related to the Installation of Equipment and Machinery

20.2 Activities related to the application of hydrogen energy in the transport sector using fuel cells may be entitled to the incentives under RA 11697 or the Electric Vehicle Industry Development Act (EVIDA) and its IRR.

- 20.2.1 Manufacture and assembly of HFS, parts, and components and establishment and operation of HFS and related support infrastructures shall undergo an evaluation process and may be entitled to the incentives provided by RA 11534 or the Corporate Recovery and Tax Incentives for Enterprises Act (CREATE).

- 20.2.2 The importation of completely built HFS shall be exempted from the payment of duties for eight (8) years from the effectivity of EVIDA.

- 20.2.3 The importation of capital equipment and components used in the manufacture, assembly, construction, or installation of HFS shall undergo an evaluation process and may be entitled to the incentives provided by RA 11534 or the Corporate Recovery and Tax Incentives for Enterprises Act (CREATE).

20.3 Projects that involve hydrogen and its derivatives production from nuclear energy shall be considered as an energy efficiency project and shall undergo an evaluation process for the availment of incentives under EEC Act.

- 20.3.1 Income Tax Holiday (ITH);
- 20.3.2 Customs Duty Exemption on Importation of Capital Equipment, Raw Materials, Spare Parts, or Accessories;
- 20.3.3 VAT Zero-Rating and Exemption; and
- 20.3.4 Such other incentives under the CREATE Act.

20.4 Enterprises engaged in Research and Development, establishment of support infrastructure, production/manufacture of machinery, equipment, materials, and components using hydrogen and its derivatives, excluding green hydrogen, and hydrogen energy projects that are under the Strategic Investment Priority Plan

(SIPP) may benefit from the following incentives under RA 11534 or the CREATE Act:

20.4.1 Income Tax Holiday (ITH) for four to seven years;
20.4.2 Special Corporate Income Tax (SCIT) equivalent to a tax rate of five percent (5%) based on the gross income earned (GIE), in lieu of all national and local taxes – for export enterprise;
20.4.3 Enhanced Deductions;
20.4.4 Customs duty exemptions on imports of capital equipment, raw materials, spare parts, and accessories; and
20.4.5 Value-Added Tax zero rating and exemption.

The foregoing incentives may be availed provided that the applicant complies with provisions of Sections 294, 295, 296, 300, 301 and 304 of the RA 11354 or CREATE Act.

Section 21. Conditions for Availment of the Incentives. The hydrogen energy industry participant must select one (1) incentive regime to the exclusion of others whenever the project qualifies fiscal and non-fiscal incentives entitlement in two or more of the incentives laws as enumerated in Section 20. Unless otherwise provided by law, registration/accreditation of a hydrogen energy project to avail of incentives under one incentive regime shall disqualify the same project from availing incentives under all other incentives regime.

V. FINAL PROVISIONS

Section 22. Administrative Procedure. The DOE shall conduct investigations upon its own initiative or upon receiving a complaint in writing and under oath of any allegation of violation under Section 23 of this Department Circular in accordance with Department Circular No. 2002-07-004 otherwise known as the "Rules of Practice and Procedures before the DOE" or any further amendments.

After due investigation and finding the complaint against any person or entity to be true and valid, the following penalties shall be imposed by the HEIC as herein specified under Section 24.

Section 23. Prohibited Acts. Any person or entity, natural and juridical, shall be subject to the imposition of penalties which may include the revocation of the Certificate of Endorsement to BOI issued under this Department Circular for violation of the following:

23.1 Engagement to any hydrogen energy industry activity without prior notice to the DOE;
23.2 Noncompliance of existing hydrogen energy project to Section 13 of this Circular;
23.3 Failure to provide accurate information or provision of false or misleading information as required;
23.4 Violations of any responsibilities stated in Section 18 of this Department Circular;
23.5 Refusal to submit to on-site inspections and monitoring; and
23.6 Non-submission of reportorial requirements.

Section 24. Penalties. Upon determination that a reasonable ground exists that a violation of any of the prohibited acts under Section 23 of this Department Circular has been committed, when warranted, a fine ranging from a minimum of One Hundred Thousand Pesos (PHP100,000.00) to a maximum of Five Hundred Thousand Pesos (PHP500,000.00) specified in Annex L of this Department Circular, and may include revocation of endorsement issued, if applicable, be imposed upon the hydrogen energy project. If warranted, the revocation of endorsement shall be notified to the BOI and the hydrogen energy industry participant.

The imposition of the fines is without prejudice to the penalties provided under existing laws, rules, and regulations prescribed by other concerned agencies.

Section 25. Confidential Information. The DOE shall not use confidential information or commercially sensitive information for purposes other than those provided herein and shall comply with the provisions of the Data Privacy Act of 2012, protect and limit the disclosure of confidential or commercially sensitive information unless allowed by the concerned party or when required by law, rules, and regulations.

Section 26. Information, Education and Communication Activities. The DOE shall develop and undertake a national awareness and advocacy program covering hydrogen energy programs and initiatives and pursue partnerships with relevant stakeholders to promote the appreciation of this Department Circular.

Section 27. Transitory Clause. All hydrogen energy industry activities in operation prior to the effectivity of this Department Circular shall comply with the additional requirements, when applicable, under this Department Circular.

Section 28. Review Clause. In light of the dynamic nature of the industry, the DOE shall periodically review, update, and issue the necessary rules/guidelines relative to hydrogen in the energy sector on an annual basis from the date of issuance and every two (2) years upon firm establishment of the market.

Section 29. Separability Clause. If for any reason, any section or provision of this Department Circular is declared unconstitutional or contrary to statutes, or relevant IRR, the other parts or provision hereof which are not affected hereby shall continue to be in full force and effect.

Section 30. Repealing Clause. The provisions of other circulars and other orders, issuances, rules, and regulations, which are inconsistent with the provisions of this Department Circular are hereby repealed, amended, modified, or superseded accordingly.

Section 31. Effectivity. This Department Circular shall take effect immediately fifteen (15) days 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 DOE, Energy Center, Rizal Drive cor. 34th Street, Bonifacio Global City, Taguig City, Metro Manila.

RAPHAEL P. M. LOTILLA
Secretary