



DEPARTMENT OF ENERGY

The Department of Energy (DOE) was created pursuant to Republic Act No. 7638 in response to the power crisis that plagued the country during the late 1980s. It is the executive arm of the Government responsible for preparing, integrating, coordinating, supervising, and controlling all plans, programs, projects, and activities relative to energy exploration, development, utilization, distribution, and conservation.

Based on its mandate, the DOE has identified two (2) organizational outcomes, namely: required energy supply level attained and sustainable consumption of energy promoted and achieved. The Department's priority programs under these organizational outcomes are:

1. NATIONAL AND REGIONAL ENERGY PLANNING PROGRAM

As a policy-making entity, the DOE is mandated to develop policies, plans and programs to address the energy requirements of all economic sectors (transport, industry, commercial, agricultural, and residential). Sustainable energy planning involves the preparation of short-, medium- and long-term energy policies and plans encompassing the entirety of the sector covering: a) exploration, development, and production of indigenous energy resources from conventional and renewable sources; b) promotion of alternative fuels and technologies; c) promotion of energy efficiency and conservation; and d) implementation of sector reforms in the downstream oil and power industries.

2. CONVENTIONAL ENERGY DEVELOPMENT PROGRAM

As energy demand is anticipated to grow significantly over the years, it is incumbent for the energy sector to pursue all means to develop the country's indigenous (local or domestic) energy resources. The DOE recognizes the fact that the country will remain dependent on conventional fuels for years to come to address its growing energy requirements. As such, the implementation of the Philippine Conventional Energy Contracting Program (PCECP) is still seen as an effective strategy in bringing in critical investments for the exploration, development, and production of conventional energy such as oil, gas, and coal.

With the contract of Malampaya already ending in February 2024, the signing of the Renewal Agreement of SC 38 by President Ferdinand Marcos Jr. for a final 15 years or until 22 February 2039 will allow for the continued production of the Malampaya gas field to ensure that the remaining gas reserves, estimated at 147 billion cubic feet, are further explored and utilized.

3. RENEWABLE ENERGY (RE) DEVELOPMENT PROGRAM

As part of the Department's goal to ensure security of supply and transition into a low-carbon future, the DOE continues to implement the policy framework enshrined in Republic Act No. 9513 or the RE Act of 2008. The law provided for the development of the National Renewable Energy Program (NREP), signaling the country's big leap from fragmented and halting RE initiatives into a focused and sustained drive towards energy security and improved access to clean energy.

Under the Philippine Energy Plan (PEP) 2023-2050 and the NREP, the government has adopted a clean energy scenario targeting an increase on the share of renewable energy in the power generation mix to 35% by 2030, 50% by 2040 and more than 50% by 2050 in line with the international commitment of transition towards the development of indigenous and clean sources of energy.

It lays down the foundation for developing the country's renewable energy resources, stimulating investments in the sector, developing technologies, and providing the impetus for national and local RE planning that will help identify the most feasible and least-cost development options.

4. ELECTRIC POWER INDUSTRY DEVELOPMENT PROGRAM

The DOE will ensure availability of electricity as it is one of the key drivers for rapid economic growth and poverty alleviation. Keen on its role and mandate, the DOE will formulate policies and plans on power generation, transmission, distribution, supply, and electrification with the overall goal of attaining a long-term reliable and sufficient supply to support the country's development.

5. DOWNSTREAM ENERGY DEVELOPMENT PROGRAM

In an environment wherein the downstream oil industry is deregulated, the government remains vigilant in setting responsive policy direction towards the protection of consumer welfare and encouragement of private sector involvement. This also allows for government to intervene in relation to fair trade practices, supply security, product quality, facility standards, and reasonableness of prices and other related aspects of the sector. These policies are envisioned to evolve over time to reflect the necessary and practical developments in the industry.

On the other hand, the country's natural gas industry is anchored on the development of additional gas-generated capacity, non-power applications, and the putting-up of necessary infrastructure that will bring natural gas to its potential markets.

6. ENERGY EFFICIENCY AND CONSERVATION PROGRAM

Initiatives to manage the country's energy demand remain to be a commitment of the Department. For over a decade, the Department has been implementing the National Energy Efficiency and Conservation Program (NEECP) which is the government's umbrella program to promote sensible and conscientious habits on energy efficiency and conservation in all sectors of society. The Energy Efficiency and Conservation (EEC) Act of 2019 or Republic Act No. 11285 opened a new era for the Philippine energy sector.

The DOE's strategies to achieve the program's primary goal of making energy efficiency and conservation a way of life for the Filipinos include the following: a) aggressive promotion of energy conservation and energy efficient technologies to effect higher energy savings both for the consumer and producer through information, education and communication campaigns; b) intensification of collaboration efforts with the private sector in implementing energy efficiency programs through voluntary agreements; c) expansion of the appliance and equipment energy standards and labeling and implementation of building energy usage standards; d) integration of energy efficiency concepts in the procurement practices of the government; e) provision of technical assistance in identifying, implementing, and evaluating effective measures to improve energy use efficiency; and g) periodic program monitoring and evaluation to assess the effectiveness of the energy efficiency and conservation plan.

7. ALTERNATIVE FUELS AND TECHNOLOGIES PROGRAM

The DOE is determined on promoting the utilization of alternative fuels as well as new, advanced, and emerging energy technologies not only to diversify supply but also to mitigate the adverse impact of energy use to the environment.

It is an initiative which aims to diversify fuel sources in the transportation sector and other areas with primary focus on policy formulation, research, demonstration, and promotion of alternative-fueled vehicles and emerging technologies. It also aims to achieve energy security, reduce vehicular emissions, and integrate alternative fuels into non-transportation sectors as well as create a sustainable and environmentally friendly transportation system while reducing reliance on fossil fuels.

8. ELECTRIC VEHICLE INDUSTRY MANAGEMENT PROGRAM

The issuance of Republic Act No. 11697 or the Electric Vehicle Industry Development Act on 15 April 2022 further strengthens the development of alternative fuels as it sets the government's policy on the regulation and development of electric vehicles in the country.

As part of the requirements of the Energy Efficiency and Conversation Act, the DOE issued Department Circular No. DC2023-05-0017 or the Vehicle Fuel Economy Labeling Program Guidelines and Department Circular No. DC2023-05-0016 of the Fuel Economy Performance Rating Guidelines for Road Transport Vehicles. The establishment of an energy labeling program for transport vehicles aims to gather and benchmark fuel economy performance data in the road transport sector. This will also lead to the empowerment of the consumer to validate information provided by vehicle manufacturers, importers, and dealers which will facilitate the selection of fuel-efficient transport vehicles by consumers, realization of fuel savings, elimination of fuel inefficient vehicles in the market, and reduction of greenhouse gas emissions.

LOCALLY FUNDED PROJECTS

1. ALTERNATIVE FUELS PROGRAM FOR TRANSPORTATION AND OTHER PURPOSES (AFTOP)

AFTOP is an initiative aimed at diversifying fuel sources in the transportation sector and other areas. It focuses on policy formulation, research, demonstration, and promotion of alternative-fueled vehicles and emerging technologies. AFTOP's primary goals are to achieve energy security, reduce vehicular emissions, and integrate alternative fuels into non-transportation sectors. The project strives to create a sustainable and environmentally friendly transportation system while reducing reliance on fossil fuels. Through these efforts, AFTOP aims to significantly contribute to the country's energy transition and environmental sustainability.

The AFTOP is designed to encourage the diversification of fuel sources and energy technologies across both transport and non-transport sectors. The primary objective of the program is to enhance energy security and promote environmental protection.

- **Energy Security.** AFTOP aims to reduce reliance on conventional fossil fuels by promoting alternative fuels. This strategy involves exploring sustainable and cleaner energy options, which enhances energy security by:
 - Decreasing dependence on a single fuel type;
 - Mitigating risks associated with fuel price fluctuations; and
 - Reducing vulnerability to supply disruptions.
- **Environmental Protection.** AFTOP also places a significant emphasis on environmental protection. The program recognizes that conventional fossil fuels contribute to air pollution and greenhouse gas (GHG) emissions, which have detrimental effects on both human health and the environment. By encouraging the use of alternative fuels such as hydrogen, electricity, sustainable aviation fuel, and other emerging technologies, AFTOP aims to:
 - Reduce emissions.
 - Promote cleaner air quality; and
 - Mitigate the impacts of climate change.
- **Implementation and Goals.** AFTOP seeks to create an enabling environment for the mainstream adoption of alternative fuels in both transport and non-transport sectors through various initiatives, including:
 - Policy measures.

- Research initiatives.
- Demonstration projects; and
- Promotional activities.

By supporting the transition towards cleaner and more sustainable energy options, AFTOP aligns with broader national goals of energy diversification, energy security, and environmental sustainability.

2. BIOFUELS PROGRAM (BP)

The Program is designed to reduce the country's dependence on imported oil, boost economic activity, generate employment, and improve air quality. The program recommends policies for using alternative feedstock in biofuel production, conducts assessments of potential plantation sites, and monitors existing and proposed biomass/biofuel projects. It aims to enhance energy security, promote economic growth, and contribute to a cleaner environment by reducing emissions.

The project has two primary goals. First, it aims to achieve energy security and fuel diversification by utilizing alternative fuels. This objective addresses the need to reduce reliance on traditional fossil fuels and explore sustainable alternatives. By promoting the use of alternative fuels, the project aims to enhance energy security and reduce the environmental impact associated with conventional fuel sources.

Second, the project seeks to raise public awareness about the benefits of using biofuels. Biofuels are renewable energy sources derived from organic materials, such as plant crops or waste products. By educating the public about the advantages of biofuels, such as reduced greenhouse gas emissions and support for local agriculture, the project aims to increase acceptance and adoption of these eco-friendly fuel options.

Overall, the project's objectives align with the broader goals of achieving sustainable energy practices, reducing environmental challenges, and ensuring a secure and diversified energy supply. By promoting alternative fuels and enhancing public awareness, the project contributes to a more sustainable and environmentally friendly energy future.

3. NATIONAL ENERGY EFFICIENCY AND CONSERVATION PROGRAM (NEECP)

The NEECP aims to establish energy efficiency and conservation (EEC) as a fundamental national practice for all Filipinos. It promotes various policies and programs focused on the efficient and prudent utilization of energy across all sectors.

The program also includes the development, enhancement, and expansion of the web-based National Energy Efficiency and Conservation Database System. This system serves as a convenient tool for stakeholders to fulfill their obligations under Republic Act No. 11285, also known as the EEC Act. Moreover, it functions as a resource for the DOE, enabling the collection and analysis of crucial data for informed decision-making and policy formulation in energy efficiency and conservation initiatives.

In support of the NEECP's objectives, efforts are directed towards procuring informational materials and services related to EEC. These resources play a crucial role in raising awareness and providing educational support to the public, businesses, and government agencies. They highlight energy-efficient practices that can be integrated into various workflows.

A recent example of these efforts is the "*You Have the POWER*" campaign.

Through these initiatives, the NEECP seeks to foster a culture of EEC throughout the Philippines. This cultural shift is expected to lead to reduced energy consumption, cost savings, environmental benefits, and a more sustainable energy future.

4. OIL INDUSTRY DEREGULATION MANAGEMENT PROGRAM (OIDMP)

The OIDMP is a policy framework implemented in the Philippines to liberalize and deregulate the oil industry. It aims to introduce market competition, reduce government intervention, and allow market forces to determine oil prices. Supporters argue that deregulation can promote efficiency, innovation, and consumer benefits.

The Program supports and pursues initiatives in deregulating the Downstream Oil Industry through IEC dissemination, Government and Private sector consultations, inspection, and monitoring of Liquefied Petroleum Products and LPG in retail level, as well as petroleum products in retail outlets.

5. NUCLEAR ENERGY PROGRAM IMPLEMENTING ORGANIZATION (NEPIO)

NEPIO is responsible for exploring the feasibility of nuclear energy as a means to support sustainable development in the country.

NEPIO, along with the Nuclear Energy Program Inter-Agency Committee (NEPIAC) which was established through Executive Order (EO) 116 on July 24, 2020, has been tasked with formulating the national position on the nuclear energy program. Their responsibilities include developing a national strategy and roadmap and addressing the challenges outlined in the Milestones Approach of the International Atomic Energy Agency (IAEA).

Pursuant to Department Order No. DO2024-01-0001, the DOE's Nuclear Energy Program Coordinating Committee (NEP-CC) was created to ensure the effective participation of the DOE in the NEPIAC pursuant to EO 164, series of 2022. The EUMB as the implementing arm of policies, plans, and programs related to alternative fuels is the newly designated Technical Secretariat of the NEP-CC.

The Milestones Approach, consisting of 19 Nuclear Infrastructure Issues, provides IAEA's Member States with a framework to assess their preparedness for implementing a nuclear energy program. The Philippine government recognizes that the importance and significance of each of these infrastructure issues may vary from country to country.

Guided by this approach, the NEP-CC and NEPIAC's efforts aim to ensure that the development of a nuclear energy program in the Philippines adheres to international standards, aligns with national policies and legislation, and effectively communicates with the public to raise awareness and understanding of nuclear energy.

Last 28 February 2022, Executive Order No. 164 titled "*Adopting a National Position for a Nuclear Energy Program, and for other Purposes*" was signed by the President. This landmark issuance focuses on the economic, political, pre-feasibility and engagement of the public and relevant stakeholders' aspects.

The Nuclear Energy Program was also defined and stipulated as a process that starts with the inclusion of nuclear power in the energy mix based on a prefeasibility study on the need for and viability of nuclear power. It includes the development of nuclear power infrastructure and encompasses the planning and construction, operational, commercial and post-operational stages of nuclear power plants.

Significantly, the way forward for the Bataan Nuclear Power Plant and the establishment of other Nuclear Power Installations was provided.

6. STRATEGIC PROMOTION OF PETROLEUM EXPLORATION THROUGH THE PHILIPPINE CONVENTIONAL ENERGY CONTRACTING PROGRAM (PCECP)

Petroleum exploration involves the search and identification of potential oil and gas reserves in a given area. It requires significant investments in terms of financial resources, technology, and expertise. To encourage exploration activities and attract investments, many countries, including the Philippines, often implement contracting programs.

Contracting programs, such as production-sharing agreements or service contracts, are commonly used in the oil and gas industry. These programs allow governments to partner with private companies, usually referred to as contractors or operators, to explore and extract petroleum resources. The terms and conditions of these contracts vary but generally involve the sharing of risks, costs, and benefits between the government and the contractor.

The PCECP, as mandated by Department Circular No. DC2017-12-0017, is the Philippine Government's foremost licensing scheme for the award of Petroleum Service Contracts to boost petroleum exploration in the country through flexible modes of licensing. To promote the exploration of petroleum resources in the country, the program conducts a series of local and international roadshows to encourage upstream players to apply for a Petroleum Service Contract in the country.

7. TOTAL ELECTRIFICATION PROJECT (TEP)

The TEP is a national initiative aimed at achieving total access to reliable and affordable electricity for all communities, including remote and underserved areas. The project focuses on rural electrification, extending the power grid, and implementing distribution systems in rural and remote regions. Last mile connectivity is a key aspect, with efforts made to connect the final households and communities in hard-to-reach areas using innovative solutions such as solar home systems or community-based power systems. The government has established policy and regulatory frameworks to promote electrification and encourage private sector investments. Partnerships with various stakeholders and the integration of RE sources are also emphasized.

The TEP contributes to the Government's goal of total household electrification. Through development of measures, interventions, mechanisms, as well as financial incentives to mobilize distributions utilities in fast tracking connection of the remaining unelectrified households in both electrified households (load centers and urban. Slum areas) and unelectrified areas of their franchise areas and by developing project measures and programs to intensify household electrification both grid and off-grid.

8. COMPREHENSIVE REGIONAL ENERGY STUDY IN THE PHILIPPINES (CRESP)

CRESP is a policy research study about the formulation of a comprehensive energy study by region that will comprise analysis, assessment, and recommendation based on the information gathered through quantitative data research on profile of energy consumption, fuel and technology preferences, public issues, and concerns on energy services and perception and awareness on energy-related policies, programs, and projects.

The result of the CRESP will serve as a tangible basis for the policymakers in the energy sector, particularly for policy formulation and decision making to address the gaps on the current energy policies, plans, and programs of the government through analysis and assessment of the patterns of energy consumption, field and technology preferences, issues and concerns on energy services and public perception and awareness on energy related policies, programs, and projects. Likewise, the data and information that can be obtained from the survey results as an input to the CRESP will be used as bases to evaluate the effectiveness of energy sector's current programs

and strategies as well as to establish a regional energy balance table database for the improvement of indicators in generating energy-related data and statistics.

9. PHILIPPINE GRADIOMETRY AND SEISMIC SURVEY PROJECT (PGSSP)

The project is a flagship national initiative which aims to modernize the country's subsurface imaging capabilities and revitalize upstream energy exploration. The project will acquire high-resolution airborne gravity gradiometry, scalar gravity, magnetic, and complementary geophysical datasets through seismic surveys. This effort is designed to significantly enhance structural mapping, basin modeling, and prospect identification across priority petroleum basins.

The PGSSP is structured as a four-year national program designed to generate geoscientific data to support petroleum exploration systematically:

- Year 1 (2026): Conduct of an aerial geophysical gradiometry and magnetic survey over approximately 40,000 square kilometers in the Southern Philippines, focusing on the systematic acquisition, processing, and interpretation of high-resolution airborne gravity gradiometry and magnetic data.
- Year 2 (2027): Expansion of the aerial survey to an estimated 80,000 square kilometers in Central Philippines, culminating in a comprehensive airborne geophysical dataset for frontier and underexplored basins.
- Year 3 (2028): Acquisition of 2D seismic data in areas where the airborne geophysical results have identified structural leads, prospective sedimentary depocenters, and other priority exploration targets.
- Year 4 (2029): Consolidation, integration, and interpretation of all acquired datasets, leading to the generation of final reports, prospectivity assessments, and data products that will support strategic exploration planning and investment promotion.

This multi-phase approach ensures that gravity and seismic acquisition, as well as subsequent analysis, are strategically guided toward achieving high-resolution results, enabling cost-efficient and data-driven exploration planning.