



DEPARTMENT OF ENERGY

Agency Performance Review (January - June 2022)

The Department of Energy (DOE), by virtue of RA 7638, is the country’s policy-making body that ensures sufficient and reliable energy and power supply for the country. The formulation of the DOE’s plans and policies is anchored on the government’s *AmBisyon Natin 2040* of a **strongly-rooted, comfortable and secure life for all Filipinos** and the **Build, Build, Build Program** of the current Administration.

As such, the DOE is guided by the eight (8) energy sector strategic directions putting emphasis on ensuring energy security; expanding energy access; promoting a low carbon future; strengthening partnership and collaboration between private sector and government agencies on energy-related issues; implementing, monitoring and integrating sectoral and technological roadmaps and action plans; advocating the passage of DOE’s legislative agenda; strengthening consumer welfare and protection; and fostering international relations and partnerships.



AMBISYON NATIN 2040:
“A strongly-rooted, comfortable and secure life for all Filipinos”



DUTERTENOMICS: *“Build Build Build”*



Energy Plans and Policies

ENERGY SECTOR STRATEGIC DIRECTIONS	1 ENSURE ENERGY SECURITY 	2 EXPAND ENERGY ACCESS 	3 PROMOTE A LOW CARBON FUTURE 	4 STRENGTHEN COLLABORATION AMONG ALL GOV'T. AGENCIES INVOLVED IN ENERGY
	5 IMPLEMENT, MONITOR AND INTEGRATE ROADMAPS AND ACTION PLANS 	6 ADVOCATE THE PASSAGE OF THE DEPARTMENT'S LEGISLATIVE AGENDA 	7 STRENGTHEN CONSUMER WELFARE AND PROTECTION 	8 FOSTER STRONGER INTERNATIONAL RELATIONS AND PARTNERSHIPS

DOE's PROGRAMS/ACTIVITIES/PROJECTS (P/A/P)

Based on the DOE's mandate, two (2) organizational outcomes have been identified, as follows:

1. Required energy supply level attained; and
2. Sustainable consumption of energy promoted and achieved.

There are five (5) programs that fall under the first outcome, namely (1) National and Regional Energy Planning Program; (2) Conventional Energy Development Program; (3) Renewable Energy Program; (4) Downstream Energy Development Program; and, (5) Electric Power Industry Program.

The second organizational outcome, on the other hand, is supported by the Energy Efficiency and Conservation Program and the Alternative Fuels and Technologies Program.

These programs are being implemented by the DOE to ensure that the expected deliverables and outcome indicators are met in a timely and efficient manner.

2022 PHYSICAL TARGETS

Following are the DOE's physical targets per program for FY 2022:

- 1. National and Regional Energy Planning Program**
 - 1 energy plan prepared and updated
 - 60 statistical research and studies prepared/updated
 - 75% of project evaluation and monitoring conducted on time
 - 20 applications for Certification of Energy Project of National Significance (EPNS) processed/evaluated
- 2. Conventional Energy Development Program**
 - 15 information, education, and communication (IEC) campaigns and other promotional activities conducted
 - 7 contracts and/or circulars drafted, prepared and reviewed
 - 298 monitoring/inspection activities conducted
- 3. Renewable Energy Program**
 - 84% of issuances and permits issued on time
 - 82 IECs and other promotional activities conducted
 - 332 inspections conducted

4. Downstream Energy Development Program

- 7 IECs and other promotional activities conducted
- 693 field work activities with corresponding reports submitted and operational monitoring activities conducted
- 4,022 issuances/permits/ standards drafted and issued
- 5 plans and policies updated/formulated/monitored and recommended for adoption and implementation

5. Electric Power Industry Development Program

- 39 IECs, promotional events and public consultations conducted
- 4 plans prepared, updated and disseminated
- 8 policies prepared, recommended and/or adopted
- 128 applications for COE for investment in the energy sector processed

6. Energy Efficiency and Conservation Program

- 33 promotional events undertaken on energy efficiency and conservation program
- 76 energy audits in government agencies conducted on time

7. Alternative Fuels and Technologies Program

- 7 IECs/promotional activities conducted
- 8 technical assistance/ evaluation completed on time
- 4 policies formulated or permits issued on time

1ST SEMESTER ACCOMPLISHMENTS

Following are the DOE's major accomplishments for the first half of 2022:

I NATIONAL AND REGIONAL ENERGY PLANNING PROGRAM

As a policy-making entity, the DOE is mandated to develop long-term and sustainable energy 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 exploration, development and production of indigenous energy resources from conventional and renewable sources, promotion of alternative fuels and technologies, promotion of energy efficiency and conservation and implementation of sector reforms in the downstream oil and power industries.

Major Accomplishments

- In preparation for the transition to the new Administration, the Energy Policy and Planning Bureau (EPPB) as Secretariat of the DOE's Transition Committee prepared the Transition

Report highlighting the accomplishments of the energy sector for 2016 to the first quarter of 2022.

- On February 28, 2022, President Duterte signed Executive Order No. 164 adopting a national position for a Nuclear Energy Program (NEP).

In developing the Program, the DOE together with the Inter-Agency Committee will be guided by four (4) cornerstone approach:

- (1) Establishment of a clear national policy which would withstand administration changes;
 - (2) Enactment of NEP into law to ensure strict adherence to all relevant standards;
 - (3) Ensure alignment of NEP with international standards under the guidance of the International Atomic Energy Agency; and,
 - (4) Strong public consultation and information campaigns to promote scientific findings on the benefits of nuclear energy use.
- DOE has participated in various regional energy cooperation fora such as: a) Association of Southeast Asian Nations (ASEAN); b) Asia Pacific Economic Cooperation (APEC); c) East Asia Summit (EAS); d) Brunei-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA), among others, including engagements in bilateral energy cooperation.

Major Highlights of the regional energy cooperation activities for the period in review include the continuation of the following:

1. Implementation of the ASEAN Economic Community (AEC) Blueprint 2025 and the fulfillment of the Implementation Plan of the ASEAN Comprehensive Recovery Framework (ACRF) as cross-sectoral cooperation within the ASEAN region;
2. Second year implementation of the ASEAN Plan of Action on Energy Cooperation (APAEC) Phase II: 2021-2025, as well as implementation of the 2022 Energy Annual Priorities (AP) under the 2022 ASEAN Ministers on Energy Meeting-Senior Officials Meeting on Energy (AMEM-SOME) Chairmanship of Cambodia;
3. Implementation of relevant plans and programs for the attainment of the regional strategic goals of reducing energy intensity by 32% in 2025 (over 2005 levels) and the aspirational target for increasing the component of renewable energy to 23% by 2025 (over 2005 levels) in the ASEAN energy mix, which includes increasing the share of renewable energy in the installed power capacity by 35% in 2025;
4. Voluntary work in the attainment of increasing the goal to a 45% reduction of regional aggregate energy intensity by 2035 in the APEC region and the new aspirational goal to double the share of RE in the APEC's overall energy mix by 2030 (over 2010 levels);
5. Philippine Chairmanship of the ASEAN Nuclear Energy Cooperation Sub-Sector Network (NEC-SSN);
6. Philippine Co-Chairmanship of the APEC Energy Resiliency Task Force (ERTF) with the United States (US);

7. Implementation of the Power and Energy Infrastructure Cluster (PEIC) Rolling Pipeline of Projects (RPop) 2020-2022 and BIMP-EAGA Mid-term Review and Assessment from 2017-2021 under the BIMP-EAGA Vision 2025 (BEV2025);
 8. Discussion on the different energy transition policies of the ASEAN Member States and efforts towards decarbonization;
 9. Active Philippine participation in different energy fora (*as attached*); and
 10. Co-spearhead the Indo-Pacific Economic Framework for Enhancing Prosperity (IPEF) Pillar 3: Infrastructure, Clean Energy and Decarbonization Negotiations with the Department of Finance (DOF).
- The DOE leads the energy sector when it activates its Task Force on Energy Resiliency (TFER) for quick response and rehabilitation, specifically to address power supply disruptions brought about by typhoons and other natural disasters.

During the first half of 2022, TFER monitored four (4) typhoons that entered the country: Agaton, Basyang, Caloy and Domeng.

In relation to the functions as Technical Secretariat of TFER, policies and guidelines were formulated and implemented on the management of COVID-19 within the Department.

II 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) energy resources. The DOE recognizes the fact that the country will remain dependent on conventional fuels for many years to come to address its growing energy requirements. As such, the conduct of energy contracting rounds is seen as an effective strategy to bring in critical investments for the exploration, development and production of conventional energy such as oil, gas and coal.

Major Accomplishments

- The DOE, through the Energy Resource Development Bureau (ERDB), continuously monitors and administers the activities of the existing petroleum service and coal operating contracts with respect to their work commitments. To date, there are 19 petroleum service contracts and 27 coal operating contracts in the country.
- In April 2022, DOE awarded SC No. 77 to SK Liguasan Oil and Gas Corporation covering a 72,000-hectare petroleum-prospective area located in the onshore Cotabato Basin. The awarded area covers portions of Sultan Kudarat and South Cotabato provinces that are outside the BARMM's territorial jurisdiction. The exploration henceforth was allowed by DOE to proceed, as SC 77 is not covered by the Bangsamoro Organic Law provision for co-management between the national and BARMM governments.

- In terms of production, 632.3 thousand barrels of oil, 121.1 million standard cubic feet (MMSCF) of gas and 2.94 million barrels of associated condensate were accounted for petroleum while 12.74 million metric tons of coal were produced in 2021.

For 2022, an additional of 137 thousand barrels of oil, 30.9 MMSCF of gas and 249.6 million barrels of associated condensate were produced during the first quarter of the year while 8.1 million metric tons of coal has likewise been produced from January to April 2022.

- At the beginning of 2022, the Indonesian government has announced banning of its coal exports until 31 January 2022 to avoid risks of domestic shortage for the power sector and potential blackouts. Indonesia is the world's third-largest producer of coal and lignite and the largest coal exporter with sales of 412 million metric tons in 2020.

Immediately after the announcement, the DOE convened a meeting with all the coal generation companies to discuss the possible mitigating measures that can be implemented to ensure continuous delivery of electricity services. A special inter-agency meeting was likewise conducted on January 17 with DTI, DFA, NEDA and MARINA together with the Philippines's Trade Attaché in Indonesia.

DOE has communicated with the Indonesia's Minister of Energy and Mineral Resources appealing for the exemption of the Philippines from the coal export ban in the spirit of ASEAN Energy Cooperation. This move by DOE was also conveyed to our colleagues at the DFA which led to the Secretary sending a letter to his counterpart Minister of Foreign Affairs in Indonesia.

Further coordination was done with MARINA on the issuance of a Special Permit for SMC Global Power Holdings Corp. for the charter of international-plying bulk cargo vessels to be used for hauling and delivery of coal cargoes from Semirara Mining and Power Corporation (SMPC) in Antique (Caluya) to the coal power plants in Bataan, Zambales, Pangasinan and Davao Occidental. In response, MARINA has officially advised SMC on the necessary supporting documents for the grant of the permit.

III RENEWABLE ENERGY PROGRAM

As part of the Department's goal to ensure security of energy supply, the DOE implemented the policy framework enshrined in Republic Act No. 9513 or the Renewable Energy 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 renewable energy initiatives into a focused and sustained drive towards energy security and improved access to clean 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 renewable energy planning that will help identify the most feasible and least-cost development options.

Major Accomplishments

- The government's higher prioritization on the promotion and adoption of cost-competitive sustainable renewable energy technologies have induced investments for renewable energy development. As of 31 December 2021, a total of 959 renewable energy service contracts have been awarded with total potential capacity of 48.1 GW and installed capacity of 5.6 GW (commercial and own-use).
- One significant milestone is the issuance of the Green Energy Auction Program (GEAP) on 14 July 2020 that sets the framework for the facilitation of immediate and timely investment for new and additional RE capacities to ensure provision of adequate supply under a competitive process. The Notice of Auction (NOA) for the 1st round of Green Energy Auction for RE was published on 9 February 2022 with a total RE capacity of 2,000 MW from hydro, biomass, solar and wind. Of the total, 1,400 MW will be auctioned in Luzon, 400 MW in the Visayas, and 200 MW in Mindanao.
- The DOE is collaborating with the World Bank Group and the Energy Sector Management Assistance Program (ESMAP) in developing the Offshore Wind (OSW) Roadmap for the Philippines, which was formally launched on 20 April 2022.
- As of March 2022, 26 biofuels producers (13 each for biodiesel and bioethanol) have been accredited and are operational with an aggregate production capacity of 1,151.4 million liters per year (MLPY).

IV DOWNSTREAM ENERGY DEVELOPMENT PROGRAM

Against the backdrop of a deregulated downstream oil industry, the government remains vigilant in setting responsive policy direction towards the protection of consumer welfare and encouragement of private sector involvement. It is also empowered to intervene with respect 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 as well as putting-up of necessary infrastructure that will bring natural gas to its potential markets.

Major Accomplishments

Oil

- For the downstream oil sector, the country's inventory level of petroleum products stood at 41.0 days of supply equivalent to 2,457 million liters (as of 01 July 2022). This was comprised of 26.5 days of on-shore inventory of crude and refined products and 14.5 days of supply in-transit.

- To further improve the monitoring of the downstream oil industry, a Reportorial Management System was developed for the improvement in the reportorial submissions to enhance industry reports and statistics. The online portal was designed to easily monitor the reportorial requirements and foster collaboration with the downstream oil industry participants.

The system was introduced on 09 February 2022 to the participants of the downstream oil industry, with majority now onboarded to the system and have been submitting their monthly and quarterly reports.

- Under the Memorandum of Agreement (MOA) for the updating of 2002 Philippine National Oil Contingency Plan (PNOCP), JOGMEC will conduct a study within eight months of its signing, and the parties shall have a one-year consultative period after the submission of the final report. Two months after the completion of the study, JOGMEC will submit to DOE an updated PNOCP, and all its corresponding relevant data and information. JOGMEC will also provide relevant recommendations on the creation and operation of the Philippine Strategic Petroleum Reserve Program (PSPRP). The final report of the study was presented to the DOE by JOGMEC, CHIYODA U-TEC Co., Ltd., and the Institute of Energy Economics, Japan (IEEJ) last 06 January 2022.
- Classified as a trade regulatory government agency (TRGA) under the chemicals, oils, minerals, and environment cluster, the Oil Industry Management Bureau (OIMB) is onboarding the TradeNet System. Said system serves as the vehicle for the country's National Single Window (NSW) which aims to link all 75 trade regulatory government agencies across 18 government departments to facilitate trade, heighten transparency in customs procedures, and improve revenue collection. On 03 March 2022, the OIMB received its final Agency and End-User Consolidated Manual. Relatedly, a public consultation with the downstream oil stakeholders was conducted on 18 March 2022 to present the End-User Manual and solicit comments and inputs on the related draft Department Circular, respectively.

Gas

- For the downstream natural gas sector, the Technical Assistance through the Gas Policy Development Project 2 (GPDP 2) was implemented specifically in the capacity development with the conduct of virtual trainings to stakeholders. The DOE also conducted operational meetings with the Downstream Natural Gas Review and Evaluation Committee (DNG REC) to update the committee on the progress of the proposed Liquefied Natural Gas (LNG) terminal projects.
- The DOE also conducted inspection and real time investigations of proposed natural gas facility in coordination with the Philippine Inter-Agency Health, Safety, Security, Environment Inspection and Monitoring Team (PIA-HSSE IMT) at FGEN LNG Corporation Facility in Batangas. Likewise, the DOE regularly conducts monitoring and updating of the status of the compliance of requirements and permit conditions of the six (6) approved LNG terminal projects.

V ELECTRIC POWER INDUSTRY 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 formulates plans and policies on power systems, transmission highways and distribution facilities with the overall goal of providing a long-term reliable power supply and improving the country's transmission and distribution system.

Major Accomplishments

- For 2021, the country's installed generating capacity reached 27,519 MW while dependable capacity was recorded at 24,349 MW.

In the same period, total installed capacity of coal-fired and oil-based plants were 11,684 MW and 4,417 MW, respectively, owing to the operation of major coal power plants, such as the 668 MW GNPowder Dinginin Unit 1 in Mariveles, Bataan; the 44.6 MW Bunker/Diesel Internal Combustion Engine of Therma Power Visayas Inc. in Naga, Cebu; and the 179 MW Ingrid Modular Diesel Power Plant in Pililla, Rizal; among others. Natural gas, on the other hand, recorded 3,453 MW capacity.

- Household electrification level as of December 2021 stood at 95.41 percent, wherein 25.02 million households are enjoying the benefits of electricity access. The remaining 1.06 million unenergized households is targeted by Government to realize the goal of attaining 100 percent electrification of unserved and underserved areas by 2022.
- On a per grid basis, Luzon and Visayas' household electrification is already past the 90 percent mark. Meanwhile, Mindanao's electrification level is at 86 percent, owing to low electrification levels of electric cooperatives such as BASELCO (Basilan), LASURECO (Lanao Del Sur), SIASELCO (Siasi, Sulu), SULECO (Jolo, Sulu), and TAWELCO (Tawi-Tawi).
- The enactment of RA 11646 or the Microgrid Systems Act of 2022 on 21 January 2022 serves to complement the government's continuing efforts towards total electrification. It is guided with the objective of accelerating total electrification and ensuring provision of quality, reliable, and secure electricity and affordable supply of electric power service at reasonable rates in unserved and underserved areas. The Act will also provide a competitive environment and level playing field for different kinds of energy resources with a preference for low-cost, indigenous, renewable and environment-friendly sources of energy.
- The Power Development Plan (PDP) 2020-2040, published by the DOE on 24 May 2022, serves as a comprehensive guide for industry stakeholders to address the future landscape of the country's electric power industry.

The PDP 2020-2040 contains power-related statistics, major policies and programs, power demand and supply outlook, and power sector roadmaps for the generation, transmission, distribution, supply, electricity market, off-grid development, and total electrification. These roadmaps are anchored on the following goals by 2040: (1) ensure energy security, resiliency, affordability, and sustainability; (2) institutionalize a transparent and fair playing field in the power industry; and (3) expand electricity access for all.

VI ENERGY EFFICIENCY AND CONSERVATION PROGRAM

Initiatives to manage the country's energy demand remain to be a long-term commitment of the Department. For over a decade, the Department has been implementing the 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 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 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; intensification of collaboration efforts with the private sector in implementing energy efficiency programs through voluntary agreements; continuous implementation and expansion of the appliance and equipment energy standards and labeling implementation of building energy usage standards; integration of energy efficiency concepts in the procurement practices of the government; the provision of technical assistance in identifying, implementing and evaluating effective measures to improve energy use efficiency; the use of alternative fuel to reduce dependence on imported oil; and periodic program monitoring and evaluation to assess the effectiveness of the energy efficiency and conservation plan.

Major Accomplishments

- Since the issuance of Republic Act No. 11285 or the Act Institutionalizing Energy Efficiency and Conservation, Enhancing the Efficient Use of Energy, and Granting Incentives to Energy Efficiency and Conservation Projects on 12 April 2019, several Department Circulars have been issued by the DOE. For the first half of 2022 alone, the DOE has issued the following:
 - Department Circular 2022-03-0004: Guidelines for the Endorsement of Energy Efficiency Strategic Investments to the Board of Investments for Fiscal Incentives
 - Department Circular 2022-03-0005: Guidelines for the Recognition of Testing Laboratories for the Examination, Testing & Verification of the Energy Efficiency of Energy-Consuming Products (ECPs) & the Fuel Efficiency of Transport Vehicles, Including the Issuance of Certificate of Endorsement to the Board of Investments (BOI) for Fiscal Incentives
 - Department Circular 2022-03-0006: Adoption of Training Regulations Certification Process for Energy Auditors (EAs)

- Department Circular 2022-03-0007: Adoption of Training Regulations for the Certification of Energy Conservation Officers (ECOs)
 - Department Circular 2022-03-0008: Adoption of Training Regulations and Prescribing Certification Process for Training Institutions and Energy Managers (EMs)
 - Department Circular 2022-03-0013: Adoption of Certification Guidelines for Energy Audit Conducted by Firm, Partnership, Corporation and Sole Proprietorship (FPCs)
- The Inter-Agency Energy Efficiency and Conservation Committee was created to evaluate and approve government energy efficiency projects and provide strategic direction for the Government Energy Management Program (GEMP).
 - As of April 2022, there are 3,720 government agencies complying with the GEMP requirements. This showed electricity savings of about 289.95 GWh (PhP2.86 billion) under the GEMP initiative.

IAEECC Resolution No. 5 entitled “Directing All Government Entities, Including the Local Government Units (LGUs) and Foreign Service Posts to Observe the Approved GEMP Guidelines” was issued on 11 February 2022.

The Online Application and Database System for the PELP and GEMP has been developed to enhance the processing and monitoring of application requests (company or product registration, issuance of energy labels), downloading of PELP required forms, approved labels, and submission of regular energy consumption reports. The PELP Online Registration System was launched on 12 August 2021 enjoining all manufacturers, importers and distributors of ECPs to register their existing and upcoming product models to the PELP System.

And as of April 2022, a total of 47 companies have successfully registered in the System, while 590 registered ECPs have been registered under the PELP. There are also 409 energy labels issued during the period.

- Under Memorandum Circular (MC) MC2020-05-001, all DEs in the commercial, industrial, and transport sectors are required to regularly submit their Annual Energy Efficiency and Conservation Reports (AEECR) and Annual Energy Utilization Report (AEUR) to the DOE. As of March 2022, there are 2,829 DEs which have submitted their AEUR via the online Google platform.

As of January 2022, submissions of private entities pursuant to said MC have registered investment costs of PhP15 billion and energy savings of about 120,462 kWh. (Data as of April 2022 is still for validation)

VII ALTERNATIVE FUELS AND TECHNOLOGIES PROGRAM

The DOE is determined on promoting the utilization of alternative fuels as well as new and advanced energy technologies not only to diversity the country's utilization of energy sources but also to mitigate the adverse impact of energy use to the environment.

This program will focus on the following key initiatives: a) Continuous assessment of emerging alternative fuels and energy technologies (AFET), b) conduct of relevant policy studies on emerging AFET and c) conduct of IEC on benefits of AFET to engage energy stakeholders.

Under the Alternative Fuels Program, the project entitled "Alternative Fuels for Transportation and Other Purposes" is one of its key initiatives that aim to introduce alternative fuel vehicles and promote emerging and advanced energy technologies. Another objective of the project is to reduce the country's dependence on imported oil by providing energy consumers with more environment-friendly fuel options aside from conventional fuels.

Major Accomplishments

- On transport, the EV industry is seen to ramp up with the signing of R.A. 11697 or the Electric Vehicle Industry Development Act (EVIDA which became effective on 15 April 2022. by President Duterte on 15 April 2022. The EVIDA will provide national energy policy and regulatory framework for the manufacture and use of electric vehicles and establishment of electric vehicle charging stations to promote cleaner and energy efficient transport technologies.
- For the 1st Semester 2022, eight (8) IEC campaigns were conducted to disseminate the benefits of using alternative fuels and technologies such as EVs, autoLPG, human kinetics and other emerging energy technologies
- To provide consumers with options on advanced energy technologies and environment-friendly fuel, the DOE continues to embark on mainstreaming the AFETs. New policies related to electric vehicles and charging stations were institutionalized, as well as research studies on alternative fuel applications and demonstration of advanced energy technologies, and formulation of code of practice and minimum energy performance rating for household appliances and transport vehicles are being conducted.