

Long-Term Energy Scenarios (LTES) for developing National Energy Transition Plans in Asia.

Webinar series

### PHILIPPINE ENERGY SECTOR

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Department of Energy
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## Role of DOE

### PEP 2020-2040



Republic Act (RA) No. 7638 (Department of Energy Act of 1992)

Prepare, integrate, coordinate supervise and control all plans, programs, projects, and activities of the Government relative to energy exploration, development, utilization, distribution, and conservation

Legal Basis: R.A. No. 7638 (DOE Act of 1992)

#### Section 5.b:

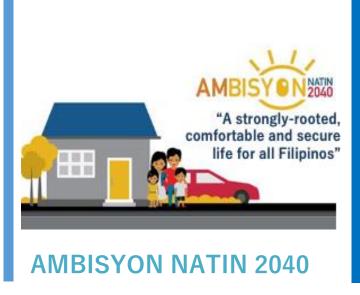
"Develop and update the existing Philippine energy program which shall provide for an integrated and comprehensive exploration, development, utilization, distribution and conservation of energy resources, with preferential bias for environment-friendly, indigenous, and low-cost sources of energy...."

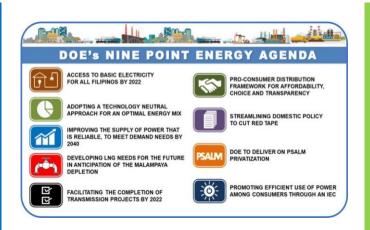


- ☐ The PEP is a comprehensive roadmap of programs and projects of the energy sector to ensure *sustainable*, *stable*, *secure*, *sufficient*, *accessible* and *reasonably-priced energy*.
- ☐ Embodies the country's major plans and programs in consideration of energy trends and development, as well as the action agenda to respond to emerging energy challenges and issues.

## POLICY FRAMEWORK







**DOE's NINE-POINT ENERGY** 

**AGENDA** 



### The 8-Point Socioeconomic Agenda of the Marcos



Reduce transport and logistics cost

Reduce energy cost to families

2. Reduce vulnerability and mitigate scarring from the COVID-19 pandemic



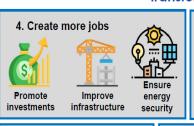
learning losses



fundamentals and government processes Enhance bureaucratic efficiency and management Ensure a resilient and innovative financial sector

macroeconomic

...and medium-term constraints to economic transformation.







7. Ensure a level playing field

8. Uphold public order and safety, peace and security \_= @ =

## **ENERGY PLANNING PROCESS**





Pre-consultation
with DOE Bureaus
and Services,
Attached Agencies,
and oversight of
Government
Agencies

- New Directives/Agenda/ Goals setting
- Framing energy strategies
- Identification of assumptions and target indicators
- Updating of Sectoral Roadmaps/Catchup Plans



- Preparation of energy demand projections
- Assessment of energy resources and technologies
- Supply-Demand balancing
- Drafting of sectoral write-ups to consider energyrelated Development Plans
- Consultation with Attached Agencies and Industry Stakeholders



- Revision of draft PEP
- Secretary's Approval
- Publication of the PEP
- Transmittal to OP and Congress (on or before 15 Sept)
- Circulation to energy stakeholders
- PEP IEC (includes a survey of stakeholders' satisfaction)
- Integration of PEP with national and local development plans
- Alignment of PEP to international frameworks such as UN Sustainable Development Goals, APEC, and ASEAN energy cooperation plans of action



- PEP monitoring, evaluation and assessment
- Sectoral performance Appraisal
  - Review of Sectoral Roadmaps
  - Assessment of Sectoral Challenges

FORMULATION

**FINALIZATION AND ADOPTION** 

IMPLEMENTATION REVIEW

# PHILIPPINE ENERGY PLAN (PEP) 2020-2040 TARGETS LTES



## "Sustainable Path Towards **Clean Energy**"

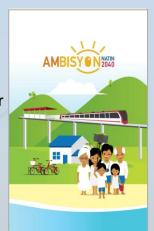


Reference Scenario

- + RE
- + EE and C
- + Other Energy Technologies
- + ICT
- + Resiliency

Clean Energy Scenario

**Energy Security** Sustainable Energy Resilient Infrastructure Competitive Energy Sector **Smart Homes and Cities Empowered Consumers** 





### RENEWABKE ENERGY PLANS AND PROGRAMS



#### RENEWABLE PORTFOLIO STANDARDS

Requires electricity suppliers to source an agreed Portion of their supply from eligible RE facilities

1

#### **GREEN ENERGY AUCTION PROGRAM**

Sets the framework for the facilitation of immediate and timely investment for new and additional RE capacities to ensure the provision of adequate supply under a competitive process

2

#### **GREEN ENERGY OPTION PROGRAM**

Provides end-users the option to choose RE resources as their source of energy

3

#### **RE MARKET RULES**

Establishes the market for the trading of RE Certificates between and among trade participants

4

#### **OPEN AND COMPETITIVE SELECTION PROCESS**

Facilitates project development by offering well-characterized RE sites to project developers

5



#### RENEWABLE ENERGY TRUST FUND

To finance research, development, demonstration, and promotion of the widespread and productive use of RE systems

#### NET-METERING PROGRAM

End-users can install up to 100-kW RE systems to reduce their electricity bills and sell the surplus to the grid

#### **COMPETITIVE RE ZONES**

Covers the upgrade and expansion of transmission facilities through policy initiatives and activities that shall enable the optimal use of RE in the country

#### **100% FOREIGN OWNERSHIP RESTRICTIONS**

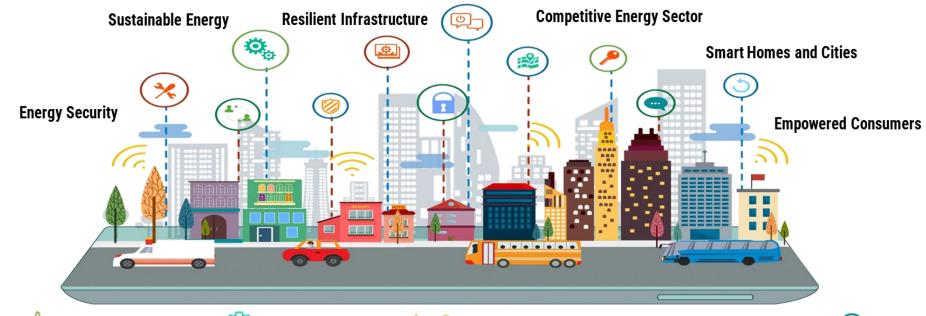
Issuance of Department Circular (DC) No. 2022-11-0034 which amends Section 19 of the RE Act's IRR

#### **EXECUTIVE ORDER NO. 21 ON OFFSHORE WIND (OSW)**

Issuance of Executive Order No. 21 s. 2023 incorporating the processing of OSW in the existing EVOSS System to facilitate the processing/securing of permits through various government agencies.

### **FUTURE ENERGY SCENARIO IN A CAPSULE**







Renewable Energy

35% of power generation mix by 2030; and 50% by 2040



Energy Efficiency and Conservation

5% energy savings on oil products and electricity by 2040



Emerging and Innovative Technologies

10% EV penetration rate in road transport by 2040; Exploring new and efficient technologies



Information and Communications Technology

Adopting advanced and interoperable ICT in the energy chain



Energy Resiliency

Resilient and climate-proof energy infrastructure

"The goal of the Philippine Energy Sector is to provide the Filipino people with energy that is both <u>accessible and affordable</u>."

## Power Supply Outlook 2023-2050



# REFERENCE SCENARIO

- 35% RE Share in power generation mix by 2030
- 50% RE by 2040-2050

2

# HIGH RE + NUCLEAR + COAL RETIREMENT

- 35% RE Share in power generation mix by 2030
- 50% RE by 2040
- About 60% by 2050

3

#### HIGH RE + NUCLEAR + COAL RETIREMENT

- About 60% RE Share in power generation mix by 2050
- Higher OSW Capacities



### Thank you for your attention





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