Department of Energy

Updates on Biomass Utilization-related Policy and Expectations for Technology Introduction in the Philippines

Cleaner Energy Future Initiative for ASEAN (CEFIA)
Biomass Webinar
14 January 2026

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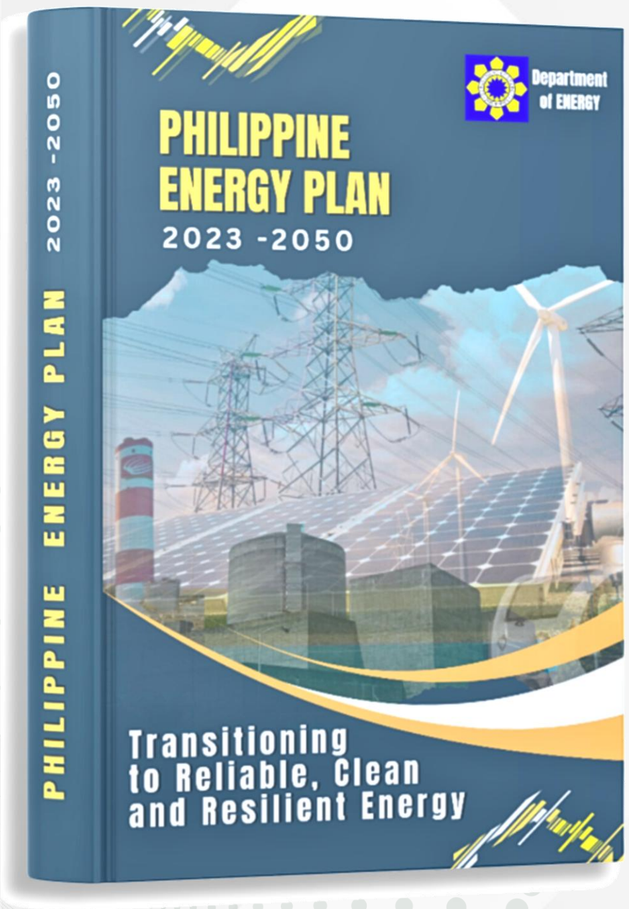
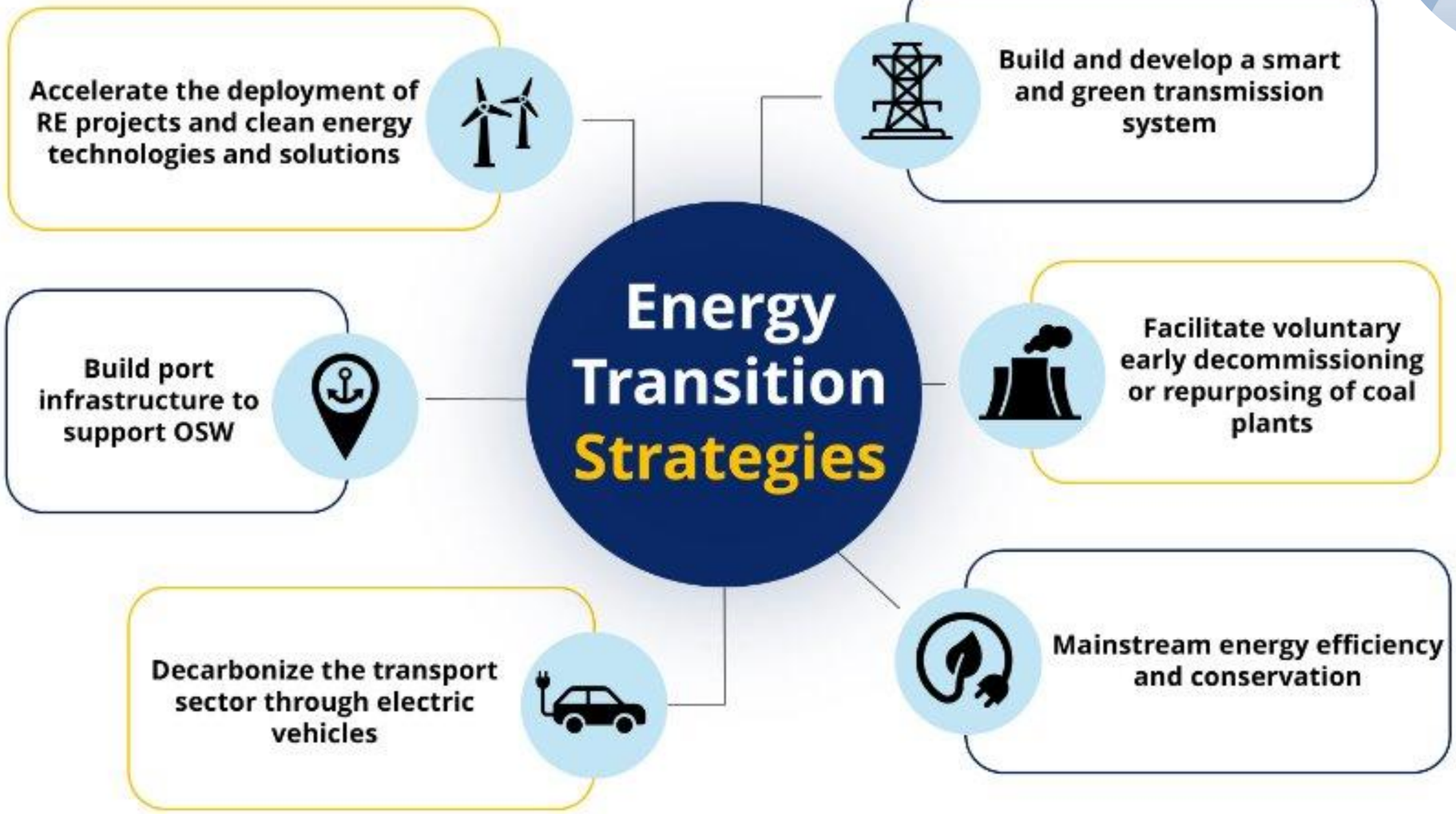
The Philippine Energy Plan

PEP 2023-2050



REFERENCE	▪ 35% RE share in power generation mix by 2030 ▪ 50% RE by 2040–2050
CLEAN ENERGY 1 (High RE with low OSW + Nuclear + Coal Repurposing)	▪ 35% RE share by 2030, 50% RE by 2040, more than 50% by 2050 ▪ Coal repurposing ▪ Nuclear capacity of 1,200 MW by 2032, 2,400 MW by 2035 and 4,800 MW by 2050 ▪ **19 GW of OSW by 2050**
CLEAN ENERGY 2 (High RE with high OSW + Nuclear + Coal Repurposing)	▪ 35% RE share by 2030, 50% RE by 2040, more than 50% by 2050 ▪ Coal repurposing ▪ Nuclear capacity of 1,200 MW by 2032, 2,400 MW by 2035 and 4,800 MW by 2050 ▪ **50 GW of OSW by 2050**

ENERGY TRANSITION



ENERGY TRANSITION

Sustainability

Grid Stability

BIOMASS

Climate Change Mitigation

Total Electrification

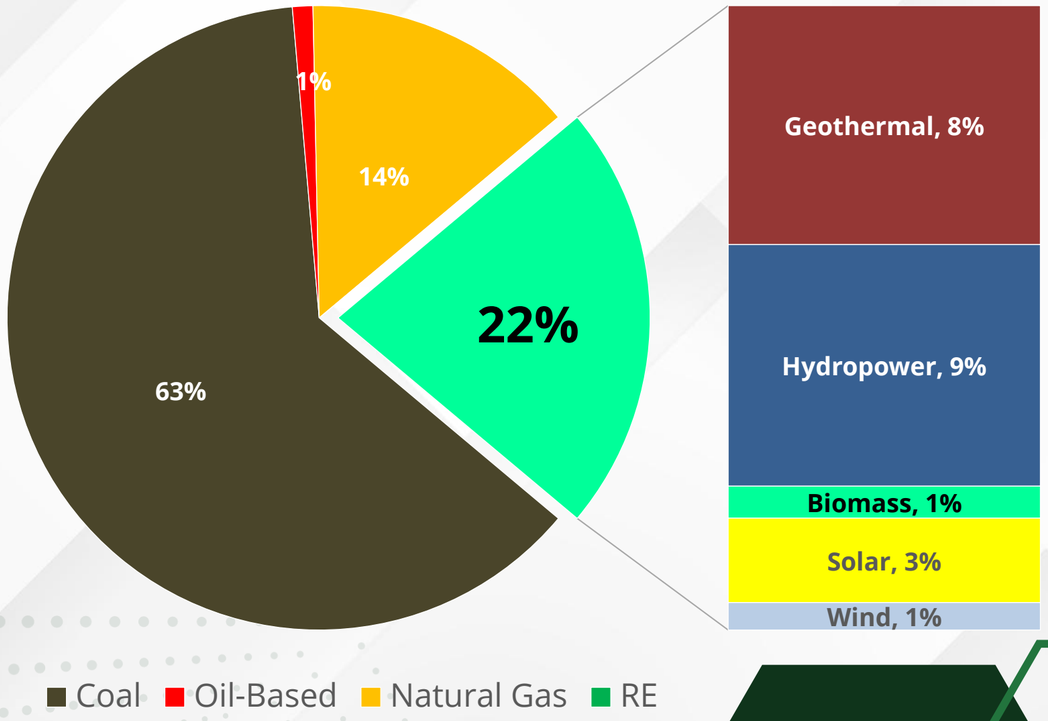
2024
POWER STATISTICS

In 2024 RE comprised 32% of the installed capacity and 22% of the gross power generation of the country.

Installed Capacity

	Capacity, MW	% Share
Coal	13,006	43.8
Oil	3,448	11.6
Natural Gas	3,731	12.6
RE	**9,520**	**32.0**
Geothermal	1,952	6.6
Hydro	3,836	12.9
Biomass	**595**	**2.0**
Solar	2,710	9.1
Wind	427	1.4

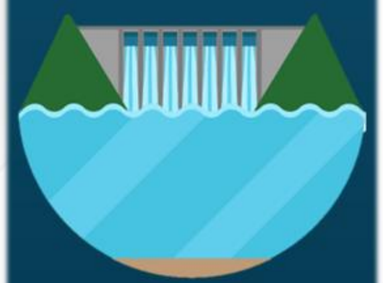
Gross Generation



Awarded RE Contracts

As of October 2025

HYDROPOWER



409 Awarded Projects

14,516 MW
POTENTIAL CAPACITY

1,660 MW
INSTALLED CAPACITY

OCEAN

9 Awarded Projects

34 MW
POTENTIAL CAPACITY

GEOTHERMAL

27 Awarded Projects

882 MW
POTENTIAL CAPACITY

1,952 MW
INSTALLED CAPACITY

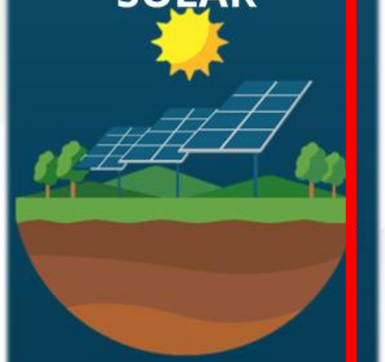
WIND

277 Awarded Projects

90,530 MW
POTENTIAL CAPACITY

442 MW
INSTALLED CAPACITY

SOLAR



572 Awarded Projects

35,987 MW
POTENTIAL CAPACITY

2,889 MW
INSTALLED CAPACITY

BIOMASS

73 Awarded Projects

269 MW
POTENTIAL CAPACITY

804 MW
INSTALLED CAPACITY

Recent updates in the Philippine RE policies and programs

Enabling Investments in RE

Easing Foreign Ownership Limit in RE Investments

The foreign ownership restriction that hampers the flow of RE-sector investments has been liberalized on 15 November 2022. Prior to this issuance, foreign companies were already allowed to develop and operate biomass power plants in the Philippines.

Preferential Dispatch of All RE Resources in the WESM

On 05 October 2022, all RE generating units are given preference in the Wholesale Electricity Spot Market dispatch schedule to ensure its maximum output injection in the grid. This is to encourage additional investments because of guaranteed dispatch in the grid at their full available capacity, allowing recovery of investments.

Policy Framework for Offshore Wind

Following Executive Order No. 21 issued by the President, the DOE issued Department Circular No. DC2023-06-0020 titled “Policy and Administrative Framework for the Efficient and Optimal Development of the Country’s Offshore Wind (OSW) Resources”, in 16 June 2023. Studies such as Marine Spatial Planning, Grid Readiness, and Permitting and Consenting are being undertaken to hasten the development of OSW resources.

RE Transition Pathways

RE Policy Mechanisms

Renewable Energy Market

Serves as the venue for the transparent and fair trading of RE Certificates

Renewable Portfolio Standards

Requires all load-serving entities, both in on-grid and off-grid areas, to source or produce a specified portion of their supply from eligible RE facilities

Net-Metering Program

Allows end-users to generate electricity from RE-based systems up to 100 kW for own use and sell their excess to the grid

Green Energy Option Program

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

Green Energy Auction Program

Provides additional market for RE through a competitive electronic bidding of RE capacities

Expanded Roof-Mounted Solar

Open to all roof-mounted solar energy generating facilities with a capacity of above 100 kWp, intended for own-use and/or export of energy .

RE Resource Development

Geothermal Energy, Offshore Wind, Waste-to-Energy, Ocean and Tidal Energy, and Expanded Roof-mounted Solar

Other Opportunities/ Applications

Co-firing of Biomass or Refused Derived Fuel in Coal-Fired Power Plants

Biomass offers locally available, renewable resources that **may be co-fired with coal** to reduce carbon emissions as part of the energy transition strategies to facilitate voluntary early decommissioning or repurposing of coal plants.

Meanwhile, refuse-derived fuel (RDF) also presents a viable circular economy solution. **RDF** is a processed form of combustible Municipal Solid Waste that **may supplement existing biomass facilities and coal fired power plants as a co-firing material**, reducing carbon intensity and enhancing energy recovery from waste.

Other Opportunities/ Applications

Utilization of Excess Heat for Power Generation

Excess gases from combustion process still carry substantial residual heat, which can be recovered through systems like heat recovery steam generators or organic Rankine cycle units. By integrating waste heat recovery, Biomass and WTE plants can improve overall energy efficiency, lower fuel consumptions, reduce emissions, and enhance the sustainability and economic performance of the operation.

THANK YOU
FOR YOUR ATTENTION

Let's take action now to protect our planet and build a sustainable future.

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