INTRODUCTION OF THE UPDATED POLICIES/MEASURES TOWARDS CARBON NEUTRALITY

34th Energy Conservation Workshop under ASEAN-Japan Energy Efficiency Partnership (ECAP 34)

Department of Energy Philippines

Climate Change

INITIATIVES



CLIMATE CHANGE INITIATIVES



ENERGY TRANSITION PATHWAY

RE

EEC

EMERGING & INNOVATIVE TECHNOLOGIES

ICT

ENERGY RESILIENCY

35% of power generation mix by 2030, 50% by 2040, and more than 50% by 2050

10% energy savings on oil products and electricity by 2040 up to 2050

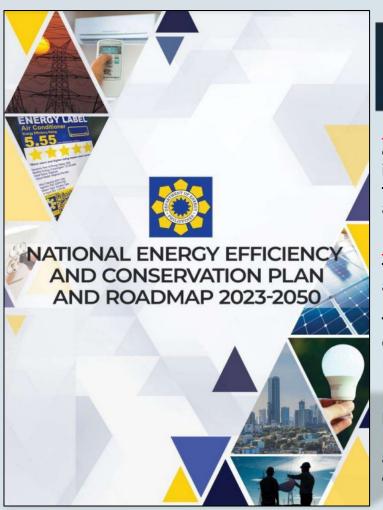
50% EV penetration rate in road transport by 2040; Exploring new and efficient technologies

Adopting advanced and smart grid technologies

Resilient and climateproof energy infrastructure

CLIMATE CHANGE INITIATIVES

NATIONAL ENERGY EFFICIENCY AND CONSERVATION PLAN
AND ROADMAP 2023-2050



Department Circular No. DC2023-05-0018

Adoption of the National Energy Efficiency and Conservation Plan (NEECP) and Roadmap 2023 -2050

National Energy Efficiency and Conservation Plan is a comprehensive framework and plan that institutionalizes energy efficiency and conservation in the country across key sectors of the economy in accordance with the EEC Act.

Roadmap 2023 - 2050 provides an updated outline of the strategic plans and actions for EEC in the Philippines across all sectors.

The target of the NEECP and Roadmap cover the Commercial, Industrial, Transport, Government, Residential, and the Utilities and End-Use sectors.

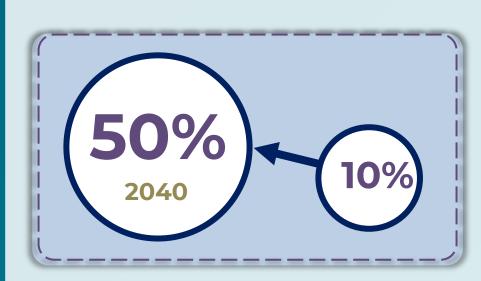
Included in its various goals are the updating of the building energy efficiency code, development of Building Energy Efficiency Indices, the establishment of a building efficiency labeling scheme, and the expansion of the MEPP and PELP, to name a few.

COMPREHENSIVE ROADMAP FOR THE ELECTRIC VEHICLE INDUSTRY



CREVI or the Comprehensive Roadmap for the Electric Vehicle Industry refers to the national development plan for the EV Industry with an annual work plan to accelerate the development, commercialization, and utilization of EVs in the country.

It envisions electrifying a wide range of vehicles and establishing a domestic EV industry with strong export potential while aiming to build a sustainable future where new EVs and required infrastructure are locally robust with reduced environmental impact.



It sets a more aggressive target aiming for **50%** EV Fleet share by **2040** compared to its **10%** business as usual scenario.







The **CREVI** contains annual work plan to accelerate the development , commercialization, and utilizations of EVs in the country through four components: **EVs and EV Charging Station; Manufacturing of EVs; R&D** involving EVs; and Human Resource Development for the EV Industry.

MEASURES TOWARDS Carbon Neutrality

MEASURES TOWARDS CARBON-NEUTRAL

DEMAND SIDE MANAGEMENT PROGRAM DEVELOPMENT

The Southeast Asia Energy Transition Partnership (ETP) is assisting the Philippine Department of Energy (DOE) in developing a Demand Side Management (DSM) program to lower energy demand through capacity building, preparing a DSM implementation plan and M&E framework, and designing a toolkit and training distribution utilities to facilitate the integration of DSM plans.

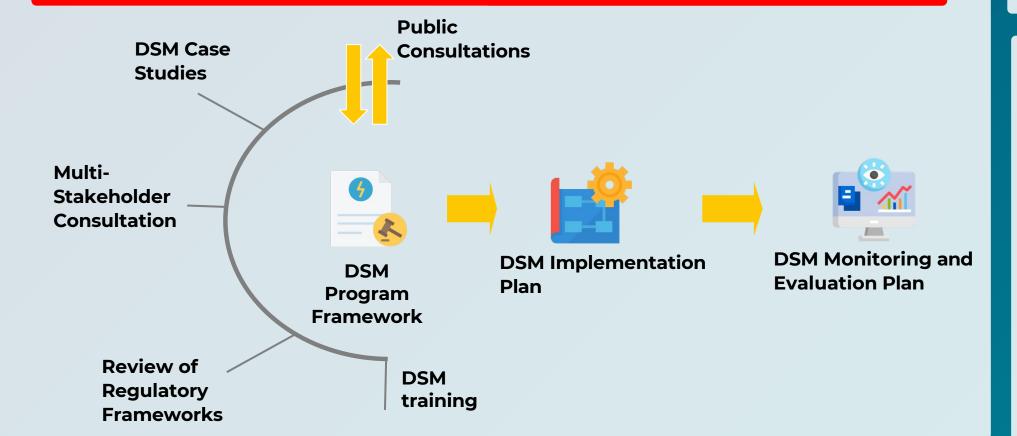
Vision

To support creation of a resilient, reliable, efficient, clean and affordable electricity system leading to economic, social and technological goals by meeting load profile objectives with strategic conservation, load management and demand response (DR) options.

Mission

To support the Government's objective of building an energy-efficient nation and facilitating increased use of RE and supported through, but not limited to, the following strategic interventions:

- Reduced energy consumption through enhanced efficiency in the domestic, commercial, industrial, public and municipal sectors.
- Strategic load management through permanent load shifting (PLS) using TOU tariffs.
- Active load management in the form of DR to balance the supply-demand gaps and to integrate higher levels of RE.

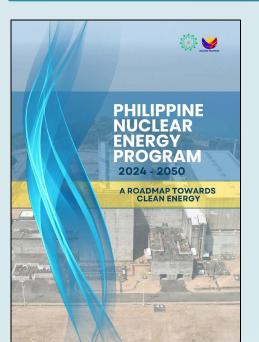


SMART SUSTAINABLE COMMUNITIES AND CITIES



DC2020-02-0003 National Smart Grid Policy Framework

PHILIPPINE NUCLEAR ENERGY PROGRAM



Outlines the key targets that must be achieved for the successful commercial operations of a nuclear power plant in the country.

2032

Target for commercial operation

1,200MW
Initial capacity

NUCLEAR ENERGY PROGRAM INTER-AGENCY COMMITTEES (NEP-IAC)

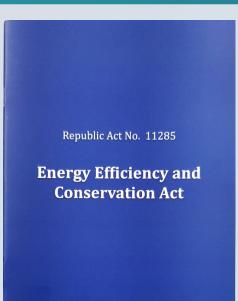


Energy Conservation INITIATIVES

ENERGY CONSERVATION INITIATIVES

As of October 2024

RA 11285: ENERGY EFFICIENCY AND CONSERVATION (EEC) ACT



Institutionalized energy efficiency and conservation, enhances the efficient use of energy, and grants incentives to energy efficiency and conservation projects

62 Policy Issuances

PHILIPPINE ENERGY LABELING PROGRAM (PELP)



National labeling system for energy consuming products (ECPs) based on the energy performance



Electric

Room Air Lighting
Conditioners Products



Washing Machines



Refrigerating Appliances



Display Monitor



Television



Energy Saving Device

DESIGNATED ESTABLISHMENTS

DEs refers to a private entity identified as energy intensive industries.



Commercial



Industrial



Transport

5,345

DEs submitted their annual energy consumption reports through the DOE DE Online Submission Portal (for 2024 compliance)

MINIMUM ENERGY PERFORMANCE FOR PRODUCTS (MEPP)

Department Circular No. DC2020-06-0016

Prescribing the Minimum Energy Performance for Products (MEPP) covered by the Philippine Energy Labeling Program (PELP) for Compliance of Importers, Manufacturers, Distributors, Dealers and Retailers of Energy-Consuming Products



Energy Consumption	Minimum CSPF
Below 3.33 kW	3.08
3.33 kW- 9.99 kW	2.81



Type	Minimum EEF
Single door	200
Two-door Manual Defrost	230
Frost-free	180



LED Type	Minimum Efficacy (lm/W)
Non-Directional	80
Linear	90



Power Input	Minimum power (W)
Stand-by pow	er > 1.0

ENERGY CONSERVATION INITIATIVES

As of October 2024

FISCAL INCENTIVES

Department Circular No. DC2021-05-0011

Guidelines on the Endorsement of Energy Efficiency Projects to the Board of Investments (BOI) Fiscal Incentives Department Circular No. DC2022-03-0004

Guidelines for the Endorsement of Energy Efficiency Strategic Investments to the Board of Investments for Fiscal Incentives



Simple Energy Efficiency Projects

Projects that involve new installation, upgrading or retrofitting of a specific equipment of devices in the system



Projects that involve new installation, retrofitting, or upgrading of system or a combination of a systems



New Energy Efficiency Projects

Innovative EE projects designed to reduce energy consumption of costs





ENERGY EFFICIENCY PRACTITIONERS

Department Circular No. 2022-03-0008
Adoption of Training Regulations and
Prescribing Certification Process for
Training Institutions and Energy
Managers (EMs)

Department Circular No. 2022-03-0007
Adoption of Training Regulations for the
Certification of Energy Conservation
Officers (ECOs)

Department Circular No. 2022-03-0008
Adoption of Training Regulations and
Prescribing Certification Process for
Training Institutions and Energy
Managers (EMs)

1,404



Certified Energy Manager (CEM)



Certified Energy
Conservation Officers
(CECO)



289

Certified Energy
Auditor (CEA)

NON-FISCAL INCENTIVES



Department Order No. DO2021-09-0014

Guidelines on the Energy Efficiency Excellence Awards

REGISTERED AND CERTIFIED ESCO

63

ESCOs registered to the DOE as of 31 August 2024 Department Circular No. DC2020-09-0018
Guidelines, Rules, and Procedures in the
Administration, Classification, and
Certification of Energy Service Companies
(ESCO)

PHP6.45B

Estimated Project Cost based on 2023 Submission of APAR for Completed EE Projects 610.61 GWh

Annual Energy savings from the energy efficiency projects implemented by ESCOs

423M t-CO2

Total CO2 reduction based on the reported savings from the EE Projects of ESCOs

ENERGY CONSERVATION INITIATIVES

As of October 2024

GOVERNMENT ENERGY MANAGEMENT PROGRAM (GEMP)

The GEMP refers to the government-wide program of reducing the monthly consumption of electricity and petroleum products. This is achievable through efficiency and conservation in electricity use as well as fuel use of government vehicles and the employment of renewable energy systems, among others.

The GEMP is geared towards sustainability by requiring government entities to reduce their electricity and fuel consumption by 10%.

1,133 Spot

Checks

1,263 **Energy Audits**



31,994.75 MWh **2024 GEMP Electricity**

Savings



576,695.41 L

2024 GEMP Fuel Savings

VEHICLES FUEL ECONOMY LABELING PROGRAM

The Philippine Transport Vehicles Fuel Economy Labeling Program (VFELP) is part of the initiatives of the Department of Energy - Energy Utilization Management Bureau (DOE-EUMB) in support to the implementation of RA 11285 or Energy Efficiency & Conservation (EEC) Act in prescribing the Energy Labeling for Transport Vehicles.

DC2023-05-0017 **VFELP Guidelines**

Road Transport

Vehicles

DC2023-05-0016

Consumer **Awareness**



Promoting Energy Efficient

FEPR Guidelines for



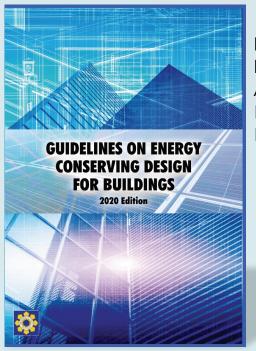
INTER-AGENCY ENERGY EFFICIENCY AND CONSERVATION COMMITTEE (IAEECC)





The IAEECC acts as a collegial body that evaluates and approves the Government **Efficiency Projects** Energy and provides (GEEP) strategic direction in the implementation of the GEMP.

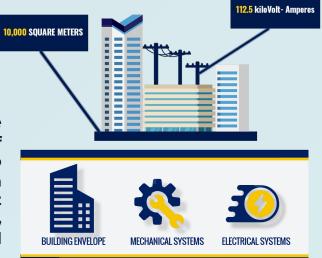
GUIDELINES ON ENERGY CONSERVING DESIGN OF BUILDINGS



DEPARTMENT CIRCULAR NO. DC2020-12-0026

Adoption of the Guidelines on **Energy Conserving Design of** Buildings

To encourage and promote the energy conserving design of buildings and their services to reduce the use of energy with due regard to the cost effectiveness, building function, comfort, health, safety, and productivity of the occupants.



THANK YOU!