

## Energy Efficiency and Conservation Roadmap









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## **Setting the Scene**

Republic Act 7638 formation of the Department of Energy (DoE).

> 2008 Philippine Energy Summit discussion on EE&C

## **EUMB OBJECTIVES**

Judicious conservation and efficient utilization of energy resources through adoption of the cost-effective options toward the efficient use of energy to minimize environmental impact.

## **NEECP VISION**

To make energy efficiency and conservation "a way of life" for Filipinos.

## III. 2017-2040 ENERGY EFFICIENCY & CONSERVATION ROADMAP

OVERALL
OBJECTIVE
BY 2040

SHORT-TERM (2017-2019) MEDIUM-TERM (2020-2022) LONG-TERM (2023-2040)

## **INDUSTRY DEVELOPMENT**

- Conduct market demand scoping
- Advocate the legislation of the EE&C bill
- Establish cross-sectoral energy performance and rating systems
- Create business tool kit for ESCOs

Government

**Transport** 

Industrial

Residential

Commercial

- Collaborate with stakeholders for expanded financing models for EE&C Projects
- Conduct Information,
   Education and Communication
   (IEC) campaign on EE practices
- Integrate EE&C at LGU level

## **STRENGTHENING**

- Create enabling mechanisms for private sector participation
- Enhance Demand Side Management mechanisms
- Integrate EE&C in the learning and education system
- Mainstream EE&C at LGU level

## **SUSTAINING**

- Institutionalize EE&C Knowledge Management System
- Develop advanced EE&C R&D capacity

- · Providing market signals
- Strengthening policies, programs and institutional structures
- Mobilizing and rationalizing private sector participation

# MEASURABLE REDUCTION IN ENERGY INTENSITY AND CONSUMPTION PER YEAR VERSUS BUSINESS AS USUAL (BAU)

## Government Priorities, Roadmap and Action Plan

PH Government Strategies and Priorities

Strategies and priorities of the present administration



**Energy Efficiency and Conservation Roadmap** 

Builds on strategies and priorities of present administration to provide a detailed outline of the strategic plans and actions across all key sectors of the economy



——
Philippines
2017-2040

Energy
Efficiency and
Conservation
Action Plan

Provides more detail to the plans and actions of the Roadmap



## **National Policy Cohesion**



<sup>\*</sup> Asia-Pacific Economic Cooperation

## **International Policy Cohesion**









## **Policy Instruments**



## **Regulatory instruments**

Laws, regulations, administrative orders, circulars, guidelines



## **Information instruments**

Information resources, communication campaigns, dissemination platforms, public information activities



## **Economic instruments**

Loans, taxes, incentives, subsidies, grants, awards, commercial funding



## **Partnership instruments**

Networks, partnerships, platforms, stakeholder forum



## **Hybrid instruments**

Pilot projects, programs



## **Education instruments**

Curricula, guidelines, teacher training, school programs, industry training, capacity building

## **Challenges for an Energy-Efficient Philippines**





## Roadmap: Economy-wide and Sectoral Targets

## Philippines Energy Efficiency Roadmap, 2017- 2040

## **Roadmap Objectives:**

To support the country's economic development through efficiency gains and ensure energy security with a reduction in energy intensity across key economic sectors.

## **Drivers**

- Sending market signals to provide incentives for EE
- Strengthening existing policy, advocacy, programs and institutional structures
   Enabling innovation and new technologies
- Harnessing private sector /partner finance

## Sectoral **Strategies**



- Minimum Fuel Efficiency Ratings developed
- Risk management on vehicle conversion, e-vehicle programs
- Re-formulated coordination mechanisms

## Medium Term (2021-30)

- Financial incentives for EE through vehicle taxes
- Promotion of key vehicle technologies
- Driver education and fleet management programs

## Long Term (2031-40)

- EE programs beyond road transport (passenger and cargo ships, aviation fuels)
- Reintegration of urban planning and transport energy use
- Congestion taxes



- Develop sectoral programs for EE in energy intensive industries
- Minimum Energy Performance (MEP) for motors, and other industrial devices
- Reporting by designated energy consumers
- Update MEP for industrial devices
- Implement demand side management programs
- Review of energy pricing
- Enhanced reporting & management for designated energy consumers
- Review inward investment rules for EE to remove distortions



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## Sectoral Strategies

- Minimum Energy Performance for appliances
- Building envelope measures cool roofs and insulation

## Medium Term (2021-30)

- Develop role of utilities as key implementation partners and information providers
- Specific EE programs for low-income households

## Long Term (2031-40)

- Towards energy efficient housing precincts
- Inclusion of EE measures in residential **Building Code**



- Reformulate group to oversee EE measures in **Building Code**
- Retro-commissioning program for existing buildings Benchmarking and ratings for building information &reporting
- EE measures for inclusion in national and regional building codes
- Enhance benchmarking and ratings

- Incentive funds in place for EE, including private financiers
- Mandatory disclosure of commercial building energy intensity



- Support passage of Enercon Bill
- Establish EE database, data collection regime, M&E framework
- Stronger coordination with local government and private sector
- Information & education campaigns

- National strategy for efficiency in power supply
- Establish enforcement regimes
- Enhanced reporting and monitoring

- Enhanced institutional arrangements
- Enhanced predecessor activities

## **Thank You!**



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