



Department of Transportation  
and Communications



Department of Environment and Natural Resources  
*Kagawaran ng Kapaligiran at Likas Yaman*

# Advancing EST in the Philippines

## *Recent Achievements and Challenges*

**6<sup>th</sup> Regional EST Forum**

New Delhi, India  
4-6 December 2011

# Timeline of EST Strategy Development



**January 2009**

**Presidential  
Administrative Order  
No. 254**

Formulation of a  
National EST Strategy

**May-June 2009**

**Regional  
Consultations**

Iloilo, Davao and  
Baguio

**2010**

**National EST  
Strategies, Indicators  
and Action Plans**

Submitted to Office of  
President and NEDA

**May 2011**

**Official Launch  
of National EST  
Strategy**



**Formal Launch of the  
National EST Strategy**

**20 May 2011**

# Public transport planning



- **Urban Transport Program for Highly Urbanized Cities**

- ✓ Development of Mega Manila Public Transportation Planning Support System
- ✓ Development of Public Transportation Strategic Plan for Metro Cebu
- ✓ Sustainable Urban Transport in Davao City (SUTra-DC)

- **Public Transport Network Integration and Improving Mass Transit Systems**

- ✓ LRT 1 to south of Metro Manila (Cavite City)
- ✓ Line 1 North Extension (Closing the Loop for MRT-LRT Lines)
- ✓ Line 2 MRT eastward (Masinag) and westward
- ✓ Reconfiguration of the North Rail Line



# BRT: Exploration Stage in Philippines



- Initial studies on possible BRT applications in Metro Manila and Davao City
- Development of a BRT System for Cebu City
- Potential challenges in BRT applications in the country
  - Suitable and enabling institutional arrangements for BRT
  - Mitigate social and economic impact to PUJ operators/drivers
  - Needs strong retrenchment program, route re-adjustment, alternative livelihood opportunities



# Inspection and Maintenance for Vehicles



- Development of National Motor Vehicle Inspection and Maintenance Program.
- Setting up of government and private sector maintained and operated lanes
  - Implementation Plan for the Motor Vehicle Inspection System

Use	Facility	Completion	Operation
Public Transport	GMVIS	End of 2013	Jan 2014
Private Vehicles	PMVIS	Dec 2011	Jan 2012
Public Transport	kGMVIS	End of 2013	Jan 2014

1. Standard Setting
2. Training
3. Demonstration
4. Type Approval Test (emission)
5. Technical Service for MRA

# Clean Fuels and Vehicles



- **Auto-LPG Jeepney Initiatives**

- ✓ Testing implemented by the Philippine Department of Energy and Auto-LPG Technical Working Group on the Vehicle Emissions Research and Testing Laboratory (VERTL) of the University of the Philippines in October 2011
- ✓ Compared vehicle fuel economy and maximum power for diesel and LPG-fed passenger jeepneys

- **Upgrading of Local Vehicles used for Public Transport**

- ✓ Development of Standards for Local Road Vehicles (e.g. jeepneys)
- ✓ Tricycle Upgrading Program

- **Euro 4 vehicle emission standards**

- ✓ Sep 2010: DENR AO: Starting Jan 2016, new LDV should comply with EURO 4 emission limits subject to EURO IV fuel availability.

# Clean Fuels and Vehicles



- **Promoting electric vehicles**

- ✓ ADB-funded E-vehicle program with DOE, COMSTE, others
- ✓ Battery swapping for electric jeepneys in Makati City
- ✓ Public battery charging station to be established in Mandaluyong City as part of the ADB-funded electric tricycles project
- ✓ Potential Challenges:
  - Design of financing scheme: consider micro-financing (with consistent terms, ex. interest rates)
  - Technology verification and certification
  - Support to develop a sufficient number of charging stations
  - Development and support to local industries



EVs on exhibit during the 1st Philippine Electric Vehicle Summit (Nov 2010)

# Recommendations: EST in a Green Economy



## Five Key Sectors of a Green Economy

- Agriculture and fisheries
- Environment and natural resources
- Infrastructure (energy, waste and water)
- Green cities (sustainable transport and urban development)
- Green industries

# Recommendations: EST in a Green Economy



- **Green Cities**
  - The strategic spatial integration to promote global Urban competitiveness
  - Efficient transportation and communication network, and
  - Bring about an efficient settlement, production and service delivery system
- **Green cities promote Environmentally Sustainable Transport (EST)**
  - Reduce annual growth rate of energy consumption and associated green house gas (GHG) and air pollutant emissions;
  - Enhance sustainable mobility through the development of a viable market for EST;
  - Promote the shift towards the use of more sustainable transport modes of low carbon intensity, such as non-motorized transport and electronic vehicles (e-jeepneys & e-tricycles), including CNG buses.

# Thank you!



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