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Promoting Environmentally Sustainable Transport (EST)

A Country Report of the Philippines

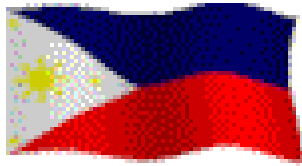
Hon. ANNELI R. LONTOC

*Undersecretary for Road Transport
Department of Transportation and
Communications*

Hon. TERESITA S. CASTILLO

*Undersecretary for Special Concerns
Department of Environment and Natural
Resources*

The Third Regional EST Forum
17 – 19 March 2008
Singapore

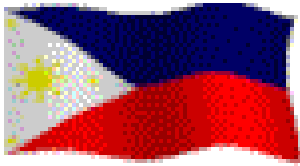


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Presentation Outline



- Major policies, plans, programmes, strategies in promoting public transport and mass transit options
- Good examples of urban transport master plans or city development strategies that address NMTS and traffic problems
- Current or future plans/programmes to address climate change issues in transport sector
- Best practices, policy issues or challenges concerning the thematic areas of EST



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Major Policies, Plans and Programs, Strategies in Promoting Public Transport



Medium Term Phil Development Plan (2004-2010) – “The government will prioritize infrastructure projects that are strategic and critical to stimulate trade and investments, such as:...(b) roads and rail systems that will decongest Metro Manila, the Clark-Subic Highway, and highways that are catalytic to development in Luzon, Visayas and Mindanao;...”

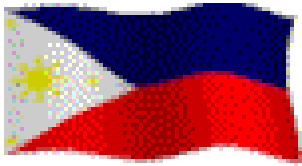
STRATEGIES/ACTION PLAN

B. Decongestion of Metro Manila

4. Improve transport within Metro Manila

a. Final Linkage of the MRT/LRT commuter loop.

The mass transport system in Metro Manila will be further enhanced through the implementation of **rail-based mass transport system**... as well as the adoption of a unified ticketing system for MRT/LRT Lines. LGU involvement in the financing of MRT/LRT projects will also be encouraged.



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Major Policies, Plans and Programs, Strategies in Promoting Public Transport



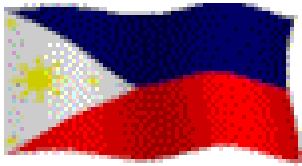
State of the Nation Address of President Gloria Macapagal-Arroyo during the 3rd Regular Session of the 13th Congress of the Republic of the Philippines Monday, July 24, 2006, Batasan Pambasa Complex, Quezon City

“ ...To be world-class we invest in five comprehensive strategies for global competitiveness:

3. Modernize infrastructure at least cost to efficiently transport goods and people...

“...Upang ibsan ang pagod ng mga empleyadong namamasaha sa trapiko sa Kalakhang Maynila, mangangapital tayo sa mga expressway at **tren**.

...Pagdurugtungin natin ang MRT at LRT mula Monumento hanggang North EDSA upang mabuo ang biyahe paikot sa Kamaynilaan, at maibsan ang trapik. We will construct the Northrail to Clark and the Southrail to Lucena and on to Bicol, and upgrade the link between them. We will also extend the LRT to Bacoor. Sa pagbilis ng biyahe patungo at palabaas ng Metro Manila, makakatira ang manggagawa sa mas mura at maaliwalas na lalawigan....”



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Sector MFO

Road Transport Services

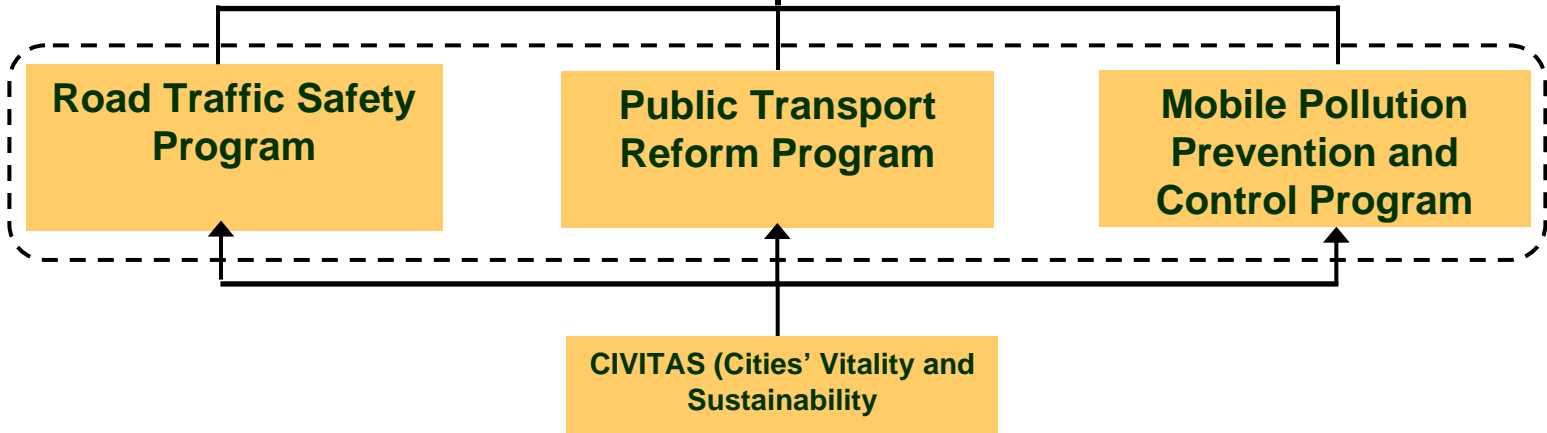
Sector Goal

Access to Environmentally Sustainable Road Transport

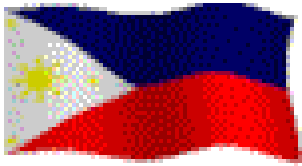
Sector Outcomes

Integrated, efficient, effective, safe, secure and environmentally sustainable road transport systems

Activities

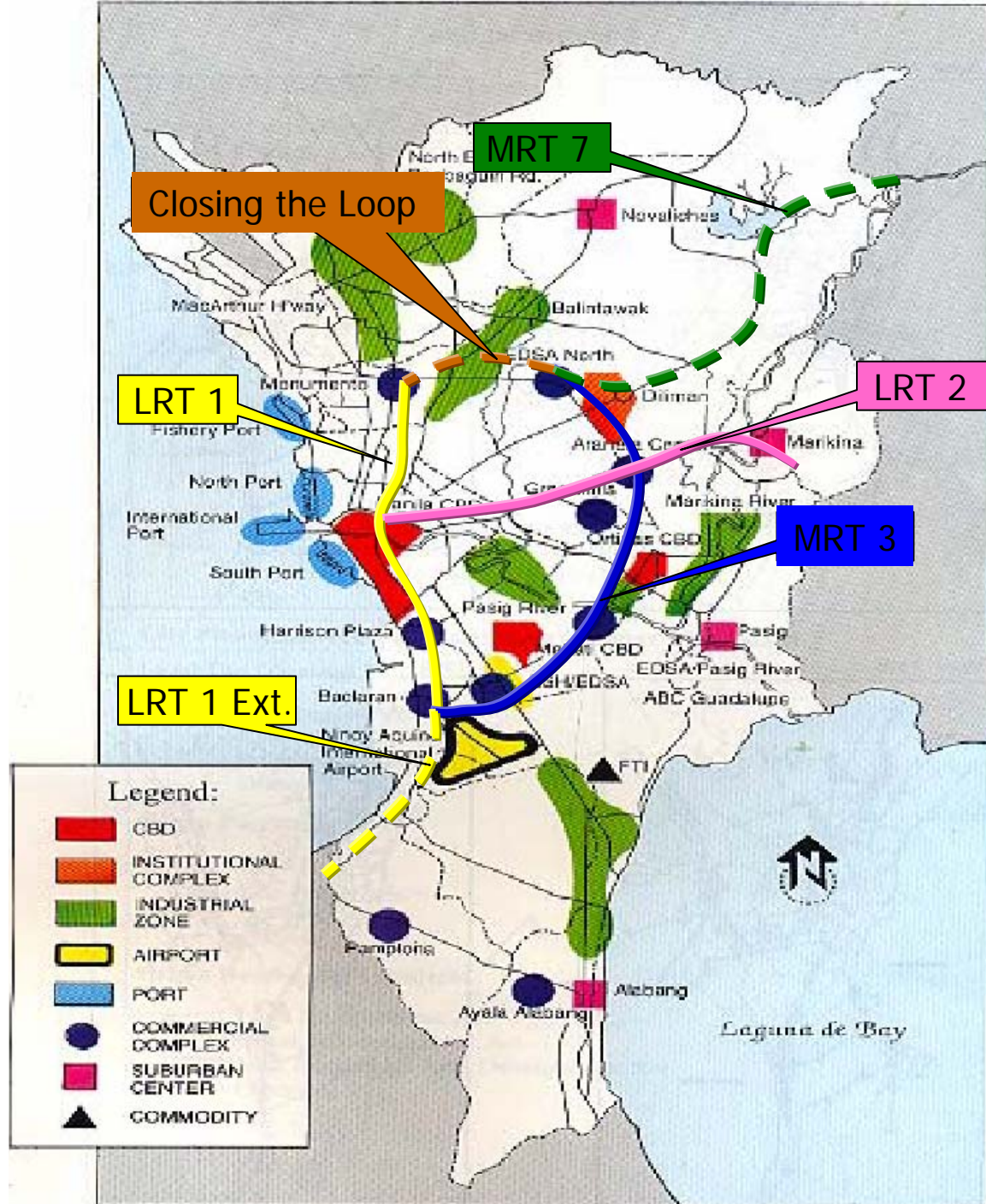


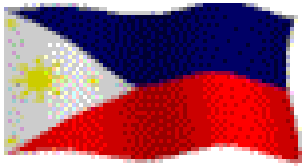
ROAD TRANSPORT SECTOR LOGICAL FRAMEWORK



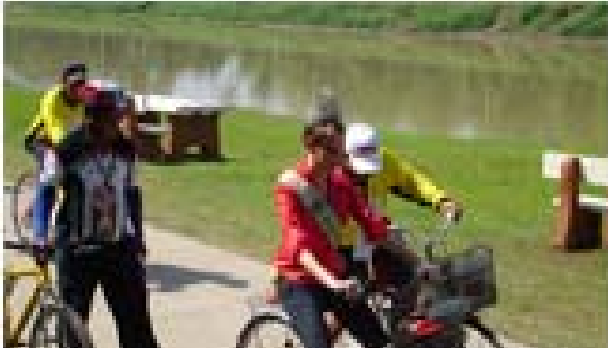
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***Main Traffic
Generators and
Attractors in
Metro Manila***





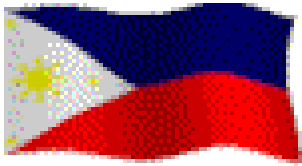
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Good example of urban transport master plans or city development strategies that address NMTS and traffic problems



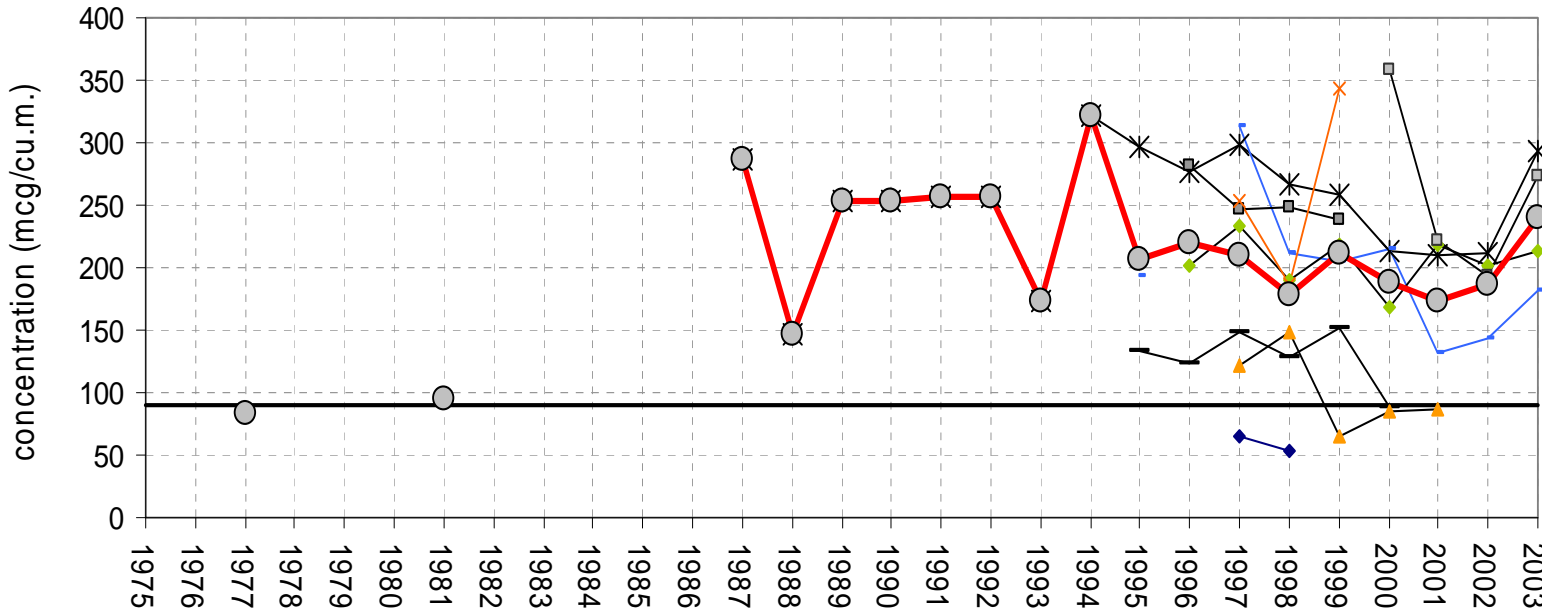
MARIKINA BIKEWAYS PROJECT



Air Quality in Metro Manila



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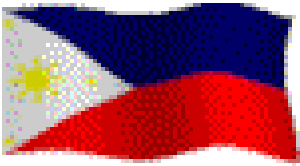


- Standard (Annual)
- PAG-ASA
- ▲ Ateneo
- ✕ Araneta Avenue
- ✱ Valenzuela
- ◆ East Avenue
- ◆ Manila Memorial
- Mean (traffic stations only)

70% of the air pollution in Metro Manila is attributed to transport

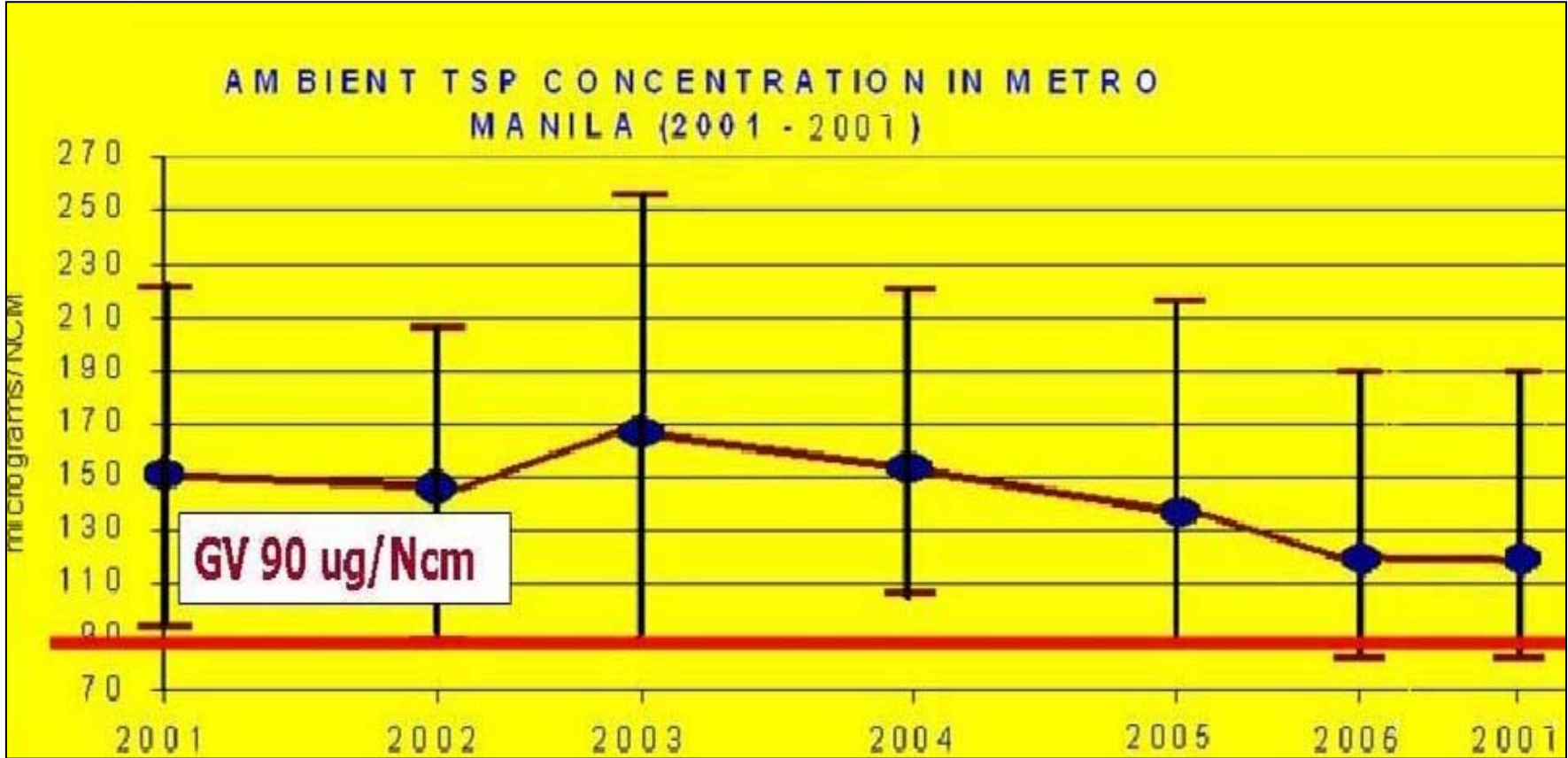
TSP Concentration – Road Traffic-Related Monitoring Stations

Sources: Department of Environment and Natural Resources Environmental Management Bureau, Philippines (DENR-EMB), DENR National Capital Region, Philippines (DENR-NCR) and Partnership for Clean Air (PCA)

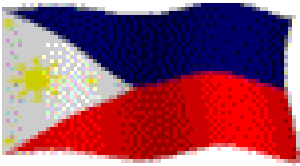


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National Ambient Air Quality Guideline
Values for : 24 hours averaging time
(short term) 230ug/NCM
1 Year averaging time (long term)
90ug/NCM

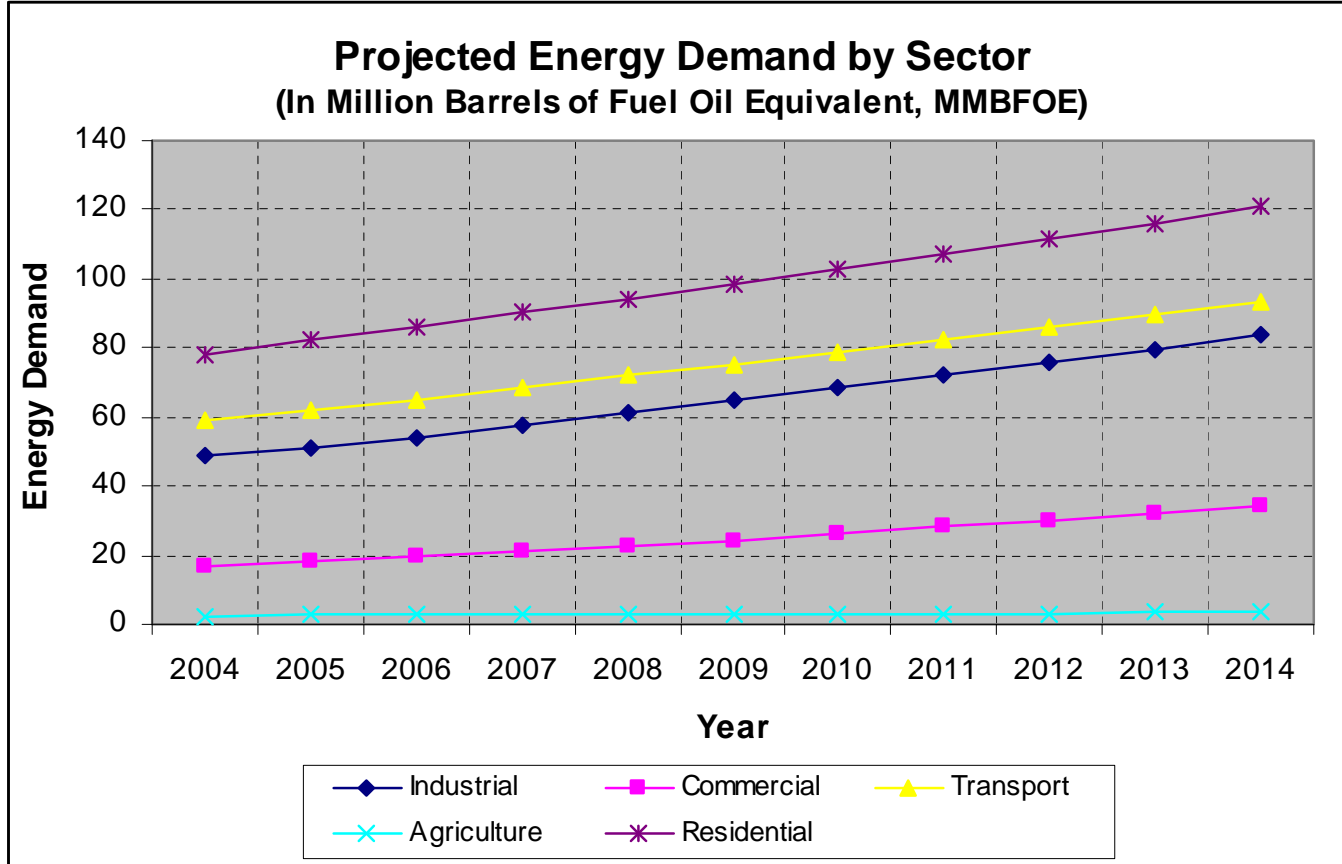


Observation: 27.65% decrease from 2003 to 2007



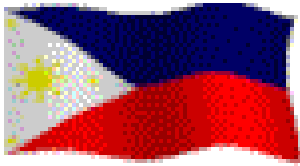
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Energy Demand by Sector



Source: Department of Energy (DOE)

- *The transport sector accounts for the 2nd largest share in total energy demand*



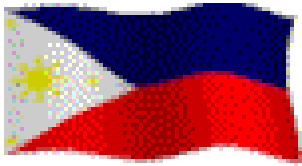
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Current Programs to Address Climate Change Issues in Transport Sector



1. Increasing Vehicle Efficiency

- **Public Transport Modernization Program (Buses, taxis)**
- **Establishment of National Motor Vehicle Inspection and Maintenance Program**
 - ✓ **New Motor Vehicle Inspection Stations (MVIS)**
 - ✓ **Periodic Motor Vehicle Inspection System**
- **Harmonization of Motor Vehicle Standards and Regulations**
 - ✓ **Development Plan for MV Type Approval System**
 - ✓ **Development of Local MV Classification System**
 - ✓ **Standards for Customized Road Vehicles**
- **Pedestrianization (incl. pedestrian walkways)**
- **New Traffic Management Measures (incl. RFID)**



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Current Programs to Address Climate Change Issues in Transport Sector



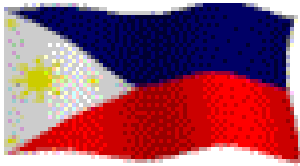
2. Switch to Energy Efficiency Transport Modes

- Mass Transport System such as LRT, MRT
- Introduction of Bus Rapid Transit (BRT), **Articulated Buses, Double Decker, Hybrid Buses**

3. Switch to Alternative Fuels

- Providing incentives for Public Transport Vehicles (buses, taxis) run by LPG, and CNG
 - additional 2 years for the term of franchise
 - priority processing for taxi units powered by LPG





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Current Programs to Address Climate Change Issues in Transport Sector



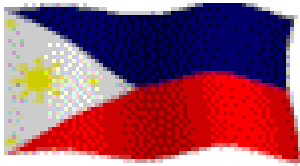
4. Decrease Travel Delays

- Yellow Lanes for Yellow Plates
- Integrated Transport Terminals
- Plate Number restriction

5. Increase Load Factor

- Public Transport Network/Infrastructure Development
- Public Transport Route Rationalization Program
- Introduction of Mega-Jeepneys
- Anti-Colorum Task Force to intensify enforcement against “colorum” and illegal operation.

6. Capacity Building and Social Marketing of EST to local government units (LGUs)



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Best practices concerning the thematic areas of EST



POLICY FRAMEWORK

Republic Act 8749 (R.A. 8749) – The Philippine Clean Air Act (CAA) of 1999

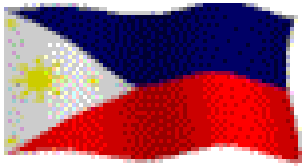
- a comprehensive air pollution control policy
- provides for close inter-agency collaboration among the Department of Environment and Natural Resources (DENR), Department of Transportation and Communications (DOTC), Department of Trade and Industry (DTI) provides for extensive partnership of these agencies with the local government units (LGUs) and non-governmental organizations (NGOs) in the pursuit of the CAA objectives.

Republic Act 8794 (R.A. 8794) - MV Users' Charge Law

- Special Vehicle Pollution Control Fund – 7.5%
- Special Road Safety Fund – 7.5%

Republic Act 9367 (R.A. 9367) Bio-fuels Act

- directing the use of bio-fuels and establishing the bio-fuels program
- declared the policy to reduce dependence on imported fuels with due regard to the protection of public health, environment and eco-systems.



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Best practices, concerning the thematic areas of EST



Promotion of Use of Cleaner/Alternative fuel

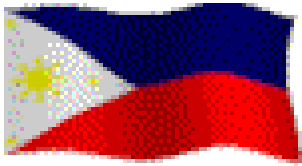
BIODIESEL - Coco Methyl Ester (CME) "Coco Diesel" & Jatropha



COMPRESSED NATURAL GAS (CNG)

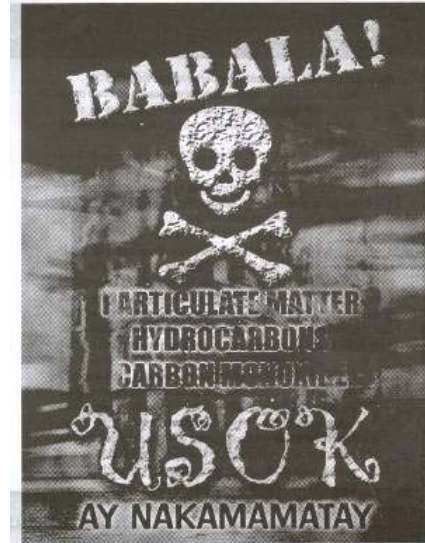
LIQUIFIED PETROLEUM GAS (LPG)

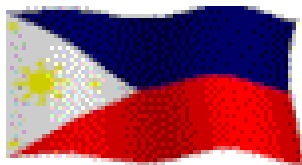




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Social Marketing on Environmental Projects





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Policy issues or challenges concerning the thematic areas of EST



- Public Health and Transport
 - Public health and road safety are integral parts of transport planning and policies
 - Institutional mechanism for integrated transport policies
 - there is a need for greater coordination among key agencies, such as health, environment and transport agencies both at local and national level.

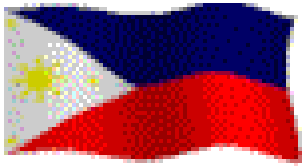
Prevalence of Chronic Respiratory Illnesses		
SAMPLE	COPD*	PTB**
Jeepney drivers	32.5%	17.5%
Aircon bus drivers	16.4%	11.5%
Commuters	14.8%	9.0%
*COPD or chronic obstructive pulmonary diseases- characterized by shortness of breath and difficulty in breathing due to limited airflow to the lungs		
**PTB or pulmonary tuberculosis – refers to a recurrence of childhood TB that affects the lungs		

Source: Philippines Environment Monitor 2002 – Air Quality (citing an epidemiology study conducted by the UP College of Public Health with support from the World Health Organization)

Health Impact of Particulate Matter in Metro Manila:

<u>Effects</u>	<u>Number of cases</u>
Chronic bronchitis	12,000
Asthma	436,000
Bronchitis in children	112,0001
Emergency room visits	45,000
Hospital admissions	2,000
Restricted activity (days)	11,000,000
Respiratory symptoms (days)	35,028,000
Total cost of PM ¹⁰ exposure	US\$430 million

Source: Dept. of Health, 1999

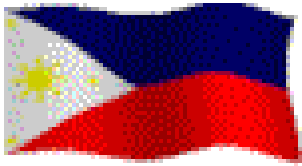


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Policy issues or challenges concerning the thematic areas of EST



- Land-use Planning
 - Integration of transport and land use development through more responsive planning standards
- Integrating Local Governance in Promoting EST
 - Get the local government involved and capacitated in developing city plans which have EST elements
 - Develop and promote CIVITAS (Cities' Vitality and Sustainability) Project in the Philippines
 - ⑩ Promotion of non-motorized transport (NMT) mode
 - Strengthen LGU air quality management capability (mobile sources)
 - Expansion of Clean Air Management Program to other cities and towns
 - Tricycle Operation Management Program
 - Motorcycle/tricycle conversion to 4-stroke engines
 - Road safety
 - RMC as regulatory tool



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Case Studies for EST Best Practices



Marikina City

- Non-motorized transport (NMT)

Iligan City

- Integrated public transport terminal

Cebu City

- Area-wide traffic management

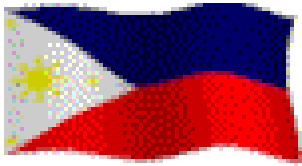
Cagayan de Oro City

- Traffic Administration

San Fernando City

La Union

- Local air-quality management



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Thank you!