

ENVIRONMENTALLY SUSTAINABLE TRANSPORT (EST) IN THE PHILIPPINES

**Voluntary progress / achievements in implementing
Bangkok 2020 Declaration**

**Seventh Regional EST Forum in Asia
& Global Consultation on Sustainable Transport
in the Post 2015 Development Agenda**

23-25 April 2013, Bali, Indonesia

Country Report

Philippines



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Voluntary Progress/Achievements/Initiatives towards Goals of the Bangkok 2020 Declaration

National EST Strategy (launched May 2011)

- Reduction of the annual growth rate of energy consumption and associated greenhouse gas (GHG) and air pollutant emissions from the transport sector in urban areas of the country;
- Enhance sustainable mobility through the development of a viable market for environmentally sustainable transport (EST) goods and services, which involves, among others, the promotion of transportation systems of low carbon intensity and shift towards the use of more sustainable transport modes.

Bangkok Declaration for 2020

- Sustainable Transport Goals for 2010 - 2020

Name of Policy or Strategy	SHIFT				IMPROVE				CROSS-CUTTING STRATEGIES					
	Goal 4	Goal 5	Goal 6	Goal 7	Goal 8	Goal 9	Goal 10	Goal 11	Goal 13	Goal 14	Goal 15	Goal 16	Goal 18	Goal 19
National EST Strategy	X	X										X		X
- Promotion of BRT system for metro cities		X										X		
- Expansion of urban rail in Metro Manila		X												
- Replacement of 2-stroke tricycles		X											X	
- Bike on Bike off - LRT	X													
Alternative Fuels														
- Biofuels as transport fuels					X									
- Natural gas for public transport					X							X		
- Autogas (LPG) program					X									
- Jeepney engine replacement to LPG					X								X	
Fuel Efficiency														
- Road Transport Patrol									X					
Nautical Highway System (RRTS)				X										
Tricycle Management														
Bikeways and Walkways Program in Metro Manila	X													
Road User's Tax Law – Special fund for air pollution control													X	
Public transport strategic plan for Metro Cebu		X												

Bangkok Declaration for 2020

- Sustainable Transport Goals for 2010 - 2020

Name of Policy or Strategy	SHIFT				IMPROVE				CROSS-CUTTING STRATEGIES					
	Goal 4	Goal 5	Goal 6	Goal 7	Goal 8	Goal 9	Goal 10	Goal 11	Goal 13	Goal 14	Goal 15	Goal 16	Goal 18	Goal 19
Mega Manila Public Transport Plan		X												
Motor vehicle inspection system program: Phase1 and 2							X							
Adoption of Euro regulations						X					X			
Development of an integrated road accident data base system									X					
Toll Roads			X											
Integrated Luzon Railway				X										
Inland Water Transport				X										
Intelligent Transport System														
High Standard Highway Development Plan				X										
Automated Fare Collection System								X						
Davao Sustainable Urban Transport		X												
National Communications on Climate Change												X		

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
II. Strategies to <u>Shift</u> towards more sustainable modes			
“Shift” Strategy	4 Require Non-Motorized Transport (NMT) components in transport master plans in all major cities and prioritize transport infrastructure investments to NMT, including wide-scale improvements to pedestrian and bicycle facilities, development of facilities for intermodal connectivity, and adoption of complete street design standards, wherever feasible	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in implementation: - Sustainability of the program
		Pilot projects and/or policies developed under development ➤ Formulation of National EST Strategy - The National EST strategy is consistent with the Bangkok Declaration 2020 that sets sustainable transport goals for Asian countries from 2011 – 2020 and complements the twelve thematic areas identified by the Aichi Statement of 2005 which establishes the forum for promoting EST in Asia. ➤ Bike on Bike off – LRT ➤ Bikeways and walkways program in Metro Manila - Construction of bicycle trails and designated lanes connecting strategic areas in the city to major transport terminals (LRT/MRT, jeepney and bus) and urban facilities such as schools, market, church, malls, offices and recreation centers.	
		Important actions you will take in 2013: - Institutionalization of EST unit in the structure of the Department	

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
“Shift” Strategy	5 Improve public transport services including high quality and affordable services on dedicated infrastructure along major arterial corridors in the city and connect with feeder services into residential communities	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation of BRT: <ul style="list-style-type: none"> - Lack of capacity of existing regulatory system for the integration of BRT into the system. - Institutional/Legal barriers prevent the establishment of a sufficiently authorized entity to own and operate the Cebu BRT. - Inability to terminate or adjust the PUJ routes in the BRT corridor. - Strong resistance from the PUJ sector leads to compromises which impact on system design and effectiveness.
		Pilot projects and/or policies developed under development <ul style="list-style-type: none"> ➤ Formulation of National EST Strategies ➤ Cebu BRT Project ➤ Expansion of Urban Rail in Metro Manila <ul style="list-style-type: none"> ▪ LRT 1 Cavite Extension <ul style="list-style-type: none"> - Extension of the LRT Line 1 by approximately 11.7 km from its existing tail (end) tracks thru PPP. Projected to increase LRT Line 1 ridership from 566,715 passengers /day to 820,389 passengers /day by 2015 ▪ LRT 2 East Extension <ul style="list-style-type: none"> - Construction of the 4.19 km eastern extension of LRT 2. Projected to increase ridership from 218,593 passengers/day in 2012 to 335,625 passengers /day by 2015 ➤ Replacement of 2-stroke tricycles 	

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration
“Shift” Strategy		<ul style="list-style-type: none"> ➤ Davao Sustainable Urban Transport <ul style="list-style-type: none"> - Formulation and implementation of a public transport strategy and an associated reform and modernization program for Davao City. ➤ Public Transport Strategic Plan for Metro Cebu <ul style="list-style-type: none"> - The public transportation strategic plan for Metro Cebu study aimed to provide the Department and other concerned stakeholders with a blueprint for the development and promotion of a sustainable public transportation in Metro Cebu. ➤ Mega Manila Public Transport Plan <ul style="list-style-type: none"> - Development of a public transportation planning support system at the Department of Transportation and Communications (DOTC) to address the gaps in the institutional capability of the DOTC to perform its planning and development mandates.
		<p>Important actions you will take in 2013:</p> <ul style="list-style-type: none"> - Procurement of works by 2013.

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
“Shift” Strategy	6 Reduce the urban transport mode share of private motorized vehicles through Transportation Demand Management (TDM) measures, including pricing measures that integrate congestion, safety, and pollution costs, aimed at gradually reducing price distortions that directly or indirectly encourage driving, motorization, and sprawl	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation: - Social acceptability of TDM measures
		Pilot projects and/or policies developed under development ➤ Toll Roads Project (321.3km) <ul style="list-style-type: none"> ▪ Cavitex ▪ Metro Manila Sky Way (MMSW) ▪ NAIA Expressway ▪ South Luzon Expressway (SLEX) ▪ North Luzon Expressway (NLEX) ▪ Southern Tagalog Arterial Road (STAR) ▪ Subic-Clark-Tarlac Expressway (SCTEX) ▪ Subic-Tipo Expressway (NLEX Segment 7) 	
		Important actions you will take in 2013: - Rollout of priority Infra Projects	

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
“Shift” Strategy	7 Achieve significant shifts to more sustainable modes of inter-city passenger and good transport , including priority for high-quality long distance bus, inland water transport, high-speed rail over car and air passenger travel, and priority for train and barge freight over truck and air freight by building supporting infrastructure such as dry inland ports	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation: - Resource mobilization to finance big ticket project
		Pilot projects and/or policies developed under development ➤ Nautical Highway System (RRTS) - Development of an integrated transport system combining RORO ferry network and services with matching road system that will provide interisland vehicular connection or linkage that will facilitate the seamless movement of vehicles. ➤ Integrated Luzon Railway - Development of Airport Express Link. A new high-speed rail project linking the Ninoy Aquino International Airport (NAIA) and the Diosdado Macapagal International Airport (DMIA) - Redevelopment of PNR Lines in Luzon ➤ Inland Water Transport - Putting up ferry services along the Manila Bay coast and Laguna Lake, and assess the impact of interconnecting these with the existing Pasig River Ferry System. ➤ High Standard Highway Development Plan - Formulation and development of strategy for the High Standard Highway Network and formulation of the High Standard Highway Master Plan to cope traffic congestion along the national arterial roads that causes various problems such as increase of travel time, failure of timely delivery of goods and people, losses of valuable time of people, aggravated roadside environment including air pollution, noise and vibration, etc..	
		Important actions you will take in 2013: - Completion of Development Plan	

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
III. Strategies to <u>Improve</u> transport practices and technologies			
“Improve” Strategy	8 Diversify towards more sustainable transport fuels and technologies , including greater market penetration of options such as vehicles operating on electricity generated from renewable sources, hybrid technology, and natural gas	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation: - The current CNG market is small compared to objectives of programme. Currently there are only 55 PUBs able to operate on CNG and the capacity of the existing DS is limited to 70 vehicles per day. - Existing PUB operators are not being sufficiently attracted to the conversion programme despite preferential rates and other incentives.
		Pilot projects and/or policies developed under development ➤ Biofuels as Transport Fuels ➤ Natural Gas for Public Transport - Promotion of the utilization of Compressed Natural Gas in the transport sector in consonance with the goal of ensuring fuel supply diversification and supply security. - The program also includes infrastructure development, market development, technology, incentives and financial assistance, manpower development, standards and other regulatory concerns and Information Education Communication (IEC). ➤ Autogas (LPG) program - Conversion of gasoline and diesel engines of taxis to LPG powered engines in Metro Manila to Mitigate air pollution caused by emission from mobile source through the use of cleaner or alternative fuel for public transport. - As of 31 December 2012 a total of 6,293 taxi’s were converted.	

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration
“Improve” Strategy		<p>➤ Jeepney engine replacement to LPG</p> <ul style="list-style-type: none"> - Conversion of gasoline and diesel engines of PUJs to LPG powered engines by providing assistance to qualified PUJ operators in Metro Manila to finance, or partially finance the desired conversion subject to a repayment scheme to mitigate air pollution caused by emission from mobile source through the use of cleaner or alternative fuel for public transport and assist PUJs drivers/operators to cope with the rising prices of conventional fuel.
		<p>Important actions you will take:</p> <ul style="list-style-type: none"> - Roll out of Natural Gas Vehicle Program for Public Transport by 2014.

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
“Improve” Strategy	9 Set progressive, appropriate, and affordable standards for fuel quality, fuel efficiency, and tailpipe emissions for all vehicle types, including new and in-use vehicles	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation:
		Pilot projects and/or policies developed under development ➤ Adoption to Euro Regulations <ul style="list-style-type: none"> ▪ DAO 2010-23 "Revised Emission Standards for All Types of Motor Vehicles Excluding Motorcycles/Tricycles" <u>New: “Type Approval Standards”</u> <ul style="list-style-type: none"> - Euro2/II standards for Light Duty Vehicles, Passenger Cars and Medium/Heavy Duty Vehicles effective Jan. 1, 2008 up to Dec. 31, 2013 - Euro 4 for Passenger cars & Light duty vehicles by Jan. 1, 2016 <u>In-use:</u> Emission standards for Carbon Monoxide (CO) and Hydrocarbon (HC) for In-use vehicles. No standard for NOx. <ul style="list-style-type: none"> ▪ DAO 2010-24 "Revised Emission Standards for All Types of Motor Vehicles Excluding Motorcycles/Tricycles“ - Euro2 standards for new motorcycles/3-Wheeled effective Sept.2012 - Euro-3 for new motorcycles/3-Wheeled effective Sept.2015) <u>In-use:</u> Emission standards for Carbon Monoxide (CO) and Hydrocarbon (HC) for In-use motorcycles/tricycles. No standard for NOx.	
		Important actions you will take in 2013: <ul style="list-style-type: none"> - Set progressive, appropriate, and affordable standards for fuel quality, fuel efficiency, and tailpipe emissions for all vehicle types, including new and in-use vehicles 	

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration		
“Improve” Strategy	10	Establish effective vehicle testing and compliance regimes, including formal vehicle registration systems and appropriate periodic vehicle inspection and maintenance (I/M) requirements, with particular emphasis on commercial vehicles, to enforce progressive emission and safety standards, resulting in older polluting commercial vehicles being gradually phased-out from the vehicle fleet, as well as testing and compliance regimes for vessels	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation:
		Pilot projects and/or policies developed under development ➤ Motor Vehicle Inspection System Program: - The project involves the establishment of infrastructure and implementation of a systematic and comprehensive minimum of 3-lane vehicle testing system (MVIS Center) for vehicle road safety and emissions in NCR, Region 1, 2, 3, 4-A, 6, 7, 10, 11 & 12 with a total of 35 lanes. - The program aims to expand of all MVIS, at least 3-lane Motor Vehicle Inspection Center (1 Heavy Motor Vehicle Lane, 1 Light Motor Vehicle Lane, and 1 Motorcycle Lane) to all regions and key cities of the country.		
		Important actions you will take: - Rollout of MVIC Development Program by 2014		

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
“Improve” Strategy	11 Adopt Intelligent Transportation Systems (ITS) , such as electronic fare and road user charging systems, transport control centres, and real-time user information, when applicable	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation:
		Pilot projects and/or policies developed under development ➤ Automated Fare Collection System - Development and implementation of a contactless and integrated automatic fare collection system in LRT Lines 1 and 2 and MRT 3 to replace the existing magnetic stripe collection technology for both single journey and stored value tickets	
		Important actions you will take: - Procurement of AFCS Service Provider by 2013	

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration		
IV. Cross-cutting strategies				
“Cross-Cutting” Strategy	13	Adopt a zero-fatality policy with respect to road, rail, and waterway safety and implement appropriate speed control, traffic calming strategies, strict driver licensing, motor vehicle registration, insurance requirements, and better post-accident care oriented to significant reductions in accidents and injuries	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation:
	Pilot projects and/or policies developed under development ➤ Road Patrol Transport - LTO's designated Anti-Smoke Belching Units to establish a roadside inspection system and ensure that vehicles comply with the in-use emission standards set forth by the Department of Trade and Industry (DTI) together with the Department of Transportation and Communications (DOTC). ➤ Development of an Integrated Road Accident Database System - Establishment of an integrated road accident database and analysis system for the Philippines. - It will deal with issues on accurate data collection, individual agency data needs, processing, analysis, storage, and data management.			
	Important actions you will take in 2013: - Enhance the Road Accident Database			

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration		
“Cross-Cutting” Strategy	14	Promote monitoring of the health impacts from transport emissions and noise, especially with regard to incidences of asthma, other pulmonary diseases, and heart disease in major cities, assess the economic impacts of air pollution and noise, and devise mitigation strategies specially aiding sensitive populations near high traffic concentrations	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation:
			Pilot projects and/or policies developed under development Multi-sector movement (PPP) to pursue the implementation of the Clean Air Act and bring down the air pollution index in the MM/NCR area to acceptable standard. The program will be implemented thru a) media advocacy and social mobilization; b) education, culture and sports, c) strict and sustained enforcement; and finally, d) economically viable and socially acceptable interventions.	
			Important actions you will take in 2013: Multi-sectoral agreement signed.	

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
“Cross-Cutting” Strategy	15 Establish country-specific progressive, health-based, cost-effective, and enforceable air quality and noise standards, also taking into account the WHO guidelines, and mandate monitoring and reporting in order to reduce the occurrence of days in which pollutant levels of particulate matter, nitrogen oxides, sulphur oxides, carbon monoxide, and ground-level ozone exceed the national standards or zones where noise levels exceed the national standards, especially with regard to environments near high traffic concentrations	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation: Limited financial resources to acquire equipment for technology stations for nationwide Air Quality Monitoring Availability of sufficient number of emission monitoring centers for in-use motor vehicles nationwide to implement noise emission standards
		Pilot projects and/or policies developed under development ➤ Air Quality Standards ➤ DAO 2013-13 establishing guideline values for PM _{2.5} ➤ Noise Standards (Ambient and Emission) ➤ Ambient Air Monitoring and Reporting ➤ DAO 2010-23 Emission Standards for In-use gasoline-fueled motor vehicles ➤ DAO 2010-24 "Revised Emission Standards for Two/Three Wheeled Vehicles"	
		Important Actions you will take in 2013: - In the process of establishing noise emission standards for all types of motor vehicle (new and in-use) except heavy duty vehicles.	

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration		
“Cross-Cutting” Strategy	16	Implement sustainable low-carbon transport initiatives to mitigate the causes of global climate change and to fortify national energy security , and to report the inventory of all greenhouse gases emitted from the transport sector in the National Communication to the UNFCCC	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation:
			Pilot projects and/or policies developed under development ➤ Formulation of National EST Strategy ➤ BRT Projects ➤ Natural Gas for Public Transport ➤ National Communications on Climate Change	
			Important Actions you will take in 2013	

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration		
“Cross-Cutting” Strategy	18	Encourage innovative financing mechanisms for sustainable transport infrastructure and operations through measures, such as parking levies, fuel pricing, time-of-da automated road user charging, and public-private partnerships such as land value capture, including consideration of carbon markets, wherever feasible	Any action had been taken so far? <input type="checkbox"/> Not yet <input type="checkbox"/> Some (design – piloting) <input checked="" type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation: - Regulatory barriers on the utilization of SVPCF Funds to finance engine replacement program
			Pilot projects and/or policies developed under development ➤ Road User’s Tax Law- Special fund for air pollution control - An Act imposing a Motor Vehicle User's Charge on Owners of All types of motor vehicles and for other purposes. Seven and one half percent (7.5%) of the revenue shall be allotted to and placed in the Special Vehicle Pollution Control Fund. ➤ Replacement of 2-stroke tricycles ➤ Jeepney Engine Replacement to LPG	
			Important Actions you will take in 2013: - Change of policy on utilization of Special Vehicle Pollution Control fund to increase eligible expenditures like TDM, etc.	

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“Cross-Cutting” Strategy	19 Encourage widespread distribution of information and awareness on sustainable transport to all levels of government and to the public through outreach, promotional campaigns, timely reporting of monitored indicators, and participatory process	Any action had been taken so far? <input type="checkbox"/> Not yet <input checked="" type="checkbox"/> Some (design – piloting) <input type="checkbox"/> Largely in Place <input type="checkbox"/> Fully Completed (Please Check the box)	Challenges faced in the implementation:
		Pilot projects and/or policies developed under development ➤ Formulation of National EST Strategy Website : http://www.ncts.upd.edu.ph/est	
		Important Actions you will take in 2013 Expand coverage/participation of NG agencies	

THANK YOU !!