COUNTRY REPORT Philippines



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Next Generation Solutions for Clean Air and Sustainable Transport – Towards a Livable Society in Asia

Eight Regional EST Forum in Asia

Colombo, Sri Lanka

19-21 November 2014

National framework strategy on climate change

Adaptation Pillar

Build the adaptive capacity of communities and increasing the resilience of national ecosystem to climate change.

- Enhanced Vulnerability and Adaptation Assessment
- Integrated Ecosystem-based Management
- Water Governance and Management
- Climate-responsive Agriculture
- Climate-responsive Health Sector
- Climate-Proofing Infrastructure
- Disaster Risk Reduction

Mitigation Pillar

Facilitate the transition towards low greenhouse gas emissions for sustainable development.

- Energy efficiency and Conservation
- Renewable Energy
- Environmentally Sustainable Transport
- Sustainable Infrastructure
- National REDD + Strategy
- Waste management

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

National Programs

- National EST Strategy
- Strategic Approach to Climate Change in the Philippines:
 Assessment of Low Carbon Strategy in the Philippines
- National Implementation Plan
- Promotion of Low Carbon Urban Transport Systems in the Philippines
- Low Emission Capacity Building (LECB) Project
- Promotion of Low Carbon Urban Transport Systems in the Philippines

Bangkok Declaration for 2020

- Sustainable Transport Goals for 2010 - 2020

		SH	IFT			IMPR	ROVE		CROSS-CUTTING STRATEGIES				SIES	
Name of Policy or Strategy	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
Increased Vehicle Efficiency														
- Motor vehicle inspection system program:							х							
- Replacement of 2-stroke tricycles		x								х	х		х	
- Adoption of Euro regulations					х	х								
- Vehicle fuel consumption labeling program						х								
- Jeepney's Standard Development		х												
- Road Transport Patrol						х			х					х
Alternative Fuels														
- Natural gas for public transport					х									
- Autogas (LPG) program					х									
Jeepney engine replacement to LPG					х						х		х	
_ E-Trike Project					х									
_ Electric Jeepney's					х									
- Green Frog Zero Emission Transport					х									
- Green Frog Hybrid Bus					х									
Transport Demand Management														
- Mega Manila Public Transport Plan		х												
- Public transport strategic plan for Metro Cebu		х												
- Davao Sustainable Urban Transport Program		х												
- Expansion of urban rail in Metro Manila		х												
- Integrated Luzon Railway Project				х										

Bangkok Declaration for 2020

- Sustainable Transport Goals for 2010 - 2020

N		SH	IFT			IMPR	ROVE		CRC	SS-C	UTTIN	G STI	RATE	SIES
Name of Policy or Strategy	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
- North-South Commuter Line Project		х												
Development of BRT system for metro Manila and Cebu City		х												
- Inland Water Transport		х												
- Intelligent Transport System		х												
- Bikeways and Walkways Program in Metro Manila	х													
- Ortigas Greenways	х													
- Tricycle Management		х									х			
- Public Transport Modernization Program		х												
_ Bike on Bike off – LRT	х													
- Road User's Tax Law – Special fund for air pollution control													х	
Development of an integrated road accident data base system									х					
- Toll Roads			х											
- Carless day and car-pooling			х											
- National EST Strategy												х		
- National Implementation Plan (NIP)												х		
Transit oriented development/ITS solutions														
- MRT 7 Project														
- Automated Fare Collection System								Х						

Goal No.	Goal Description	Voluntary Progress/Achievements, Declaration	/Initiatives in Implementing Bangkok 2020			
II. Strate	II. Strategies to Shift towards more sustainable modes					
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	Any action had been taken so far? Not yet Some (design – piloting) Largely in Place Fully Completed (Please Check the box) Pilot projects and/or policies develop	Challenges faced in implementation: - Sustainability of the program ped under development			
"Shift" Strategy	intermodal connectivity, and adoption of complete street design standards, wherever feasible	 Ortigas, Mandaluyong Greenwaler Provides a conceptual design of a improve pedestrian mobility by proposed MRT and public transportation terestrian to Metrowalk, Roconnections to the proposed CBD elevated and at-grade walkways, will also be conducted on footpath EDSA, Guadix Drive, and ADB ABIA BIKE ON BIKE OFF LRT Bike on Bike off – LRT Bikeways and walkways programed to major transport terminals (LR schools, market, church, malls, off – The publicized benefits and vialents. 	highly visible demonstration corridor intended to roviding access to public transportation modes such as rminals. The greenway corridor will connect MRT-binsons Galleria, and EDSA Shangri-La, with Park near Julia Vargas. This alignment will include as well as several road parks. In addition, design work h segments bordering ADB; these are footpaths along Avenue. Immin Metro Manila Indesignated lanes connecting strategic areas in the city T/MRT, jeepney and bus) and urban facilities such as effices and recreation centers. Dility of bicycles as an alternative transport mode in the elsewhere in the Philippines and in other countries.			

Goa No.	l	Goal Description	Voluntary Progress/Achievements/I Declaration	nitiatives in Implementing Bangkok 2020
	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? Not yet Some (design – piloting) Largely in Place Fully Completed (Please Check the box)	 Challenges faced in the implementation of BRT: 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.
"Shift" Strategy			Transportation and Communication capability of the DOTC to perform Public transport strategic plan form The public transportation strategic plan form Department and other concerned strategic promotion of a sustainable public to promotion of a sustainable public to promotion and implementation of and modernization program for Date in the Expansion of Urban Rail in Metrem LRT 1 Cavite Extension The project involves the extension its existing tail (end) tracks.	lan ation planning support system at the Department of ons (DOTC) to address the gaps in the institutional its planning and development mandates. or Metro Cebu plan for Metro Cebu study aimed to provide the akeholders with a blueprint for the development and ransportation in Metro Cebu. oort f a public transport strategy and an associated reform vao City.

Goal No.	l	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration
"Shift" Strategy			 LRT 2 East Extension Construction of the 4.19 km eastern extension of LRT 2, which will add 2 stations to the existing line 2 (from the Santolan Station at Marcos Highway fronting SM Marikina, and terminating at Masinag Junction) Projected to increase ridership from 218,593 passengers/day in 2012 to 335,625 passengers /day by 2015 LRT 2 West Extension Extension of the existing LRT Line 2 by about 1.62 kms westward from Recto Station until Delpan Street in front of Tutuban up to Divisoria Mall. MRT 3 CAPEX Purchase of LRV vehicles; Upgrade traction power substations and signalling system; Installation of additional stabling and catenary system in the depot; and Improvement of depot maintenance equipment and workshops. North-South Commuter Line Project Involves the design and construction of a standard gauge commuter rail line (i.e. viaduct, underground and at-gradae structures, depot), the procurement of rolling stock and installation of electro-mechanical systems. The line will run from Malolos, Bulacan to Calamba, Laguna and will be approximately 89.7 km. in length. Development of BRT system for Metro Manila and Cebu City Establishment a mass transit system for Manila to Quezon Avenue-Commonwealth Avenue Establishment of a transport system with around 176 buses that will run through dedicated and exclusive bus-ways from Bulacao to Talamban in Cebu City, with a link to Cebu's South Road Property (SRP). Installation of 33 bus stations along the 23-km corridor in Cebu City. Inland Water Transport System Tricycle Management Public Transport Modernization Program Important actions you will take in 2014-2015: Roll out of urban rail and BRT projects in 2015

Goa No.	.1	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration			
ft" 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	 □ Not yet □ Some (design – piloting) □ Largely in Place □ Fully Completed (Please Check the box) 	Challenges faced in the implementation: - Social acceptability of TDM measures		
"Shift"		reducing price distortions that directly or indirectly encourage driving, motorization, and sprawl	Pilot projects and/or policies develope ➤ Toll Roads Project (321.3km) ➤ Carless day and car-pooling	d under development		
			Important actions you will take in 2014 - Rollout of priority Infra Projects	4-2015:		

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		t ace of the suspended North Rail linking the Ninoy A) and the Diosdado Macapagal International		

Goa No.	l	Goal Description	Voluntary Progress/Achievements/In Declaration	nitiatives in Implementing Bangkok 2020
III.	Strate	egies to <u>Improve</u> transport practices a	nd technologies	
	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		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. However, there have been reports that despite the preferential rates for CNG and other incentives as outlined by E) 290, existing PUB operators are not being sufficiently attracted to the conversion programme
"Improve" Strategy			Motorcycles/Tricycles" New: "Type Approval Standards" Euro2/II standards for Light Duty Vehicles effective Jan. 1, 2008 up to Euro 4 for Passenger cars & Light In-use: Emission standards for Carbon Monox vehicles. No standard for NOx. (see A DAO 2010-24 "Revised Emission S Motorcycles/Tricycles" Euro-2 standards for new motorcycles/3-When In-use:	Standards for All Types of Motor Vehicles Excluding Wehicles, Passenger Cars and Medium/Heavy Duty o Dec. 31, 2013 duty vehicles by Jan. 1, 2016 xide (CO) and Hydrocarbon (HC) for In-use Annex, Tables 1-3) Standards for All Types of Motor Vehicles Excluding eles/3-Wheeled effective Sept.2012 eeled effective Sept.2015) xide (CO) and Hydrocarbon (HC) for In-use

Goal No.	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration
"Improve" Strategy		 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. Jeepney engine replacement to LPG 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. E-Trike Project Electric Jeepney's Green Frog Zero Emission Transport Green Frog Hybrid Bus Important actions you will take in 2014-2015: Roll out of other priority alternative fuel program for public transport by 2014-2015

Goal No.	l	Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration			
egy	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? □ Not yet □ Some (design – piloting) □ Largely in Place □ Fully Completed (Please Check the box)	Challenges faced in the implementation:		
"Improve" Strategy				ching Units to establish a roadside inspection		
system and ensure that vehicles comply with the in-use emist by the Department of Trade and Industry (DTI) together with Transportation and Communications (DOTC). Vehicle fuel consumption labeling program			dustry (DTI) together with the Department of as (DOTC).			
				4-2015: fordable standards for fuel quality, fuel efficiency, cle types, including new and in-use vehicles		

Go No		Goal Description	Voluntary Progress/Achievements/In Declaration	nitiatives in Implementing Bangkok 2020
"Tmmmaria" Ctratami	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	 □ Not yet □ Some (design – piloting) □ Largely in Place □ Fully Completed (Please Check the box) Pilot projects and/or policies develope ➤ Motor Vehicle Inspection System The project aims to ensure roadwor vehicles registered in the country, the throughout the Philippines, complete 	Program: thiness and emission compliance of all motor hereby reducing road accidents and pollution. ment of motor vehicle inspection centers (MVICs) te with equipment and software capable of a future motor vehicle population. It will involve the enced equipment and processes. 4-2015:

Go No		Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration					
Ctratami	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	□ Not yet□ Some (design – piloting)□ Largely in Place	Challenges faced in the implementation:				
"Gunrann"			collection system in LRT Lines 1	on of a contactless and integrated automatic fare and 2 and MRT 3 to replace the existing magnetic oth single journey and stored value tickets 14-2015:				

Goal No.		Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration		
IV.	IV. <u>Cross-cutting</u> strategies				
"Praca Pritting" Ctratomy	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	 Not yet Some (design − piloting) Largely in Place Fully Completed (Please Check the box) Pilot projects and/or policies develo ▶ Road Transport Patrol ▶ Development of an Integrated Integrated Philippines. 	Road Accident Database System road accident database and analysis system for the curate data collection, individual agency data needs, d data management.	

Go No		Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
Tuttina" Ctrotom	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	_	Challenges faced in the implementation:
المممم الم		and noise, and devise mitigation strategies specially aiding sensitive populations near high traffic	> Replacement of 2-stroke tricycles	
727		concentrations	Important actions you will take in 20 - Sustain program	14-2015:

Go No		Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
	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	☐ Some (design – piloting)	Challenges faced in the implementation:
moto.			> Replacement of 2-stroke tricycles	
"Orner Putting" Stratom			 Tricycle Management Enhancement of capabilities in Tricycle Operations and Management (SWTOM) thru seminar-workshop to increase or develop knowledge/awareness/concern for "Clean- 	
ζ,,			air quality and noise standards, mandate monitoring and report pollutant levels of particulate monoxide, and ground-level or	old-2015: essive, health-based, cost-effective, and enforceable also taking into account the WHO guidelines, and ing in order to reduce the occurrence of days in which matter, nitrogen oxides, sulphur oxides, carbon zone exceed the national standards or zones where tandards, especially with regard to environments near

Go No		Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
"Croca Putting" Ctratomi	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	Pilot projects and/or policies develop ➤ Formulation of National EST St - The National EST strategy is cons sustainable transport goals for Asi	sistent with the Bangkok Declaration 2020 that sets can countries from 2011 – 2020 and complements the y the Aichi Statement of 2005 which establishes the
			Important Actions you will take in 20 - Implement priority project in the p	

Go No		Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
Ctrotomi	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	Any action had been taken so far? Not yet Some (design – piloting) Largely in Place Fully Completed (Please Check the box)	Challenges faced in the implementation: - Regulatory barriers on the utilization of SVPCF Funds to finance engine replacement program
fine?	value capture, includ consideration of carbon marks			
7		wherever feasible	Jeepney Engine Replacement toRoad User's Tax Law- Special full	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			- 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.	
			Important Actions you will take in 20 - Change of policy on utilization of eligible expenditures like TDM, et	Special Vehicle Pollution Control fund to increase

Goal No.		Goal Description	Voluntary Progress/Achievements/Initiatives in Implementing Bangkok 2020 Declaration	
Cutting" Strategy	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	☐ Largely in Place	Challenges faced in the implementation:	
"Cross-Cutting"		'	Pilot projects and/or policies developed under development > Road Transport Patrol	
			Important Actions you will take in 20	014-2015

THANK YOU!!