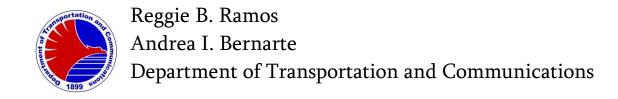
# ENVIRONMENTALLY SUSTAINABLE TRANSPORT IN THE PHILIPPINES

Voluntary progress, achievements, major initiatives in implementing the Bangkok 2020 Declaration

Ninth Regional EST Forum in Asia 17- 20 November 2015 Kathmandu, Nepal



# GOAL NO. Formally integrate **land-use and transport planning** processes and related institutional arrangements at the local, regional, and national levels

### I. Strategies to Avoid unnecessary travel and reduce trip distances

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Metro Manila Capacity Enhancement Project	Fully Completed	1 0	Restructure public transport routes and services to meet existing and future travel demand (ongoing)
Road Transit Rationalization Study	Largely in Place	corridors in Metro Manila. Implementing improved transport	Deployment of new public transport services to meet travel demand (like express buses, point to point, limited stop, and airport bus services – ongoing)
Preparation of Regional Transport Models and Urban Development Strategy for Regions outside Metro Manila	Some design	Preparation of transport plans and models for regions outside Metro Manila	

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Achieve **mixed-use development** and medium-to-high densities along key corridors within cities through appropriate land-use policies and provide people-oriented local access, and actively promote transit-oriented development (TOD) when introducing new public transport infrastructure

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Cebu Bus Rapid Transit (BRT) Detailed Engineering Design Stage	Some (design – piloting)	Land acquisition	<ul> <li>Detailed Engineering Design to be completed by end of 2015</li> <li>Start construction in 2016</li> </ul>

Institute policies, programmes, and projects supporting **Information and Communications Technology (ICT)**, such as internet access, teleconferencing, and telecommuting, as a means to reduce unneeded travel

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Automatic Fare Collection System (AFCS)	Fully completed – inter-operable among three Metro Rail Transit (MRT) lines and a few buses	<ul> <li>Educating people on the use</li> <li>Inter-operability with other modes of transport (i.e. buses – difficulty is with having thousands of bus operators)</li> </ul>	<ul> <li>Full integration in buses</li> <li>Establishment of a transport database</li> </ul>
Public Transport Information Management Center (PTIMC)	Some (design – piloting)		<ul> <li>Sustainable data collection and monitoring from public transport services</li> <li>Provide commuters with real-time public transport information at bus/jeepney stops</li> </ul>

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

### II. Strategies to Shift towards more sustainable modes

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Ortigas Greenway	Fully Completed	Promoting walkability and non- motorized transportation and interconnectivity with MRT in Metro Manila	9 , ,

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

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Cebu BRT MRT Line-3 Capacity Expansion LRT Line-1 South Extension LRT Line-2 Extension North-South Railway Project Integrated Transport System Southwest Terminal	Some (design – piloting)	<ul> <li>Land acquisition</li> <li>Delays from suppliers</li> <li>Antiquated rail parts</li> <li>Change of technology</li> </ul>	<ul> <li>Upgrade works</li> <li>Construction of new stations</li> </ul>

GOAL NO.	Reduce the urban transport mode share of private motorized vehicles through Transportation Demand Management
6	(TDM) measures, including pricing measures that integrate congestion, safety, and pollution costs, safety, and
	pollution costs, aimed at gradually reducing price distortions that directly or indirectly encourage driving,
	motorization, and sprawl

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Parking levy	Not yet	Management arrangements with LGUs	LGU managed parking levies by end of 2016
Department Order on Transport Network Companies (TNCs) and Transport Network Vehicles (TNVs)	Fully completed	Initial resistance from taxi and AUVs as competition of TNCs/TNVs	Continuing services of TNCs/TNVs to shift people away from using private cars

Achieve significant shifts to more sustainable modes of **inter-city passenger and goods 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

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Public-Private Partnerships:  North-South Railway Project  Regional Airports Development, Operations and Maintenance Project Davao Sasa Port Modernization Project Integrated Transport System Projects	Some (design – piloting)	Land acquisition	Start of construction
Roll-on/Roll-off (RORO) Bus routes	Fully completed	Evaluation of bus routes that complement the RORO routes	Continuing services

	GOAL NO. 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
	GOAL NO. 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
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### III. Strategies to Improve transport practices and technologies

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Public Utility Jeepneys (PUJ) modernization	Some (design – piloting)	<ul> <li>Resistance from PUJ sector</li> <li>Public education and acceptance is a big challenge</li> <li>Understanding modernization as inclusive of vehicle and operations upgrading</li> </ul>	<ul> <li>Modernization of vehicles starting 2016</li> <li>Voluntary participation for jeepneys to upgrade their vehicles to Euro IV, and providing them with number-coding exemption as incentives to participate</li> </ul>

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

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Mandating Euro 4 emission standard type engine	Some (design – piloting)	Stakeholder acceptance	Piloting
Emission testing centers	Fully completed	Unscrupulous testing centers	Closer monitoring and more centralized emission testing

GOAL NO. Adopt **Intelligent Transportation Systems** (ITS), such as electronic fare and road user charging systems, transport 11 control centres, and real-time user information, when applicable

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Automatic Fare Collection System (AFCS)	Fully completed – inter-operable among three Metro Rail Transit (MRT) lines and a few buses	<ul> <li>Educating people on the use</li> <li>Inter-operability with other modes of transport (i.e. buses – difficulty is with having thousands of bus operators)</li> </ul>	<ul> <li>Full integration in buses</li> <li>Establishment of a transport database</li> </ul>

GOAL NO.	Achieve improved <b>freight transport</b> efficiency, including road, rail, air, and water, through policies, programmes, and
12	projects that modernize the freight vehicle technology, implement fleet control and management systems, and
	support better logistics and supply chain management

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Davao Sasa Port	Some (design – piloting)	Right of way	Clear alignment with
Modernization Project			Competition Act and Land
			Use Plan

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

### IV. Cross-cutting Strategies

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Land Transportation Office (LTO) and Land Transportation Franchising Regulatory Board (LTFRB) insurance requirements for accidents	Largely in place	Some small insurance agencies are trying to block the implementation by filing frivolous cases	<ul> <li>Cheaper insurance</li> <li>Educate the public on insurance</li> </ul>
Acquisition of breathalyzers	Largely in place	Training Stakeholder acceptance	Implement nationwide

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 especially aiding sensitive populations near high traffic concentrations

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Special Vehicle Pollution Control Fund (SVPCF)	Largely in place	environmentally	Guidelines and processes for project approval and fund access in place by 2016
Jeepney modernization	Some (design – piloting)	Stakeholder opposition	
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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

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
<ul> <li>SVCPF Projects:         <ul> <li>Advanced Traffic and Pollution Monitoring Systems (ATPMS)</li> <li>Shifting to low emission vehicle(e-tricycles, e-jeepneys, e-buses)</li> <li>Hybrid electric vehicle</li> <li>Customized Local Road Vehicle (CLRV) standards</li> </ul> </li> </ul>	Some (design – piloting)	Stakeholder acceptance	Institutionalize program nationwide

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 Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
*Green airport – uses solar energy for power source, LED lamps, geotextile fabric to filter water runoffs and is disaster-resilient which can stand 230 kph typhoon and high intensity earthquake	Some (design – piloting)	Construction completion	Completion
Public Utility Jeepneys (PUJ) modernization	Some (design – piloting)	<ul> <li>Resistance from PUJ sector</li> <li>Public education and acceptance is a big challenge</li> <li>Understanding modernization as inclusive of vehicle and operations upgrading</li> </ul>	<ul> <li>Modernization of vehicles starting 2016</li> <li>Voluntary participation for jeepneys to upgrade their vehicles to Euro IV, and providing them with number-coding exemption as incentives to participate</li> </ul>

GOAL NO.	Adopt social equity as a planning and design criteria in the development and implementation of transport initiatives,
17	leading to improved quality, safety and security for all and especially for women, universal accessibility of streets and
	public transport systems for persons with disabilities and elderly, affordability of transport systems for low-income
	groups, and up-gradation, modernization and integration of intermediate public transport

Pilot Project	Action Taken	Challenges faced in	Important actions to be
		Implementation	carried out from 2015-2020
Discounts for senior citizens and Persons With Disability (PWDs)	Fully completed	Not applicable to all modes of transport	Apply privileges to all modes of transport
Designated coaches for women, senior citizens and PWDs			

Encourage innovative **financing** mechanisms for sustainable transport infrastructure and operations through measures, such as parking levies, fuel pricing, time-of-day automated road user charging, and public-private partnerships such as land value capture, including consideration of carbon markets, wherever feasible

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Various PPP Projects with varying financing mechanisms  • North-South Railway Project  • Integrated Transport System (South and Southwest Terminals) Projects	Largely in place	Land acquisition Timing with other related PPP infrastructure	Complete rail infrastructure works
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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 processes

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
_	Some (design – piloting)	, ,	Continuing release of messages
campaign		community behavior	on environmentally sustainable projects for public communications

Develop dedicated and funded institutions that address sustainable transport-land use policies and implementation, including research and development on environmentally-sustainable transport, and promote **good governance** through implementation of environmental impact assessments for major transport projects

Pilot Project	Action Taken	Challenges faced in Implementation	Important actions to be carried out from 2015-2020
Environmentally Sustainable Transportation Initiatives Unit (ESITU)	Largely in place	High turnover of staff due to difficulty in accessing funds *Unit is considered as a "project", hence yearly approval is needed to 'create' the unit itself	<ul> <li>Guidelines and processes for project approval and fund access in place by 2016</li> <li>Institutionalization of ESITU role in DOTC organization</li> </ul>