NAMA FACILITY PROPOSAL: JEEPNEY+NAMA

THOMAS M. ORBOS, UNDERSECRETARY FOR ROAD TRANSPORT AND INFRASTRUCTURE
DEPARTMENT OF TRANSPORTATION
65% Carbon Emission from Transportation Sector

17% of Ambient Air Pollution in Metro Manila are from PUJs

1.5% of GDP Health Costs from Degrading Air Quality Accounts in 2009

Source: GIZ, Jeepney Market Transformation Programme, Clean Air Asia and GIZ, Alternative Technologies for the Philippine Utility Jeepney
PHILIPPINE TRANSPORTATION

• Transport accounts for 34% of energy-related GHG emissions
  – ~236% increase in road transport emissions from 2010-2030
    from 25.9 MtCO2e (2010) to 87 MtCO2e (2030) in a business as usual scenario
• Vehicle ownership has been growing rapidly in past 13 years
  (average of 6.9% per year)
• Jeepneys account for 40% of all motorized person-trips, equivalent to approx. 40 million person-trips/day
• Public transportation currently lacks clear policy framework and has inefficient institutional capacities, operations, and assets – all leading to negative externalities including congestion and pollution
POLLUTION PLAGUE
Fumes kill 16 daily

Most of the victims are poor people, Sato said.
Sato also said that the costs of reducing air pollution would amount to more than P 5 billion a year, considering not only deaths and sicknesses but also economic losses from “restricted activity days” and “IQ (intelligence quotient) points lost.”
INADEQUATE PUBLIC TRANSPORTATION
UNRELIABLE TRAVEL TIMES, DISCOMFORT AND DISTRESS
UNORGANIZED MODES AND LACK OF DISCIPLINE
Disparity in travel demand mode share and road share.

Public transit accounts for 67% of the demand but only uses 28% of road space.

Private automobiles account for 72% of traffic volume but only carry 33% of travel demand.
PHP 3.5 BILLION

DAILY ECONOMIC LOSSES DUE TO TRAFFIC CONGESTION IN METRO MANILA

(JICA, 2017)
PUBLIC UTILITY VEHICLE (PUV) MODERNIZATION PROGRAM

A large-scale transformative initiative for a restructured and environmentally-sustainable transport sector aimed for Filipinos to have a pleasant commuting experience by 2022.
LEGAL AND INSTITUTIONAL BASIS OF PUVMP

DO 96-963  Modernization of Public Transport Services

DO 97-1097  Providing standard classification for all public transport conveyances

EO 712  Directing the immediate review of existing orders, rules and regulations issued by Local Government Units concerning public transportation, including the grant of franchises to tricycles, establishment and operation of transport terminals, authority to issue traffic citation tickets, and unilateral rerouting schemes of Public Utility Vehicles, and for other purposes (March 11, 2008)
THE NEED TO COMPLY WITH EURO 4 (OR BETTER) EMISSION STANDARDS

- Euro 4 (50 ppm) vs. Euro 2 (500 ppm sulfur)
- In Europe and North America, Euro 5 emission standard since Sept. 2009 (Euro 4 was their compliance standard from 2005 to 2009)

Legal and Institutional Basis:
- RA 8749  Philippine Clean Air Act of 1999
- PD 1586  The Philippine Environmental Impact Statement System
- DENR Administrative Order Nos. 2015-04, 2016-23
PUV MODERNIZATION PROGRAM COMPONENTS
LOCAL PUBLIC TRANSPORT ROUTE PLAN

Make the routes more responsive to passenger demand and determine the appropriate vehicle type depending on road hierarchy and configuration thru LGU initiative (Participatory Planning)

CITY/MUNICIPAL LGU
- Intra-city/municipality

PROVINCIAL GOVERNMENT
- Inter-city/municipality
- Intra-province

DOTr
- Inter-province/region
- Between and among independent cities
- Inter-city and inter-municipality of MM and adjoining provinces (MUCEP Area)
OBJECTIVE:
Appropriate mode based on Passenger Demand and Road Heirarchy

BASIC POLICY:
Higher capacity PUWs assigned to high demand routes
PUV MODERNIZATION PROGRAM COMPONENTS

INDUSTRY CONSOLIDATION

BEFORE:
One franchise, one unit
= Inefficiency

AFTER:
Industry consolidation:
Formation of cooperatives, corporation or consortium

✔ FLEET MANAGEMENT
✔ SAFETY OFFICER
✔ TERMINAL AND GARAGE

= EFFICIENT OPERATIONS & REDUCED COSTS
STAKEHOLDER SUPPORT MECHANISM

Programs such as Skills Training, and Livelihood and Employment Assistance to provide safety nets to affected drivers and operators.
PUV MODERNIZATION PROGRAM COMPONENTS

FLEET MODERNIZATION

ENVIRONMENT-FRIENDLY
Clean Air Act complaint engine. Euro 4 emission or better. Electric, Solar, Alternative Fuel

SAFETY
Side door, Speed limiter, Automatic Braking System, Compliant with safety standards.

SECURITY
CCTV, GPS, AFCS, Dashboard Camera

COMFORT AND CONVENIENCE
PWD/elderly-friendly, Free Wi-fi
Demand for private vehicles

Demand for public transport
Congestion reduction esp. in highly urbanized areas:

Traffic, disorganized, competitive

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BEFORE

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transit oriented, order, more mobility options; time savings; vehicle operating cost savings

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AFTER
Improved welfare for the transport sector

Drivers subjected to health risks, cash-strapped, untrained, tied with the boundary system

**BEFORE**

- Adequate training
- Assured of regular income
- Improved fleet management and safety
- Access to credit facilities and financing
- Shared operating and maintenance costs

**AFTER**
Improved public transport level of service, passenger and commuter welfare

Unsafe, uncomfortable, unreliable, difficult to access with most commuters complaining, air pollution and health hazards

— BEFORE —

— AFTER —

- Safe, efficient, comfortable
- Environment-friendly, Clean Air Act Compliant vehicles
- Rationalized Routes
- Intelligent Transport System
The PUV Modernization Program will engage the local manufacturing industry by creating more jobs and employment opportunities, further boosting the industry and contributing to the economy.

Source: GIZ, Jeepney Market Transformation Programme
PUV Modernization Program

Benefits

4.9 million tons

2.8 million tons

CO₂

43%

Annual Carbon Dioxide Emissions

Source: GIZ, Jeepney Market Transformation Programme
PUV Modernization Program

Benefits

Annual Particulate Matter Emissions

4,879 tons

1,019 tons

79%
20% INCREASE IN VEHICLE CAPACITY
• From 16-18 passengers to 22 passengers, with some units accommodating standing passengers. Increase in capacity entail increase in income.

43% DECREASE IN FUEL EXPENSE
• Improved Fuel Economy, from the current 5.70km/L to 10.05km/L for the new Euro4 units.
EFFICIENCY SAVINGS DUE TO RATIONALIZED ROUTES

- Determining routes and the appropriate number of units based on passenger demand.

EFFICIENCY SAVINGS DUE TO INDUSTRY CONSOLIDATION

- Organized Dispatching System and Fleet Management
- Consolidation allows spreading of Capital Expenses and Operating Expenses as well as Maintenance Costs.
- Consolidated entities can access discounts in fuel and spare parts
TANGGAL BULOK, TANGGAL USOK

To assure roadworthiness of existing PUVs and safety of the commuters, and to enforce existing laws and policies, the “Tanggal Bulok, Tanggal Usok” was launched last January 8 through the Inter-Agency Council on Traffic (I-ACT).

This is also in response to the President’s directive to get dilapidated and smoke-belching PUVs off the streets.
<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
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<tbody>
<tr>
<td>Number of Subpoena Orders (Smoke Belching)</td>
<td>502</td>
</tr>
<tr>
<td>Issued Citation Tickets (Defective Parts and Other Violations)</td>
<td>1,668</td>
</tr>
<tr>
<td>Impounded Vehicles (Colorum Operations and Illegal Parking)</td>
<td>151</td>
</tr>
<tr>
<td>Total Number of Apprehended Vehicles</td>
<td>2,321</td>
</tr>
<tr>
<td>Number of Passengers who availed &quot;FREE RIDE&quot;</td>
<td>25,383</td>
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</tbody>
</table>
NAMA Facility

Facility supporting **Nationally Appropriate Mitigation Actions (NAMAs)** or

Funded by agencies from Germany, United Kingdom, Denmark, and the European Commission

*21 proposals funded
7 from Asia
1 from the Philippines (Enabling Distributed Solar Power)
4 from transport sector (Columbia, Indonesia, Peru, Kenya)*
Jeepney+ NAMA
Building on the PUV Modernization Program

VISION

To create a professional, consolidated public transport industry in the Philippines that enables constant fleet renewal, improves operational and traffic efficiency and promotes an upgrade of service levels to mitigate a) rapid motorization and b) shift of trips to carbon intense use of cars.
Objectives

1. **Reduce GHG emissions** from out dated public transport system;

2. Create co-benefits, such as almost **elimination of local air pollutants**, **improvement of road safety**, **improvement of economic situation** and **time savings** for operators and commuters;

3. **Enable Government** to plan, regulate and monitor public transport provision; and

4. **Mitigate** the **current rapid motorisation trend** in the Philippines.
MORE THAN MODERNIZATION AND NEW INFRASTRUCTURE,
WE ARE FOR A HOLISTIC AND SUSTAINABLE SYSTEM REFORM FOR THE BENEFIT OF ALL:
THE TRANSPORT SECTOR, THE COMMUTING PUBLIC, AND THE ENVIRONMENT

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF TRANSPORTATION