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UNITED NATIONS CENTRE FOR REGIONAL DEVELOPMENT

In collaboration with

Ministry of Public Works and Transport, the Government of Lao PDR, Ministry of the Environment (MOE), Japan Partnership on Sustainable, Low Carbon Transport, United Nations Economic and Social Commission for Asia and the Pacific, and United Nations Office for Sustainable Development

TENTH REGIONAL ENVIRONMENTALLY SUSTAINABLE TRANSPORT (EST) FORUM IN ASIA, 14-16 MARCH 2016, VIENTIANE, LAO PDR

Country Presentation (Thailand)

(Presentation for EST Plenary Session 8 of the Provisional Programme)

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Thailand Country report Intergovernmental 10th Regional Environmentally Sustainable Transport Forum in Asia

14-16 March 2017

Ministry of Transport and Ministry of Natural resources and Environment Thailand



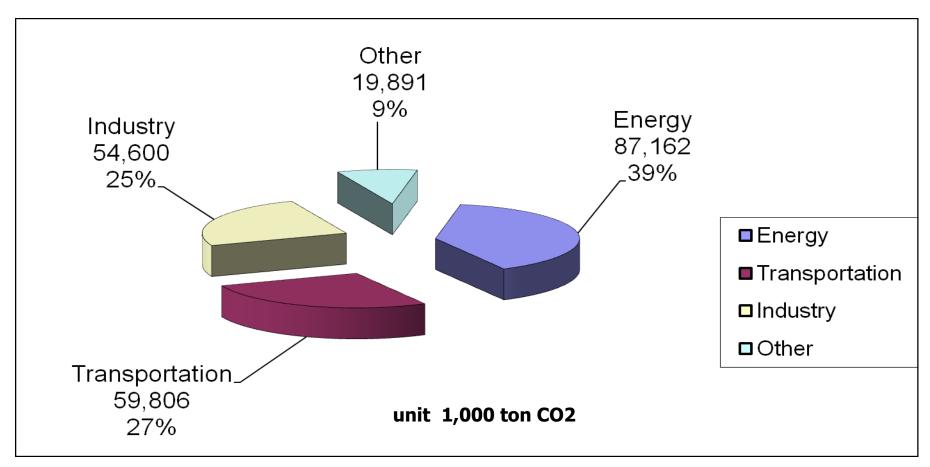
Topic

Background

Thailand's Environmental Sustainable
 Transport development according to Bangkok
 2020 declaration

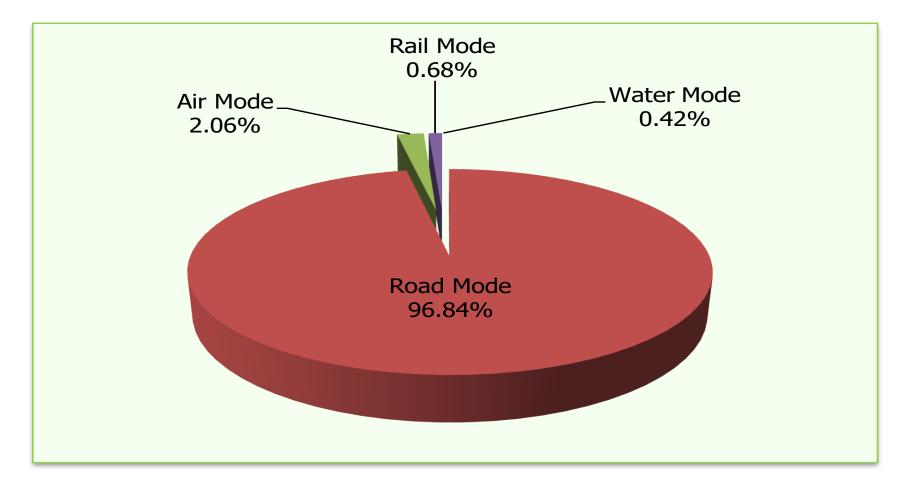


GHGs Emission by Sector: 2011



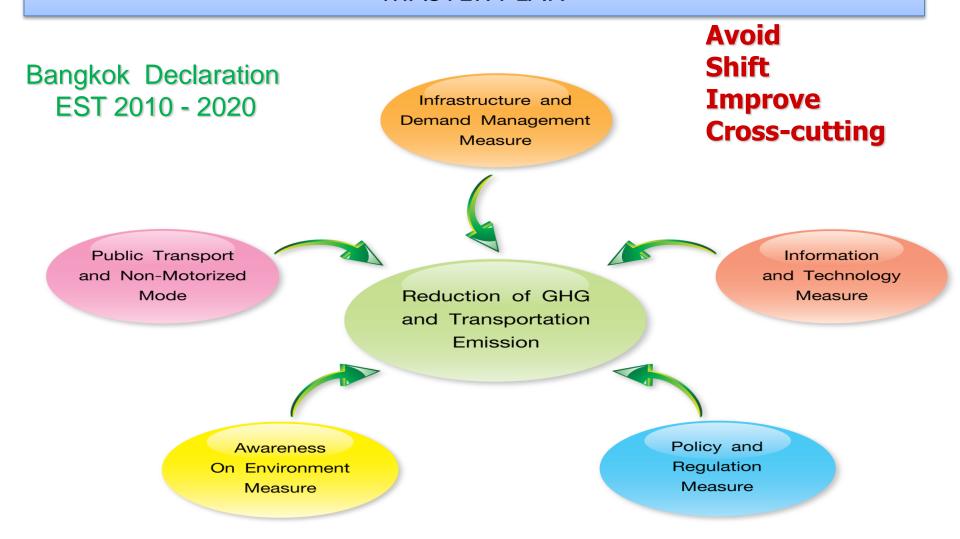
Source: Thailand Energy Statistic 2012

Volumes of Greenhouse gas released by Thailand's Transport Sector



Source: National Greenhouse Gas listing

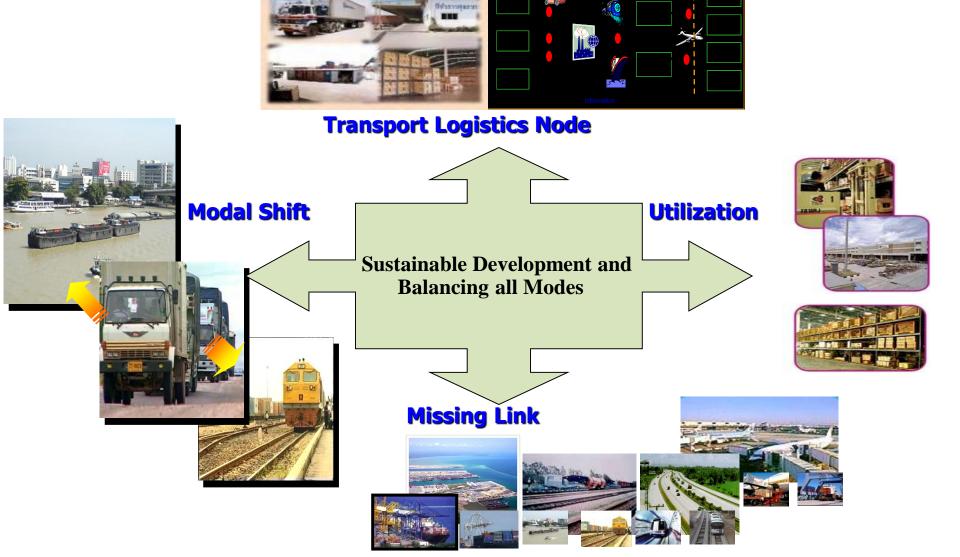
Thailand's SUSTAINABLE TRANSPORT MASTER PLAN



Potential GHGs reduction in Transportation Sector

| Year | GHGs at BAU (Million tons CO ₂ e) | Potential of GHGs reduction | |
|------|---|----------------------------------|---------|
| | | (Million tons CO ₂ e) | % |
| 2005 | 57.52 | - | - |
| 2017 | 67.53 | 11 - 13 | 16 - 19 |
| 2020 | 74.02 | 15 - 16 | 20 - 22 |
| 2030 | 102.82 | 27 - 30 | 26 - 29 |

Transport Development



Avoid:

reduce unnecessary travel/reduce trip distances

Introduce TOD (Transit-oriented-Development at) Phahonyotin transport hub)





Shift:

Towards more sustainable modes

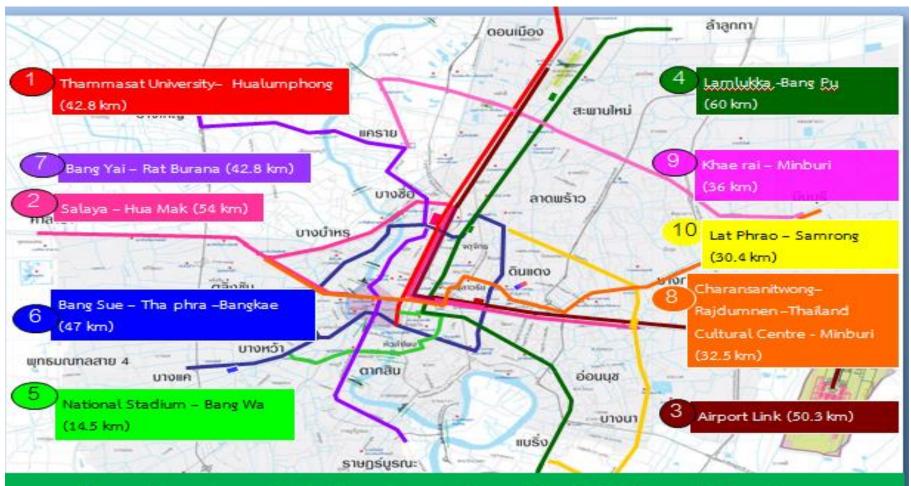
Non-Motorized Transport: is one of travel choices,

- ➤ Bicycle lanes alongside motor lanes or running trough public parks have been built.
- ➤ Bicycle parking spaces and other cycling facilities have been provided.





Shift: Towards more sustainable modes



Greater Bangkok Region: Mass Rapid Transit System

Ten Metro routes (open by December 2019) length 410 km

aunsanas.

Shift: Towards more sustainable modes

| Project | Length (km) | Cost (million baht) | Project period | | |
|--|----------------|---------------------------|-------------------|--|--|
| Routes with heavy traffic and main routes for transporting freight | | | | | |
| 1) Jira Junction – Khon Kaen | 185 | 26,007 | 2558-2561 | | |
| 2) Prachuab Kiri Khan - Chumphon | 167 | 17,293 | 2558-2561 | | |
| 3) Nakhon Pathom— Hua Hin | 165 | 20,038 | 2558-2561 | | |
| 4) Mab Ka Bao — Nakhon Ratchasima | 132 | 29,855 | 2559-2563 | | |
| 5) Lop Buri – Pak Nam Pho | 148 | 24,842 | 2559-2563 | | |
| 6) Hua Hin – Prachuab Kiri Khan | 90 | 9,437 | 2559-2563 | | |
| 5 lines + 1 line | 887 | 127 ,472 | 2563 | | |

Double Track Projects (Metre Gauge)

- Solves the problem of congestion
- Double track (standard metre gauge) supports freight transport and local train



Improve:

New technologies and standardization

Vehicle Emission Standards

- New VehiclesFollowed EU standards, EU 4 standard
- In-use Vehicles
- The emission standards are used as reference standards for inspection and maintenance programme, consisting of Black Smoke, CO, HC, White Smoke, and Noise





Improve: New technologies and standardisation

Inspection and Maintenance Programme

- All vehicles are required to pass the in-use vehicle standards prior to the renewal of license.
- Preventive Maintenance helps reduce PM up to 65% and save fuel consumption up to 30%
- Roadside Inspection reduces emissions from in-use vehicles



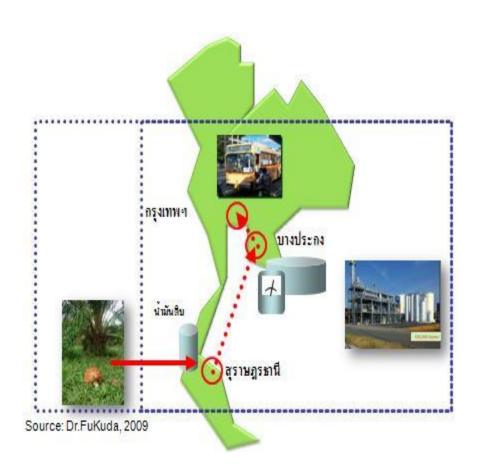
Improve: New technologies and standardization

Alternative Fuel

Bio-Ethanol and Bio-Diesel is largely on sell in the market all over the country.

NGV and Hybrid are largely implemented with some electricity vehicle.

EV was introduce in market.



Improve: New technologies and standardization



 BMTA are over 3,000 dieselpowered buses

 Private sector buses ~ 3,500, more than 80% are CNG **Government Policy**

Replace all BMTA buses to CNG and EV

Public Transport improvement

Cross cutting: Safety, Health, Air quality, Climate Change ...

Moscow Declaration on decade of Road safety

Safety:

Thailand Road safety Action plan

Promotion of alternative energy use in Transport sector

Energy security: EST cross cutting

Climate Change: Target of GHGs reduction from transport sector

Bio- diesel and Bio-ethanol was in market place

> **EURO 4 standard** and Inspection & Maintenance

Air quality and health impact:

Reduce traffic congestion in inner city , collaboration with traffic police and BMA

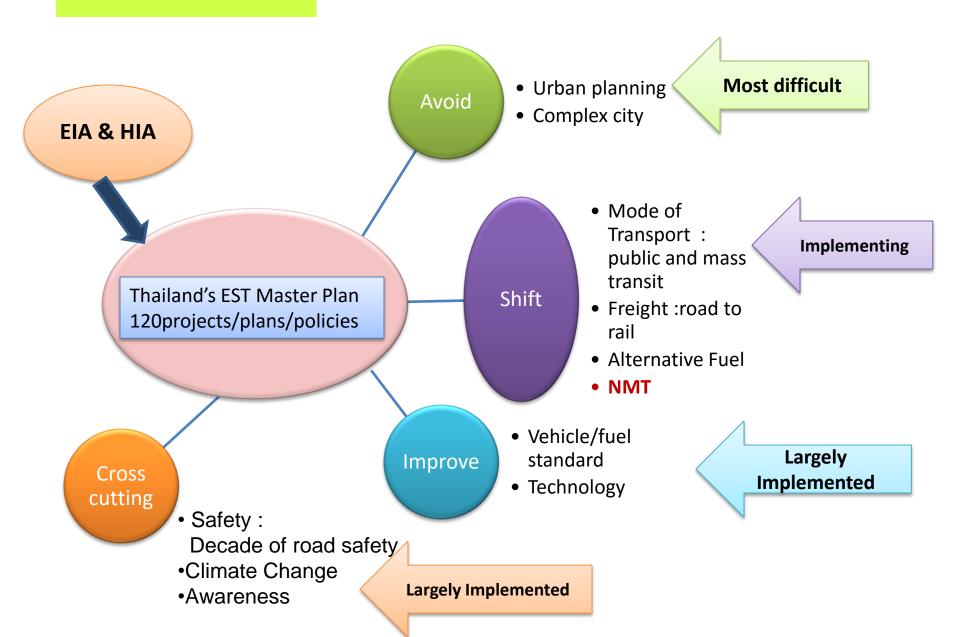


Target of **GHG** reduction of the transport sector is 23 Mt-CO₂e

Challenges of EST in Actions

- Challenges are often cited in terms of...
 - Local capacity (technical / instrumental)
 - Lack of legal /regulatory instruments
 - Financial resources
 - Awareness and support
- Background problems
 - Policy priority amongst mounting multiple challenges (poverty, slums, housing, infrastructure, health, social welfare, economic livelihood) > More competition than synergy
 - Perception Environmental protection measures are financial burden (prevailing both in city managers, donors and investors)

Conclusion







Thank you for your attention

