



# Thailand Country report Intergovernmental 11<sup>th</sup> Regional Environmentally Sustainable Transport Forum in Asia

3-5 October 2018

Office of Transport and Traffic Policy and Planning  
Ministry of Transport  
Thailand



# Topic

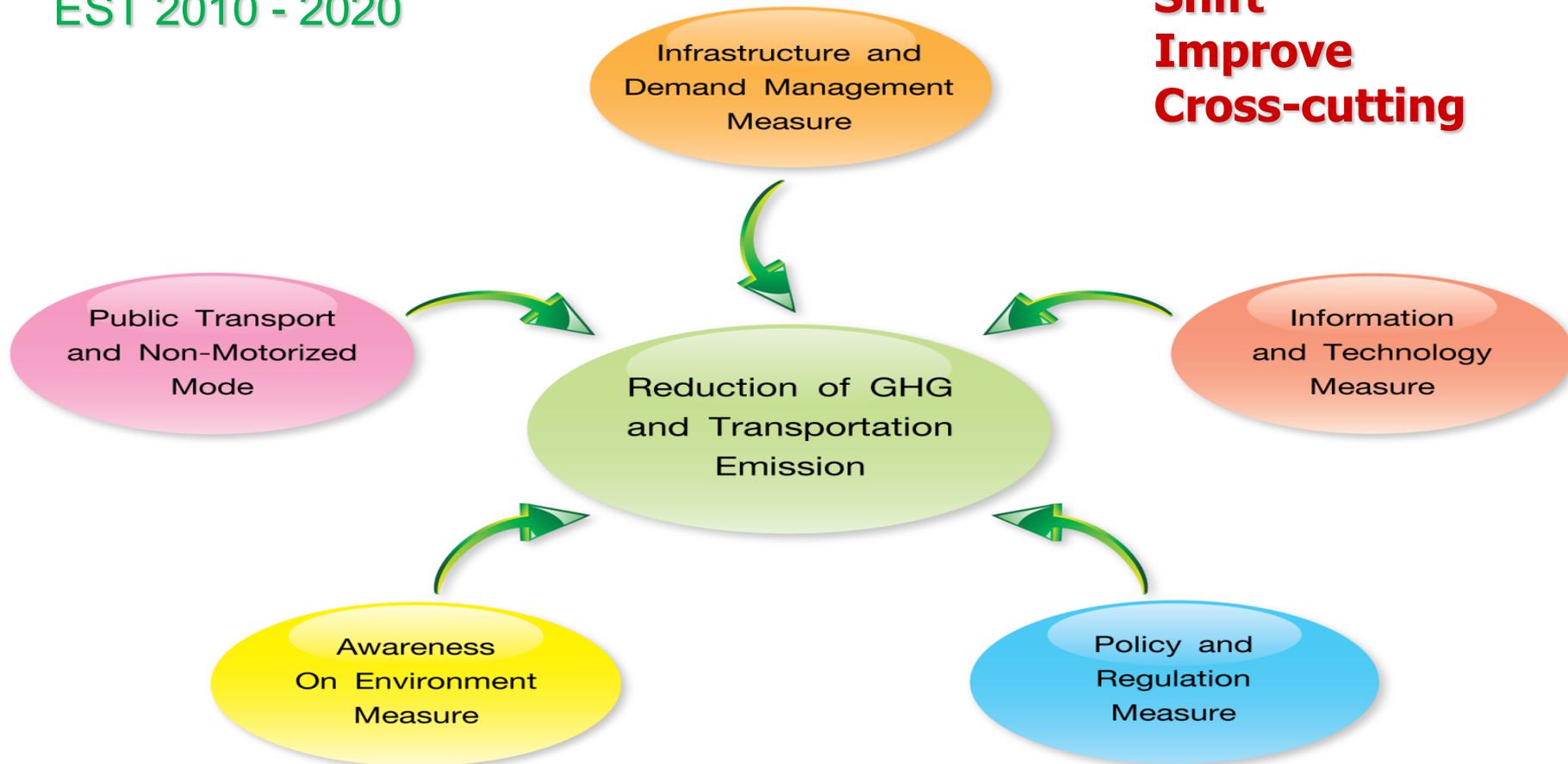
- Thailand's Environmental Sustainable Transport development according to Bangkok 2020 declaration



# Thailand's SUSTAINABLE TRANSPORT MASTER PLAN

Bangkok Declaration  
EST 2010 - 2020

**Avoid  
Shift  
Improve  
Cross-cutting**



# Avoid

reduce unnecessary travel/  
reduce trip distances

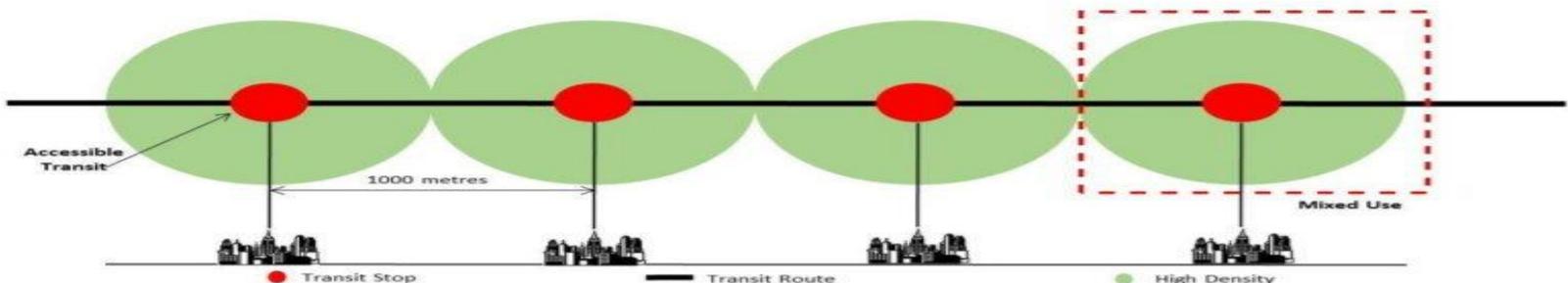
- Introduce TOD (**Transit-oriented-Development** at) Phahonyotin transport hub)
- **Develop** Phahonyotin transport hub to be Thailand Smart city



# Avoid

reduce unnecessary travel/  
reduce trip distances

- Study on City and Transport Infrastructure Development (2018-2019)
  - Masterplan for cities along High-speed train, double-track and Transport Center Hub
  - Apply Urban planning and Transit-Oriented Development (TOD)
  - Control urban sprawl along railway development



# Avoid

reduce unnecessary travel/  
reduce trip distances

- **Information and Communications Technologies**

- studied on the Intelligent Transport System (ITS) Development Master Plan. The plan is currently under proposed to the ministry and the Commission of the Management of Road Traffic for approving before collaborating the master plan with other related agencies respectively. The ITS development in Thailand is now focused on GPS tracking system on vehicles and the proposal of Public Transport Information Standard in ITS.

# Shift

towards more sustainable modes

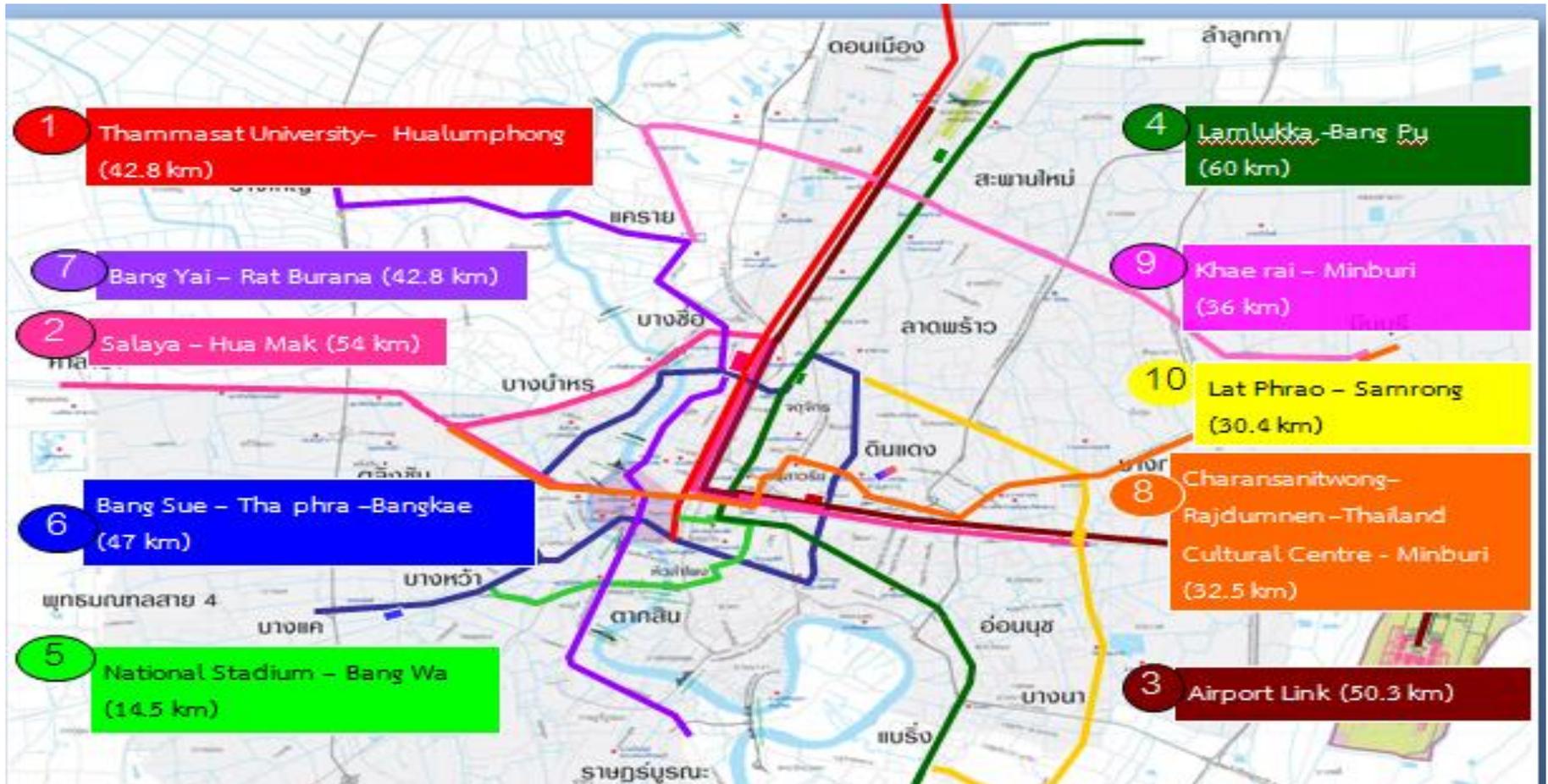
**Non-Motorized Transport** : is one of travel choices,

- studied and developed NMT policies include in transport master plan in all major cities over the country.
- The length of the available bicycle path is 566.13 km. over the country, the length under construction is 715.39 km. This current bicycle path are under responsibility of Ministry of transport, Bangkok Metropolitan Administration and Ministry of Tourism and sport.
- Guideline for Bicycle path design and construction (2016) [www.otp.go.th](http://www.otp.go.th)



# Shift

towards more sustainable modes



## Greater Bangkok Region: Mass Rapid Transit System

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

# Shift: Towards more sustainable modes

Project	Length (km)	Cost (million baht)	Project period
<b>Routes with heavy traffic and main routes for transporting freight</b>			
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) <b>Hua Hin – Prachuab Kiri Khan</b>	90	9,437	2559-2563
<b>5 lines + 1 line</b>	887	<b>127,472</b>	<b>2563</b>

## Double Track Projects (Metre Gauge)

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



# High speed train Development



	Bangkok - Nakhon Ratchasima – Nong Khai	608 km.
	Bangkok – Ra Yong	194 km.
	Bangkok – Hua Hin	211 km.
	Bangkok – Phisanulok - Chiang Mai	673 km.



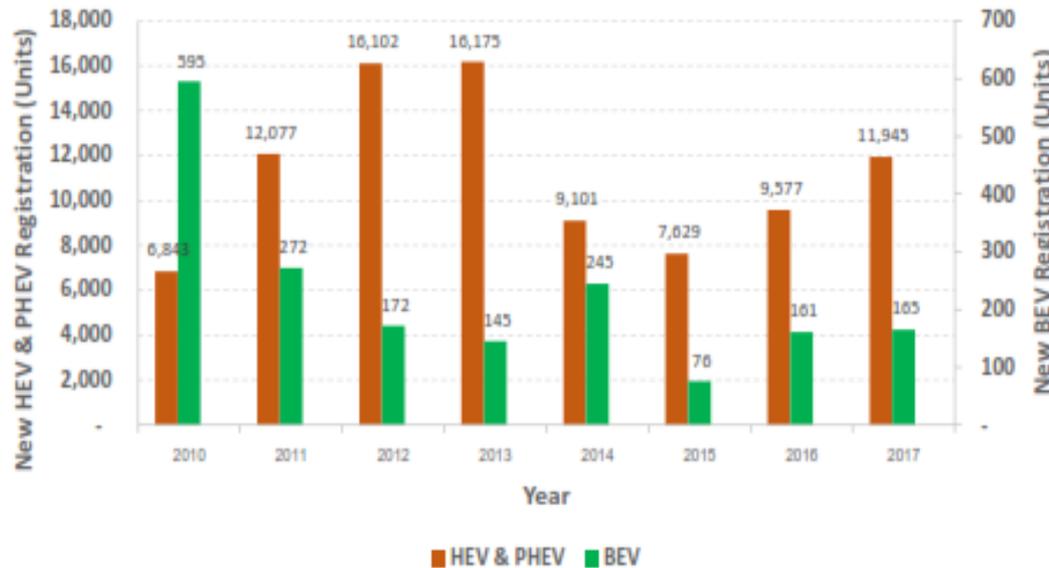
# Improve

## New technologies and standardization

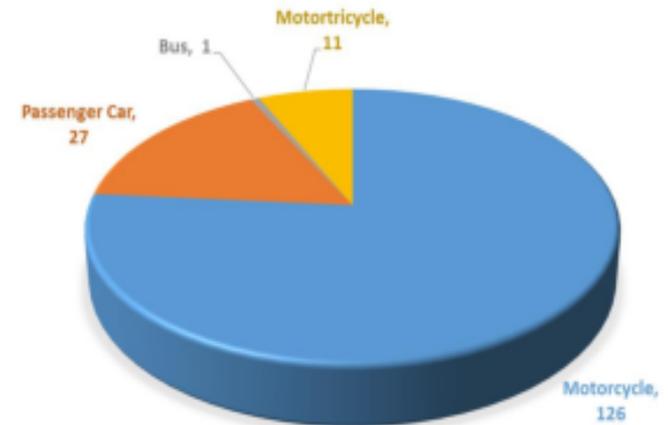
### EV Status Overview in Thailand



#### Number of New xEV Registration (as of 31<sup>st</sup> Dec 2017)



#### New BEV Registration by Vehicle Types (as of 31<sup>st</sup> Dec 2017)



# EV Status Overview in Thailand



## Plug-in Hybrid Electric Vehicles (PHEV)



BMW x5 xDrive40e



Volvo XC90 Drive-E



Mercedes Benz C350e



BMW 330e



Porsche Cayenne S E-Hybrid



Mercedes Benz S500

# EV Status Overview in Thailand



## Battery Electric Vehicles (BEV)



Leabon  
Tuk Tuk



FOMM  
Concept one



BYD  
e-6



Hyundai  
ioniq electric



Kia  
Soul EV



MINE  
MPV EV



City EV



Nissan  
LEAF



Tesla  
Model X



FOMM  
AWD Sport<sup>18</sup>

# EV Status Overview in Thailand



## Public Charging Stations in Thailand



Paragon Department Store



Pollution Control Department

# 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

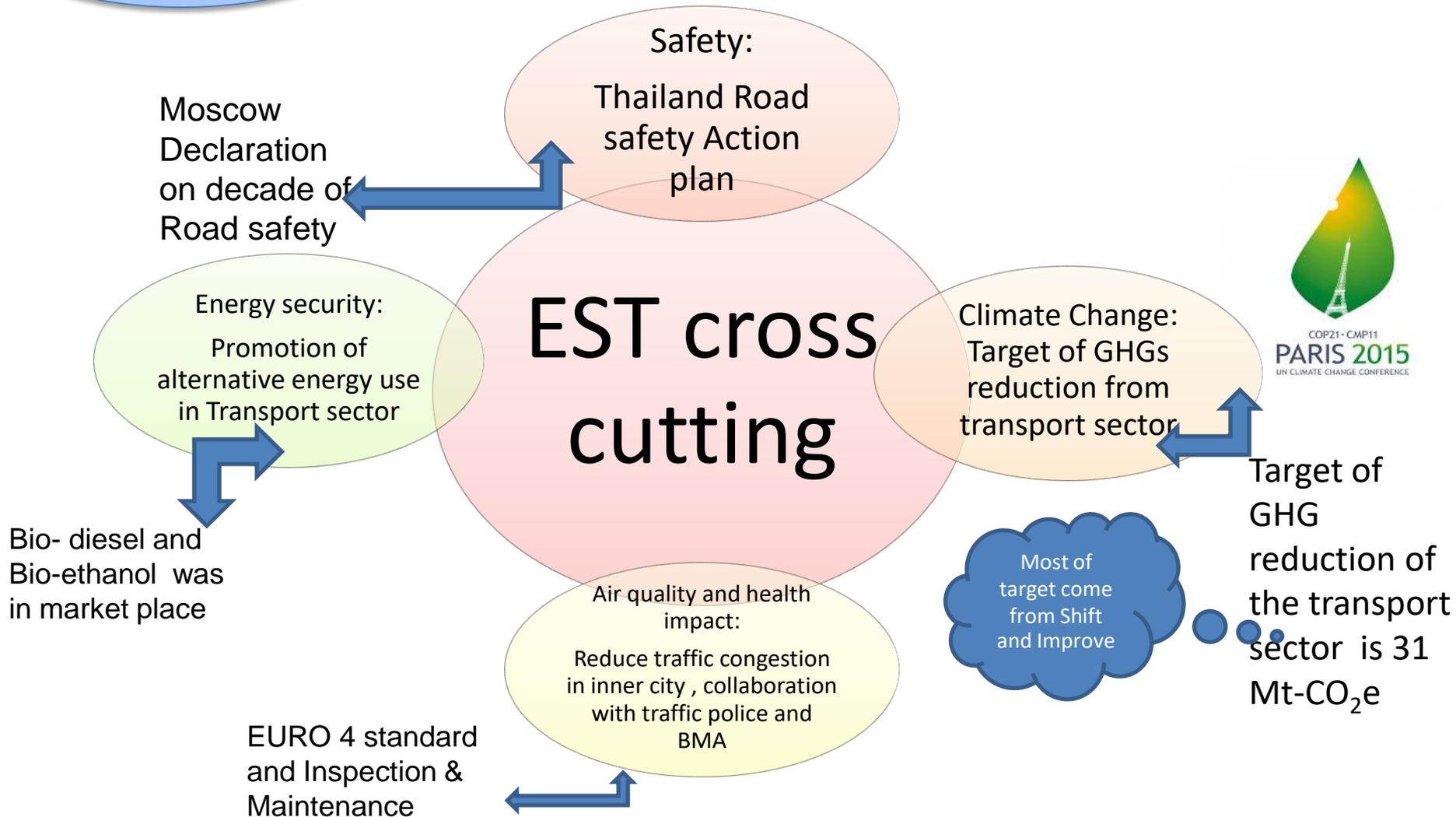
Implementing of Euro standards to new vehicles.

- Right now, all passenger cars, vans and light duty vehicles are in Euro IV and will be up to Euro V in 2023
- Buses and trucks are Euro 3 standard and will be up to Euro V in 2026
- Motorcycles is under EC standard and can comply as Euro 4 in 2062



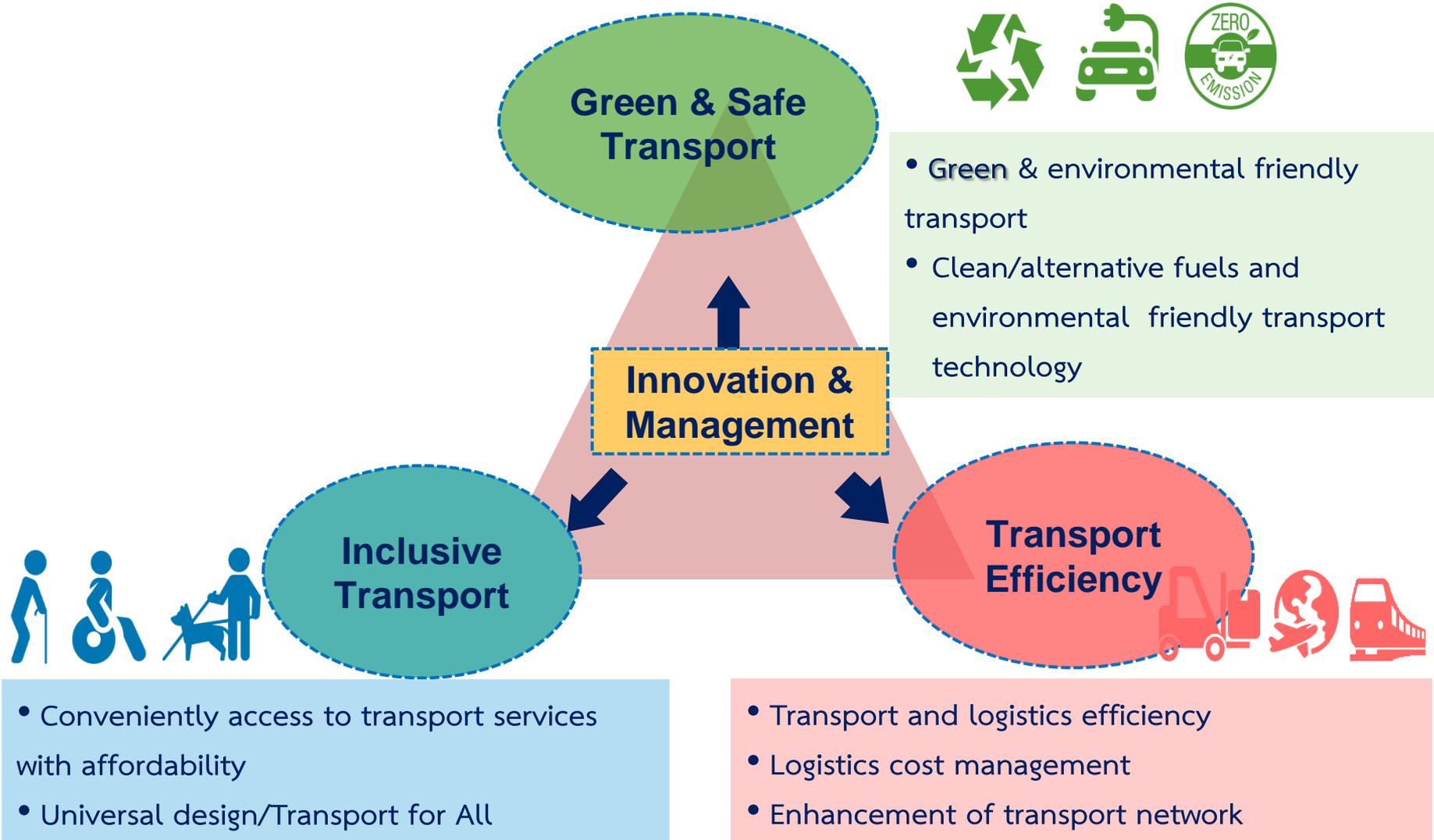
# Cross cutting

Safety, Health, Air quality, Climate Change ...

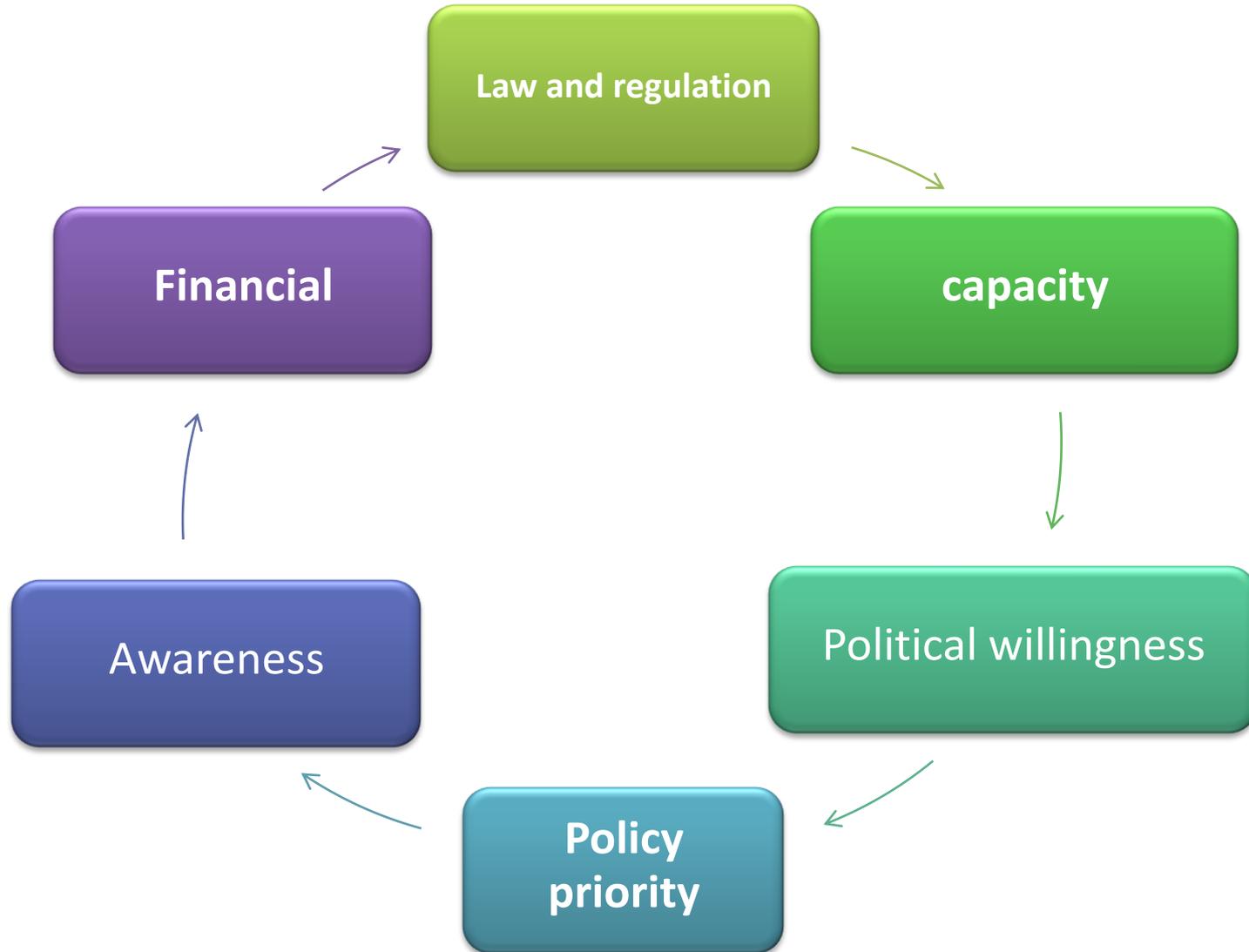


# Conceptual Framework of

## 20 years Thailand Transport Systems Development Strategy (2017 – 2036)



# Challenges and Difficulties





**Thank you for your attention**

