

# **Outcomes and Lessons learned from the Comprehensive Review**

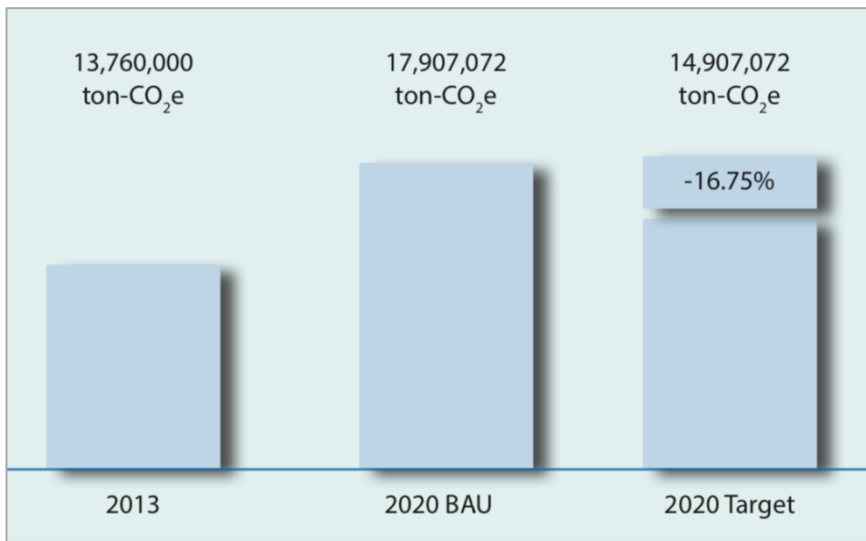
## **-Transport Sector-**

24 May 2019

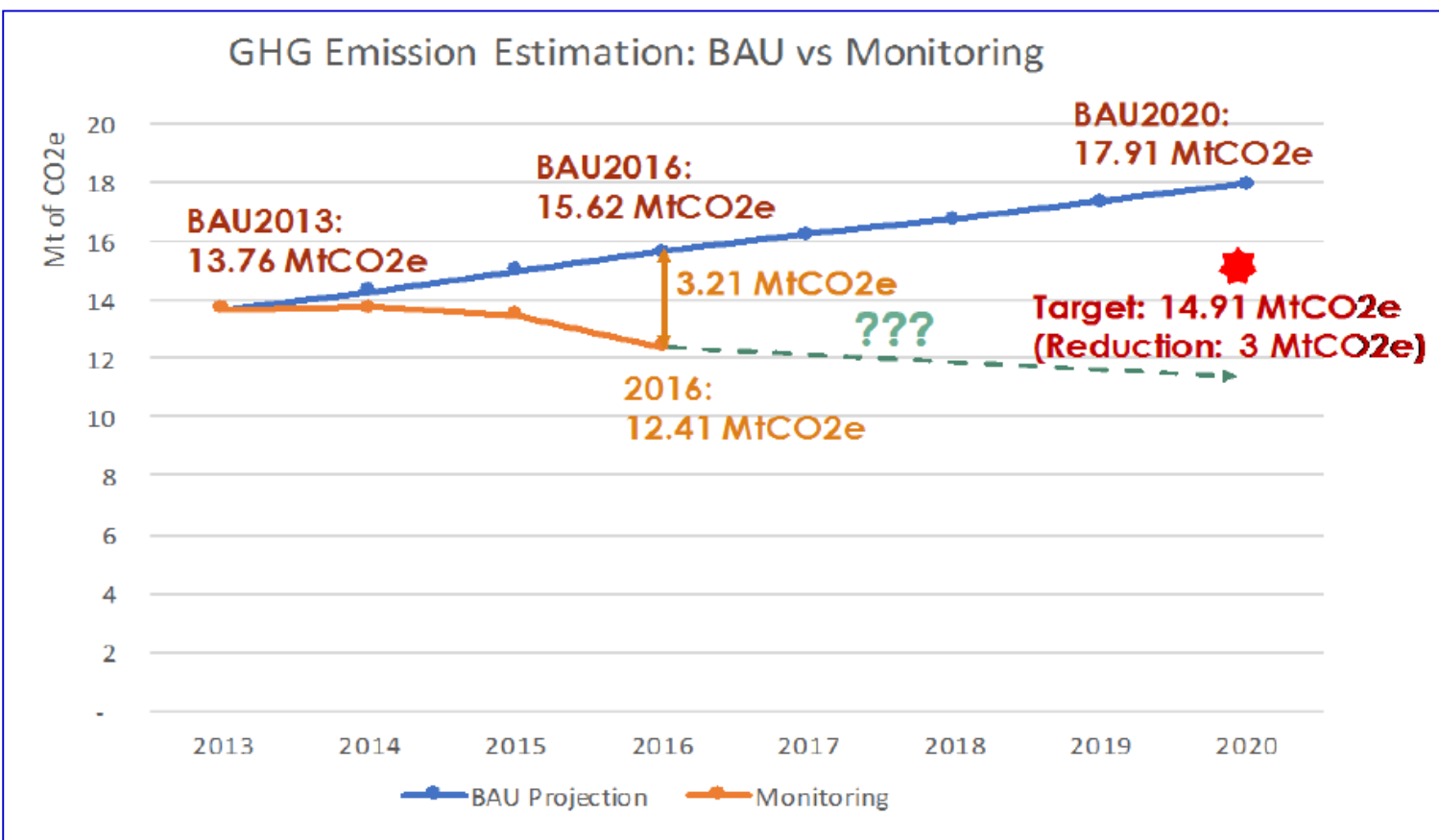
Mr. Jakrapon Wannagul

Transport Sector

# GHG Emission Mitigation Target and Trend in Transport Sector



Mitigation target in the transport sector  
(Excerpt from the BMA Climate Master Plan)



	BAU GHG emission	Actual GHG emission (Targeted GHG emission in 2020)
2013	13.76	13.76
2016	15.62	12.41
2020	17.91	14.91



# Major reasons of the status of GHG emission

## How 3 MtCO<sub>2</sub> reduced?

### Avoid:

Reduction of CNG and LPG taxi  
Reduction of fixed route bus

### Shift:

Private car -> MRT, BTS, BRT, buses

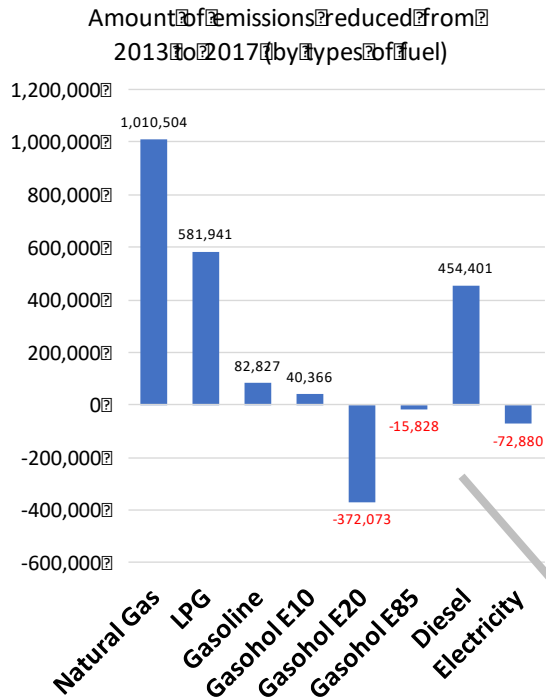
### Improve:

Increase of high energy efficiency cars, i.e. hybrid cars and efficient gasoline/diesel cars

### Fuel Switch:

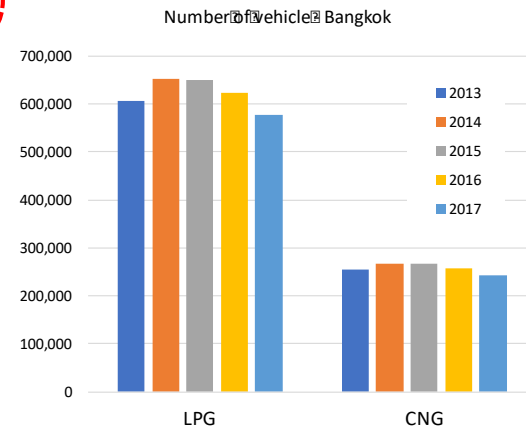
Diesel -> Biodiesel (B2)

Gasoline -> Gasohol (E10, E20 and E85)



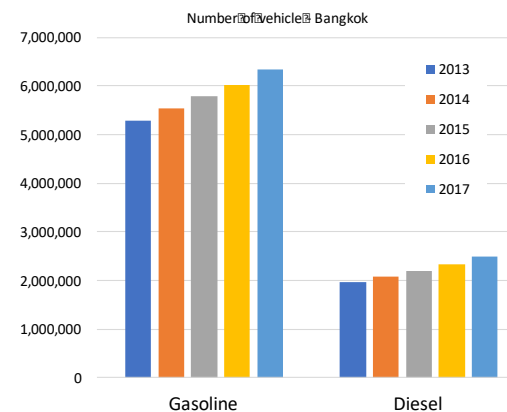
NG, LPG, diesel have higher reductions.

Number of LPG and CNG vehicles in Bangkok



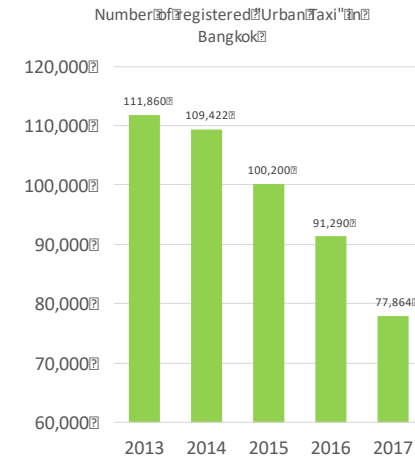
Number of LPG and CNG vehicles reduced from 2013 to 2017.

Number of gasoline and diesel vehicles in Bangkok



Number of gasoline vehicles increased.

Number of diesel vehicles increased.



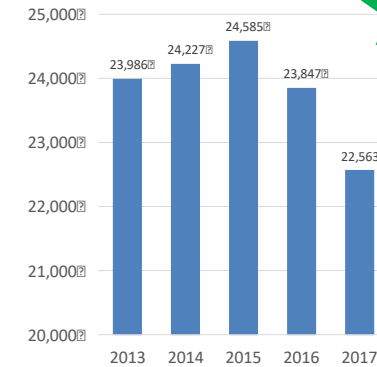
Number of Urban Taxi in Bangkok

Around 34,000 taxi reduced from 2013 to 2017. Most of taxi uses LPG or CNG.

34,000 taxi emit around 0.6 MtCO<sub>2</sub>/year

Source: Transport Statistics Sub-Division, Planning Division, Department of Land Transport

Number of registered Fixed-route Bus in Bangkok



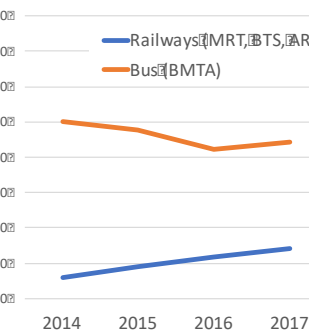
Number of Fixed-route Bus in Bangkok

However, around 1,400 fixed route buses decreased.

1,400 buses emit around 0.1 MtCO<sub>2</sub>/year

Source: Transport Statistics Sub-Division, Planning Division, Department of Land Transport

Number of passengers by mode



Number of passenger per year by transportation mode

Number of urban railways passenger increased.

# Successful activities conducted during the Review period in the sector

## 1. On – Street parking Control

- Installing No-parking sign 6,000 locations
- Installing Speed limit sign (not over 50 km/hr.)

## 2. Improvement of Connectivity of Public Transport (Sky walk)

- Between BTS Station (Bangwa Station) and Taksin Petasem pier Station 0.24 km.
- Between BTS Station (Bangna Station – Udomsuk Station) and Bangna transfer point 1.4 km.

## 3. Promotion of public transportation (Public Awareness : CAR FREE DAY)

## 4. Improvement of Signal System (Traffic Volume/ Flow Control)

- the ATC project supported by JICA is implemented.

## 5. Introduction of Low emission vehicles (LEV)

- In progress of preparing setting committee



## Challenges

1. To training for MRV the Project which some projects have complicated methodology
2. To develop adaptive traffic signal system ; Area Traffic Control (ATC)

## Lessons learned

- ✓ Should be select the project that implementing in period of master plan to achieve the target
- ✓ Evaluation and training about MRV is very important for the selected project monitoring

# Proposal for enhanced actions

## **(1) Major target of the Department for FY 2019**

- Project of Maintenance of Sky walk and Park & Ride
- Project of Mass Transit and Management Extend Silom line (Taksin - Phetkasem)
- Project of Promotion of Sustainable Public Transportation (Bangkok Car Free Day 2019)
- Installation of Traffic Signal

## **(2) Flagship/focused projects that are relevant to the Climate Change MP**

- Project of Provision and Operation Water Transportation
- Improvement and Installation of Traffic Signal (ATC) (Collaboration with JICA)