



# Thailand's automotive excise tax reform

November 20 ,2014

Chiang Mai, Thailand





## Impact on Green House Gas : CO<sub>2</sub>

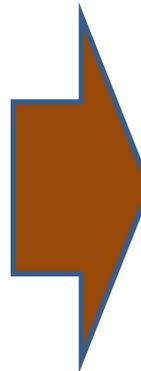
- National Disasters cause by climate change which lead to raising in temperatures such as: Hurricanes, Typhoons and Great Floods etc.
- Transportation Sector contributes to CO<sub>2</sub> about 23% and raising
- Urban population shift means more congestion
- Automotive Technology Trend Toward : Efficiency Vehicles
  - Reduce Dependence on Fossil Fuel or Fuel Efficiency
  - Low Carbon Economy
  - Promote Motor Driven Vehicles



# Revolution of Excise Tax on Automobile

## Present

1. Excise tax structure is calculated based on engine size (cc) and horsepower to reflect luxury principle and fuel consumption
2. Promote alternative fuel vehicle and efficiency consumption vehicle by using tax incentive
3. Supporting product champion vehicles  
: Pick Up, Eco Car



## Future (1 January 2016)

1. Efficiency Vehicles
  - Low carbon emission
  - Fuel efficiency
2. Supporting Product Champion Vehicles
3. Promoting Active Safety in Vehicles
4. Supporting Simplicity, Transparency, Efficiency<sub>3</sub> and

Fairness

# Comparison of Current Structure VS New Structure

Categories Of Vehicle	Tax Structure in Present				Tax Structure in Future			
	Engine Capacity (Horse Power)	Tax Rate (%)			CO <sub>2</sub>	Tax Rate (%)		
		E10	E20	E85		E10/E20	E85/NGV	Hybrid
<b>Passenger Vehicles</b> -Passenger Vehicles and, Vans less than 10 seats	≤2,000 CC	<b>30</b>	<b>25</b>	<b>22*</b>	≤ 100 g/km	} <b>30*</b>	} <b>25</b>	<b>10</b>
	2,001-2,500 CC	<b>35</b>	<b>30</b>	<b>27</b>	101-150g/km			<b>20</b>
	2,501-3,000 CC	<b>40</b>	<b>35</b>	<b>32</b>	151-200 g/km	<b>35</b>	<b>30</b>	<b>25</b>
	>3,000 CC (เกิน 220 HP)	<b>50</b>	<b>50</b>	<b>50</b>	>200 g/km	<b>40</b>	<b>35</b>	<b>30</b>
	>3,000 CC	<b>50</b>	<b>50</b>	<b>50</b>	>3,000 CC	<b>50</b>	<b>50</b>	<b>50</b>
PPV / DC /Space Cab/Pick Up	≤3,250 CC	<b>20/12/ - /3,18</b>			≤ 200 g/km	<b>25*/12/5/3,18</b>		
	>3,250 CC	<b>50</b>			>200 g/km	<b>30/15/7/5,18</b>		
	>3,250 CC	<b>50</b>			>3,250 CC	<b>50</b>		
Eco Car (Benzine/Diesel) / E85	1,300/1,400 CC	<b>17</b>			≤100 g/km	<b>14*/12</b>		
					101-120 g/km	<b>17/17</b>		
Electric Vehicle /Fuel Cell/ Hybrid	≤ 3,000 CC	<b>10</b>				<b>10</b>		
	>3,000 CC	<b>10</b>				<b>**</b>		
	>3,000 CC	<b>50</b>			>3,000 CC	<b>50</b>		
NGV-OEM	≤ 3,000 CC	<b>20</b>				<b>**</b>		
	>3,000 CC	<b>50</b>			>3,000 CC	<b>50</b>		

**Remarks** \* : Assign safety standard for Active Safety (ABS+ESC) for Passenger Vehicles and, Vans less than 10 seats must obtain CO<sub>2</sub> ≤150 g/km / PPV must obtain CO<sub>2</sub> ≤200 g/km / Eco Car must obtain CO<sub>2</sub> ≤100 g/km

\*\* Depend on CO<sub>2</sub> emission

\* less than 1,780 CC but not over 2,000 CC

# Why 150 g/km or 200 g/km ?

New excise tax structure

(PC) 30/25 (E85)  
Eco Car 17/14/12  
Hybrid 10/20

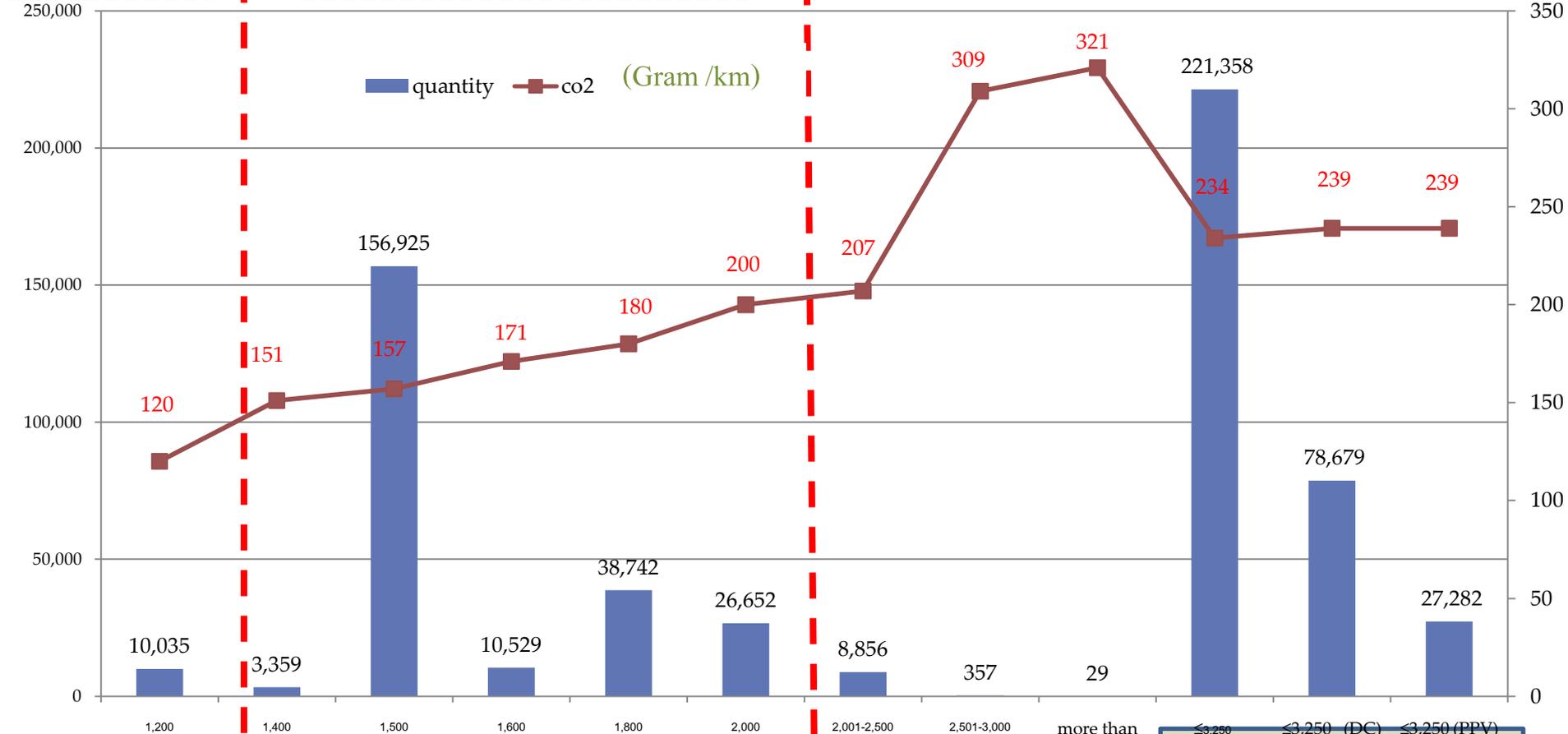
150

(Passenger Car: PC) 35/30 (E85)  
Hybrid 25

200

(PC 40)/35 (E85)  
Hybrid 30

	Pick up/SC	DC	PPV
Co <sub>2</sub> ≤ 200	3/5	12	25
Co <sub>2</sub> > 200	5/7	15	30



Current structure (E20)  
Eco Car 17  
Hybrid 10

(PC) 25

(PC)30

(PC)35

(PC)50

(Pick up)

3	12	20
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## Resulting from “Output” rather than “Input”

### Present based on “Input”

Sources of energy power and technologies

E10, E20, E85, NGV-OEM, NGV-Retrofit



### Future based on “Output”

CO<sub>2</sub> emission (gram per kilometer) reflects

efficient use of energy and pollution reduction



1. Current tax structure is complex (43 tax rates)
2. Not encourage CO<sub>2</sub> reduction
3. Tax rate for E20 and E85 vehicles generate loss of revenue and not promote efficiency use of alternative fuel. For example, those who drive passenger cars that could run on E85 or E20 use E10 instead.

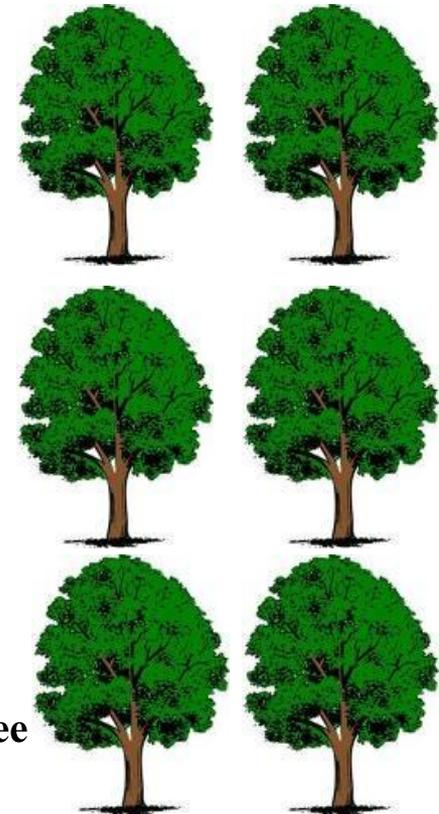
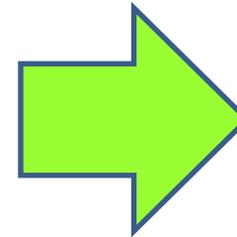
1. Simplicity and creates confidence of investments as tax structure no longer depend on new technology and innovation of alternative energy usage
2. Implementation of CO<sub>2</sub> emission-based excise tax rate to enable automobile industry to produce vehicle with clean technologies and encourage buyers to go green
3. Create fairness on tax administration



## Benefit of CO<sub>2</sub> Reduction

150,000 Vehicles or equivalent to 61 % of total passengers vehicles ranking with engine size between 1,400-1,500 cc adjust their engines to reduce CO<sub>2</sub> emission by 15

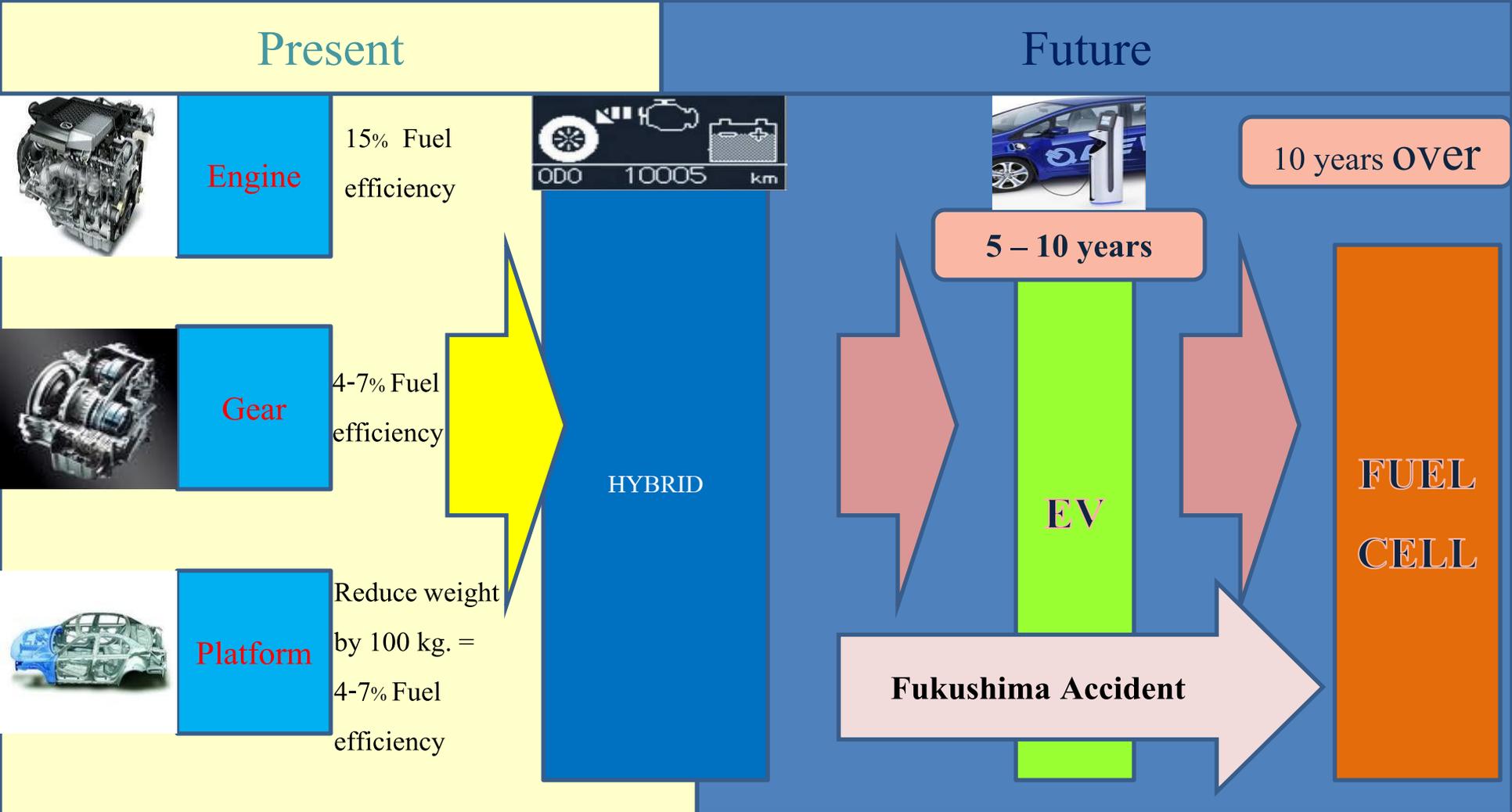
Engine adjustment (%)	CO <sub>2</sub> Reduction (ton / year)	CO <sub>2</sub> reduction (%)
100	44,275	8.7
80	35,326	6.9
60	26,645	5.2
40	17,606	3.5



Reduction of CO<sub>2</sub> emission 40,000 tons per year equivalent to plant perennial tree such as teak about 44,000 rai or 17,600 acres



# Future Technology Trend on Automobile





# The Conclusions of The New Automobile Tax Structure

## Simplicity

- New tax structure will be simply based on “Output” rather than “Input” which less complicated comparing to the current tax structure.

## Transparency

- The tax structure has been announced in 2013 and will be implemented in 2016 which create some lead time to all car manufacturers to be produce in Thai market and also create investor confident.

## Efficiency

- Tax rate and tax incentive will be based on efficiency of CO<sub>2</sub> emission, vehicles with more fuel efficiency will pay lower tax in order to encourage customers to aware of greenhouse gas effects reductions

## Fairness

- By changing from “input” to “output” that means all technology that available in the world market can be produce and sell in Thailand.