

# Energy Efficiency Policies in Transport Sector in Thailand

**Borwornpong Sunipasa**  
**Department of Alternative Energy  
Development and Efficiency (DEDE)**

**Ministry of Energy**

**Workshop of  
APEC Supporting the Development and Implementation  
of Low-Emission Development Strategies (LEDs) in  
Transport Sector  
Lima, Peru  
19-20 September 2017**



Department of Alternative  
Energy Development and Efficiency

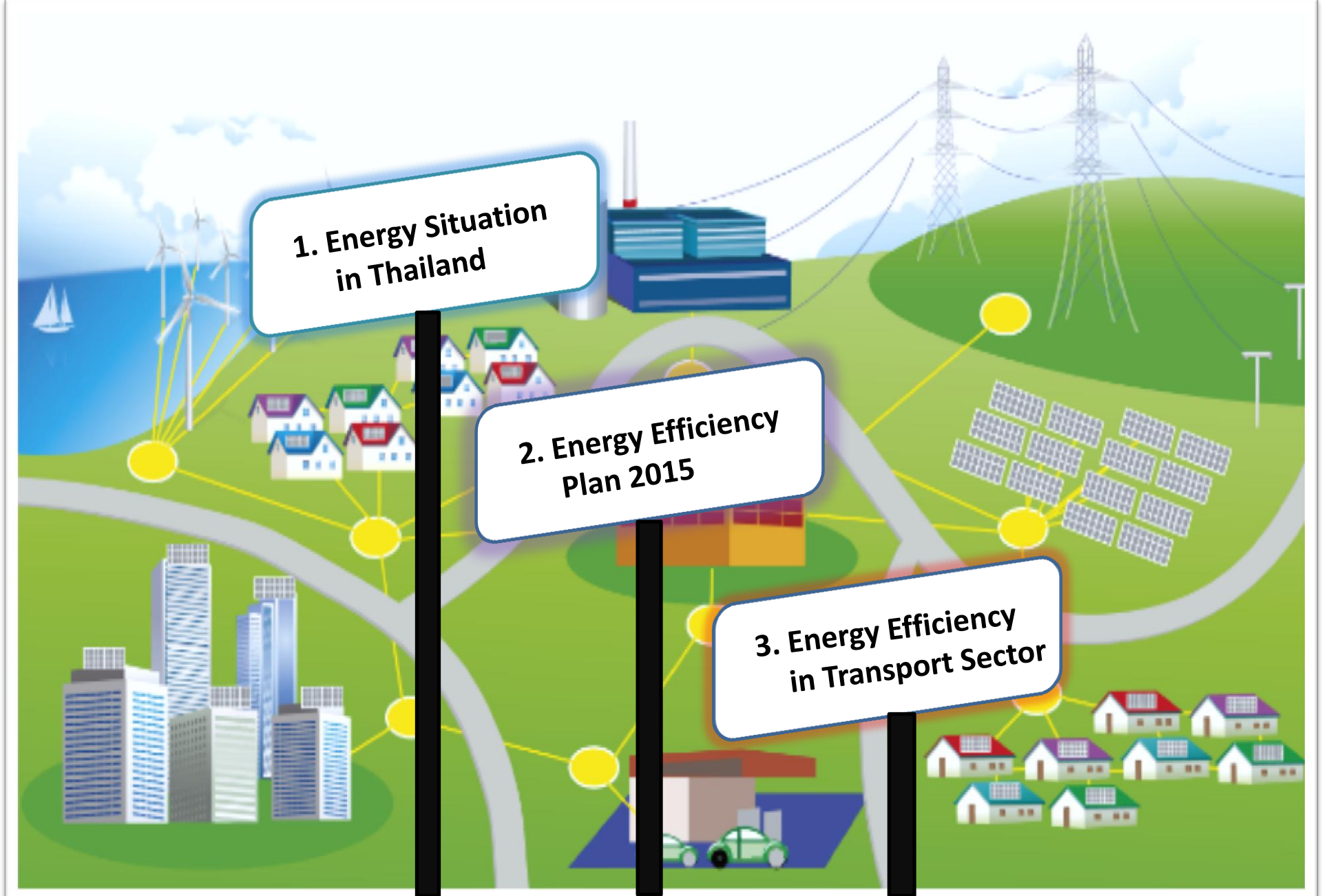
**MINISTRY OF ENERGY**



**1. Energy Situation  
in Thailand**

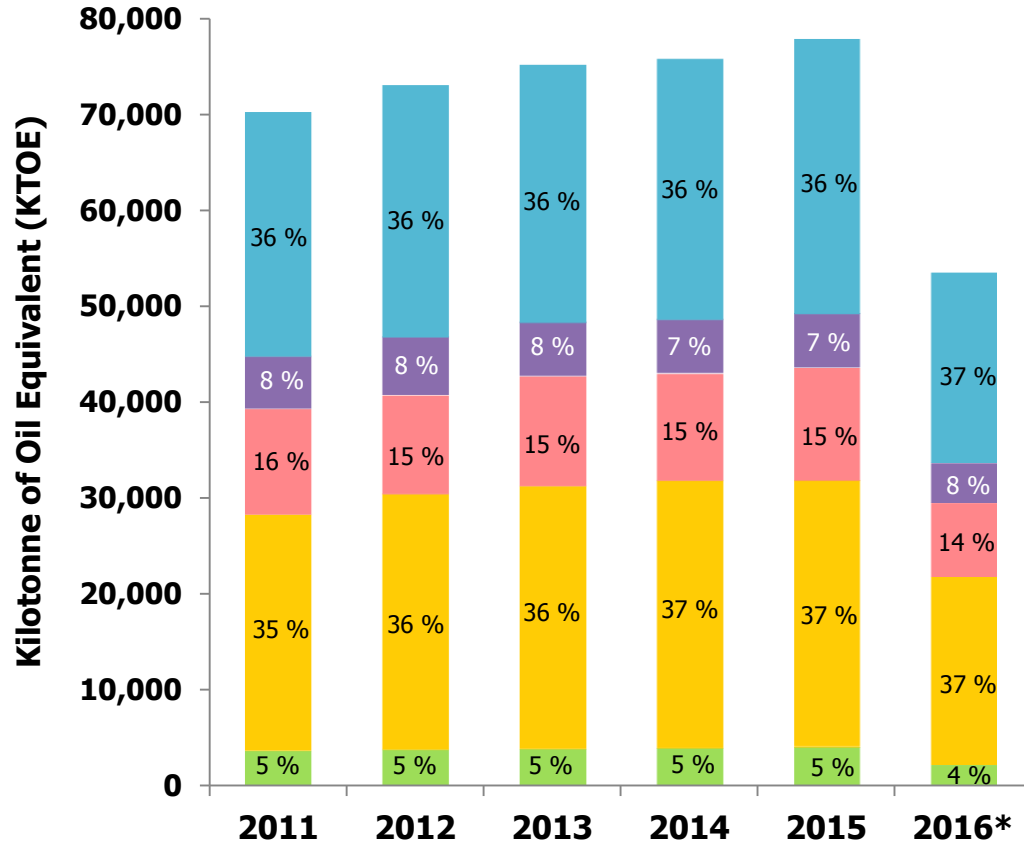
**2. Energy Efficiency  
Plan 2015**

**3. Energy Efficiency  
in Transport Sector**

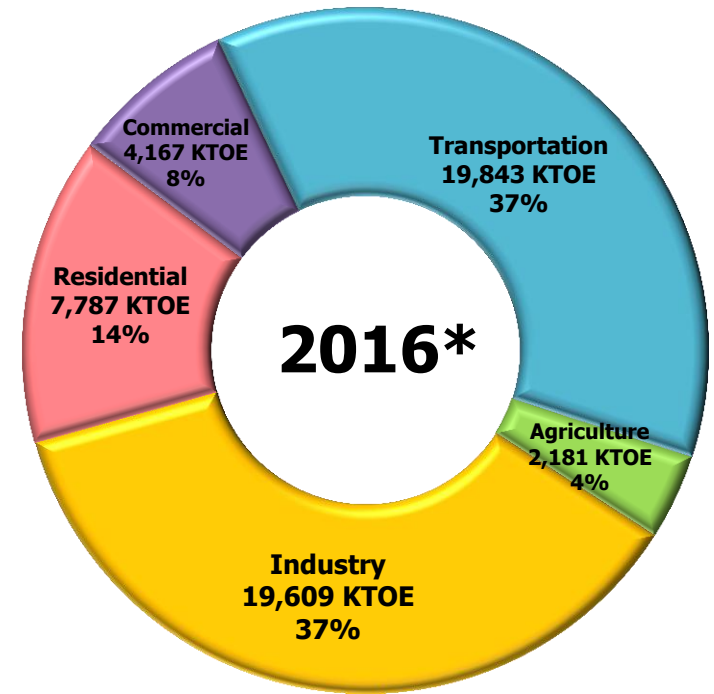




# Total Energy Consumption



## Share of Total Energy Consumption by Economic Sector in 2016\*



**Total Energy Consumption in 2016\*  
= 53,587 KTOE**

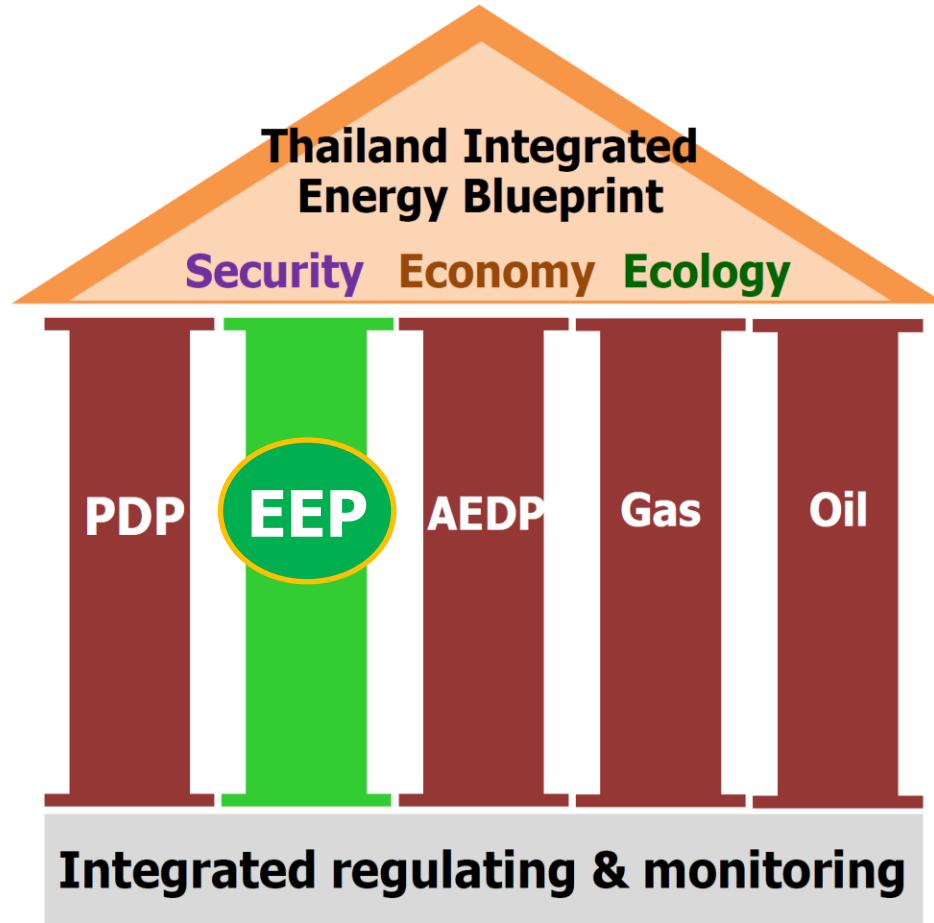


source : DEDE

\* Jan-Aug



## Integrating 5 Major National Energy Plans



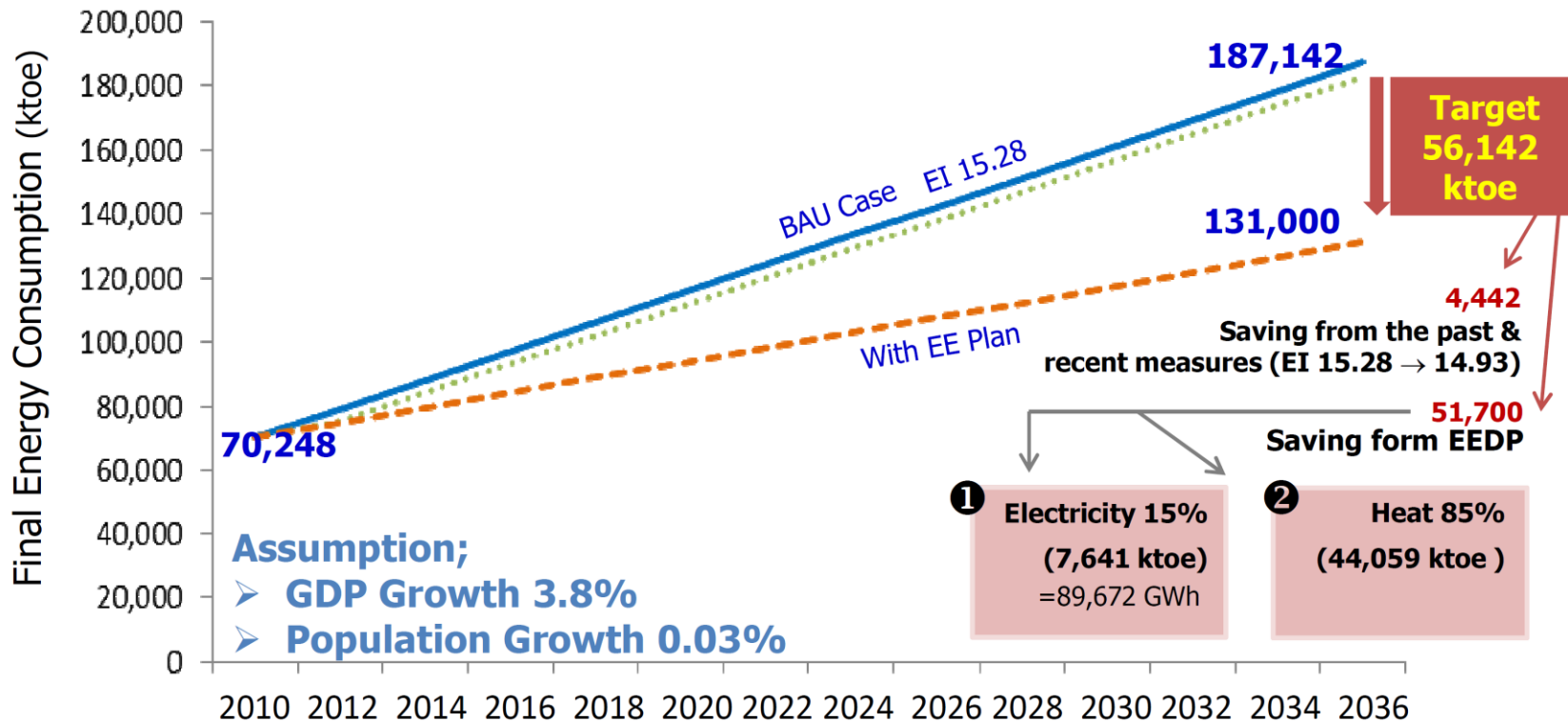
- Based on the same period through long term approach planning **(2015-2036)**
- Main Focus on Country's Competitiveness & Sustainability



## Energy Efficiency Plan (2015-2036)

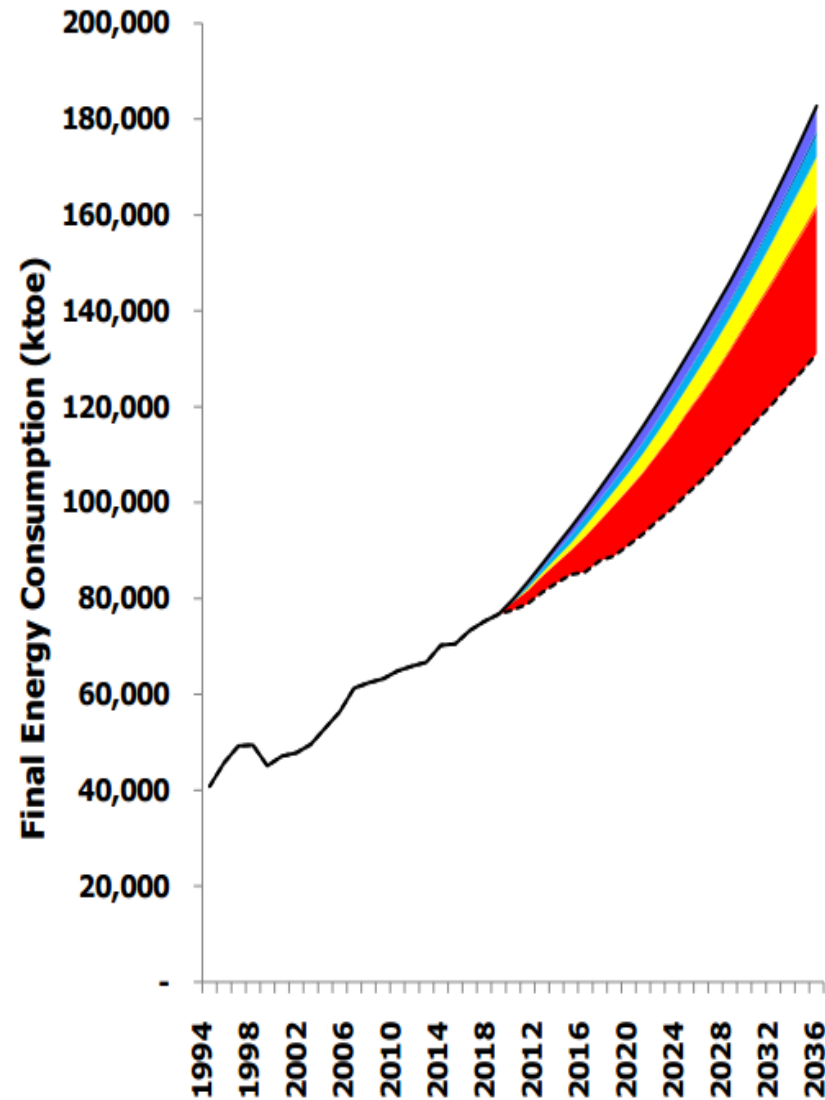
**A Target to reduce Energy Intensity by 30% in 2036,  
compared with that in 2010**

EI (2010) actual <b>15.28</b> ktoe/billion baht	EI (2013) actual <b>14.93</b> ktoe/billion baht	EI (2030) forecast <b>11.0</b> ktoe/billion baht	EI (2036) forecast <b>10.7</b> ktoe/billion baht
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## Summary of EEP 2015 Target by Measures

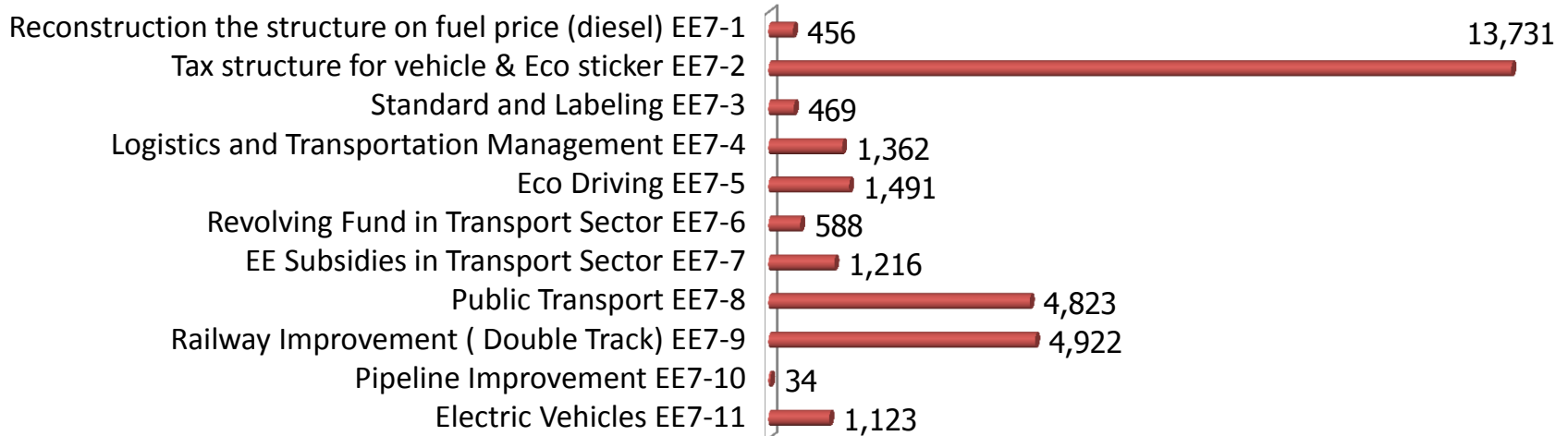
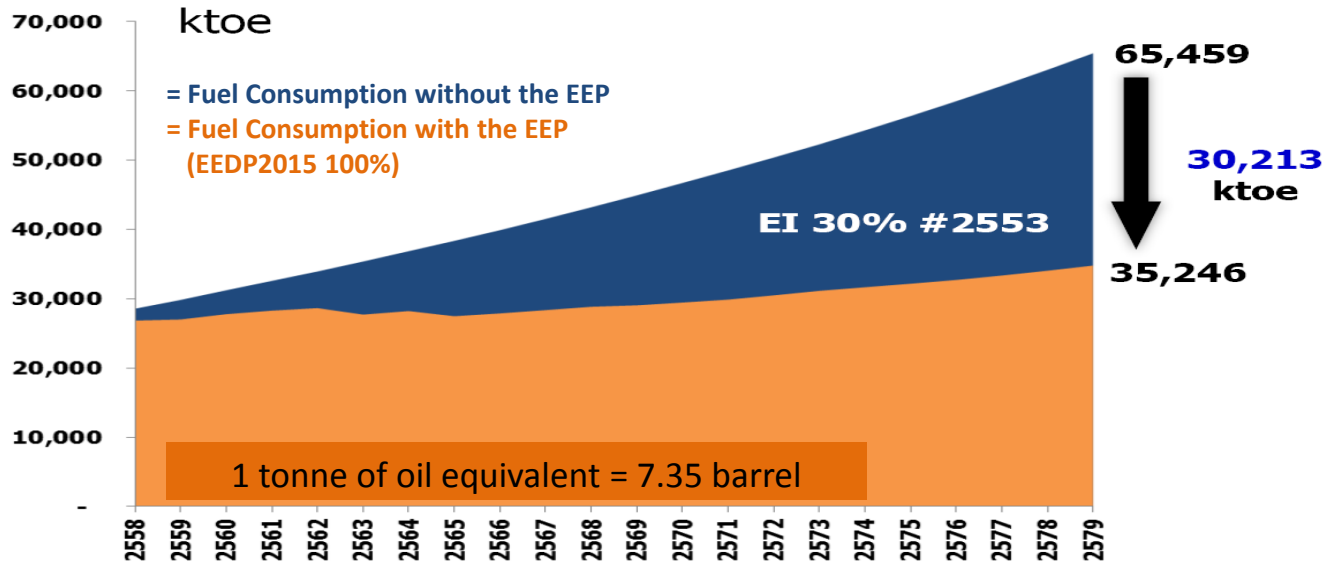


Expected Energy Saving by Economic Sector		Total	
		(ktoe)	(%)
EE1	Enforcement of ENCON Act 1992 on energy conservation standards for designated factories and buildings	5,156	10%
EE2	Building Energy Code (BEC) on new buildings	1,166	2.2%
EE3	Energy Labeling on equipment/appliances (HEPs & MEPS)	4,150	8%
EE4	Enforcing Energy Efficiency Resource Standard (EERS) for large energy producers and distributors	500	1%
EE5	Financial Incentives and support for energy performance achievement	9,524	18.4%
EE6	Promoting and encourage to use LED	991	2%
EE7	Energy saving measures in transport sector	30,213	58.4%
EE8	Support the energy efficiency technology research & development	-	-
EE9	Support the human resource development on energy conservation	-	-
EE10	Support the public awareness and behavioral change on energy conservation	-	-
<b>Total</b>		<b>51,700</b>	<b>100%</b>







## Energy Efficiency Plan on Transport Sector Saving Target (2015-2036)

Target 2015-2036 = **30,213** ktoe







Unit : ktOE

Initiative	Agency	Activities	Target
<p><b>EE7-1</b>                      Reconstruction the structure on fuel price (Diesel)</p>	<p>EPPO</p>	<p>Floating Diesel price. Target saving of 9.2 million liters</p>	<p>456</p>
<p><b>EE7-2</b>                      Tax structure for vehicle &amp; Eco sticker</p>  	<p>OIE and The Excise Department</p>	<ul style="list-style-type: none"> <li>• Eco Sticker the rate of CO2 and oil consumption (Start on the January 1<sup>st</sup> 2016)</li> <li>• Approved 97 company of 2,249 versions Eco Stickers</li> <li>• From that date the CO2 emission has decreased</li> <li>• Sales on the first tenth month of 2016                             <ul style="list-style-type: none"> <li>passenger car: 266,938 cars</li> <li>pick-up truck and others: 350,221 cars</li> </ul> </li> <li>• Further information: <a href="http://www.car.go.th">www.car.go.th</a></li> </ul>	<p>13,731</p>
<p><b>EE7-3</b>                      Standard and Labeling for tire</p>  	<p>DEDE and TISI</p>	<p>TISI is constructing the driving test circuit and tire testing center, which will be completed in 2018. The study of standard and labeling will be studied after its complete and will be ready by 2020</p>	<p>469</p>





unit : ktoe

<b>Initiative</b>	<b>Agency</b>	<b>Activities</b>	<b>Target</b>
<p><b>EE7-4</b>            Logistics and Transportation Management</p> 	<p>DEDE and FTI</p>	<ul style="list-style-type: none"> <li>• Transportation management system demonstration for an efficient logistics management               <ul style="list-style-type: none"> <li>- Train 110 logistics company</li> </ul> </li> <li>• Tracking and initiatives to reduce energy consumption in transport sector               <ul style="list-style-type: none"> <li>- Traffic modeling</li> <li>- Create a data base to collect each car mileage</li> </ul> </li> </ul>	<p>1,362</p>
<p><b>EE7-5</b>            Eco Driving</p>  	<p>DEDE, DLT and FTI</p>	<ul style="list-style-type: none"> <li>• Eco- driving Training               <ul style="list-style-type: none"> <li>- 4 region total of 400 drivers (2 days training)</li> <li>- Create a network for training centers</li> <li>- In 2018 target 5,000 drivers</li> </ul> </li> </ul>	<p>1,491</p>
<p><b>EE7-6</b>            Revolving Fund in Transport Sector</p> 	<p>DEDE and FTI</p>	<p>Under evaluation for a appropriate approach</p> <ul style="list-style-type: none"> <li>- ESCO for transport sector</li> </ul>	<p>588</p>



unit : ktoe

Rate: 1 US dollar = 33 Thai Baht

<b>Initiative</b>	<b>Agency</b>	<b>Activities</b>	<b>Target</b>
<b>EE7-7</b> Subsidies in Transport Sector	DEDE and FTI	<ul style="list-style-type: none"><li>• In 2016 Encourage to switch to radial tire<ul style="list-style-type: none"><li>- Support 200 companies of 500,000 baht each (total of 100 million baht)</li></ul></li></ul>	1,216
<b>EE7-8</b> Public Transport	OTP	<ul style="list-style-type: none"><li>• Under construction: Sky train network and Subway train network</li><li>• Fundamental information about energy saving evaluation</li></ul>	4,823
<b>EE7-9</b> Railway Improvement (Double Track)	OTP	<ul style="list-style-type: none"><li>• Under construction: Double Track Railway</li><li>• High-Speed Rail</li></ul>	4,922





<b>Initiative</b>	<b>Agency</b>	<b>Activities</b>	<b>Target</b>
<b>EE7-10</b> Pipeline Improvement 	DOEB	Action plan on transporting oil via pipeline to northern and eastern parts of the country	34
<b>EE7-11</b> Electric Vehicles (EV)   	EPPO	<ul style="list-style-type: none"><li>• Foundation to develop the infrastructure on electric vehicles</li><li>• Development Plan for EV</li><li>• Subsidy for 150 electrical charging stations</li><li>• Encourage tuk tuk to be EV</li><li>• Purchase of 200 EV buses</li></ul>	1,123



## Structure of Responsible Ministry/Bureau for EE7 Plan

### Working and Tracking Committee

- DEDE Director General or DEDE Deputy Director General as a president of the committee
- Representatives from the Energy Efficiency Plan Committee
- Relevant Agencies
- DEDE works as a secretary

### Energy Efficiency Plan on Transportation Committee

- Deputy Prime Minister as a Chairman
- Minister of Interior
- Minister of Energy
- Minister of Transport
- Minister of Industry
- Minister of Natural Resources and Environment
- Permanent Secretary of Ministry of Finance or Representatives
- Permanent Secretary of Ministry of Energy or Representatives
- Permanent Secretary of Labour or Representatives
- Secretary of Fiscal Policy Office or Representatives
- Director of The office of Transport and Traffic Policy and Planning or Representatives
- Director of The Office of Industrial Economics or Representatives
- Director of The Energy Policy and Planning Office or Representatives
- Representative from The Land Transport Federation of Thailand
- Professional Advisory in Energy Efficiency on Transport Sectors
- DEDE works as a secretary



1. Unstable policies
2. The project fundamental is behind schedule
3. Fluctuate in oil price
4. People understanding on energy efficiency



# Thank You

**Department of Alternative Energy Development  
and Efficiency, Ministry of Energy, Thailand**  
**[www.dede.go.th](http://www.dede.go.th)**

