



**Low Carbon Asia Research Network (LoCARNet) First Annual Meeting
Mobilizing Wisdom for a Low-carbon Asia**

16 October 2012

Novotel Bangkok - Siam Square

**Policy Making Process and Use of Integrated
Assessment Model**

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Thailand



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Asian Institute of Technology
National Institute for Environmental Studies
Kyoto University
Mizuho Information & Research Institute
Asia-Pacific Integrated Model

Lesson learned in Thailand

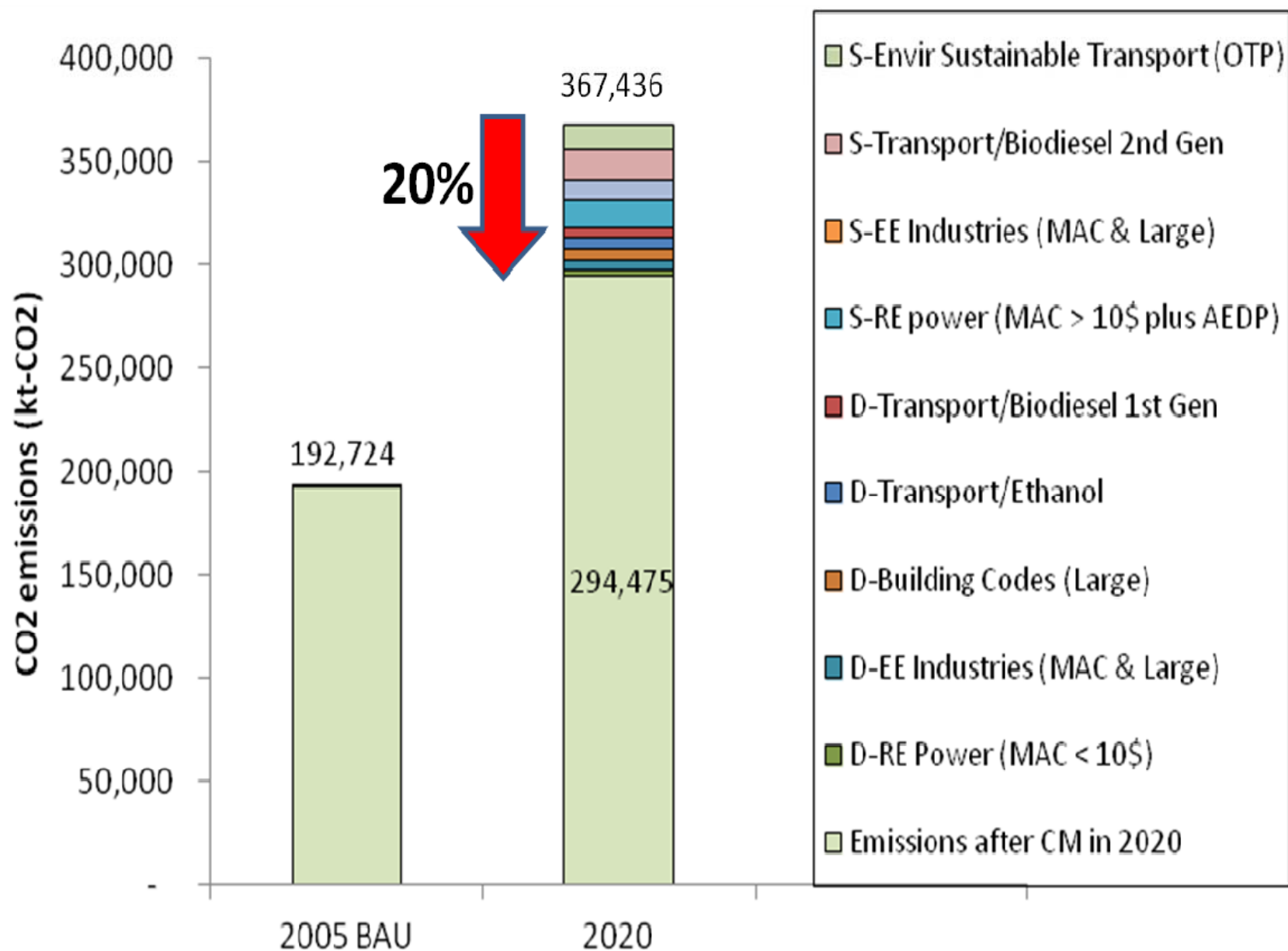
Linkage to policy makers

- **LCS Scenarios and LCS Roadmap in Thailand**
 - **Cost-effectiveness**
 - **GHG Mitigation potential**
 - **Conflict with other policies**
 - **Co-benefits**
 - **Consensus of stakeholders**

Potential of CO₂ Mitigation in Thailand

NAMAs	CO ₂ Countermeasures	CO ₂ reduction in 2020 (kt-CO ₂)
Domestic NAMAs	RE Power (MAC < 10\$/t-CO ₂)	2,568
	EE Large Industries (MAC < 10\$/t-CO ₂)	4,762
	Building Codes (Large buildings)	5,909
	Transport/Ethanol (AEDP 2012)	5,069
	Transport/Biodiesel 1 st Gen (AEDP 2012)	5,022
	<i>Sub-total</i>	<i>23.0 Mt-CO₂</i>
Internationally Supported NAMAs	RE Power (MAC > 10\$/t-CO ₂ plus AEDP)	13,456
	EE Large Industries (MAC > 10\$/t-CO ₂)	9,743
	Transport/Biodiesel 2 nd Gen (AEDP 2012)	14,459
	Environmental Sustainable Transport	12,000
	<i>Sub-total</i>	<i>50.0 Mt-CO₂</i>
Total Domestic and Supported NAMAs		73.0 Mt-CO₂
Total emissions in 2005		192,724 kt-CO₂
Total emissions in BAU2020		367,436 kt-CO₂

Potential of CO₂ Mitigation in Thailand



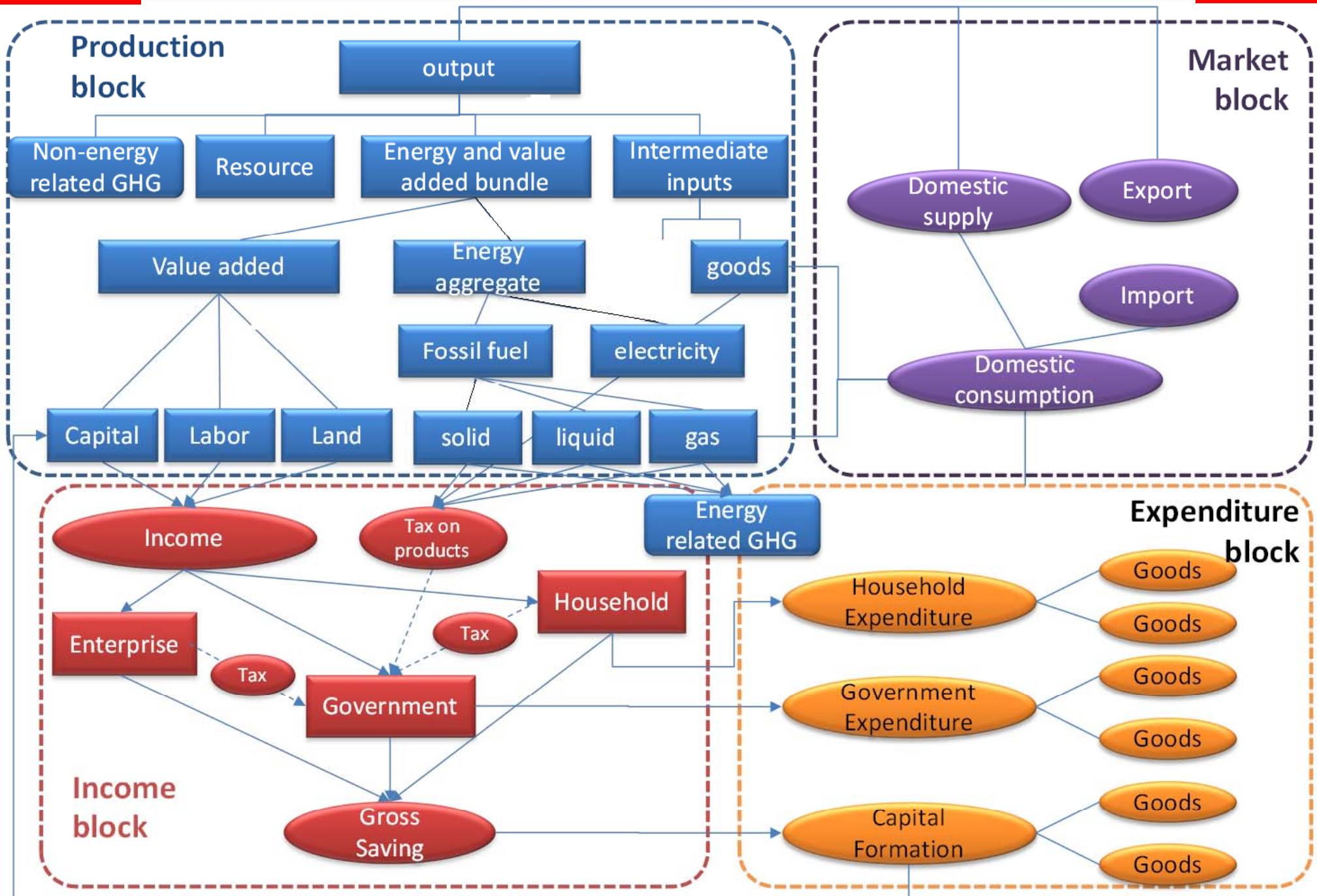
Co-benefits of Low Carbon Thailand

Energy Security of LCG in Thailand NAMAs

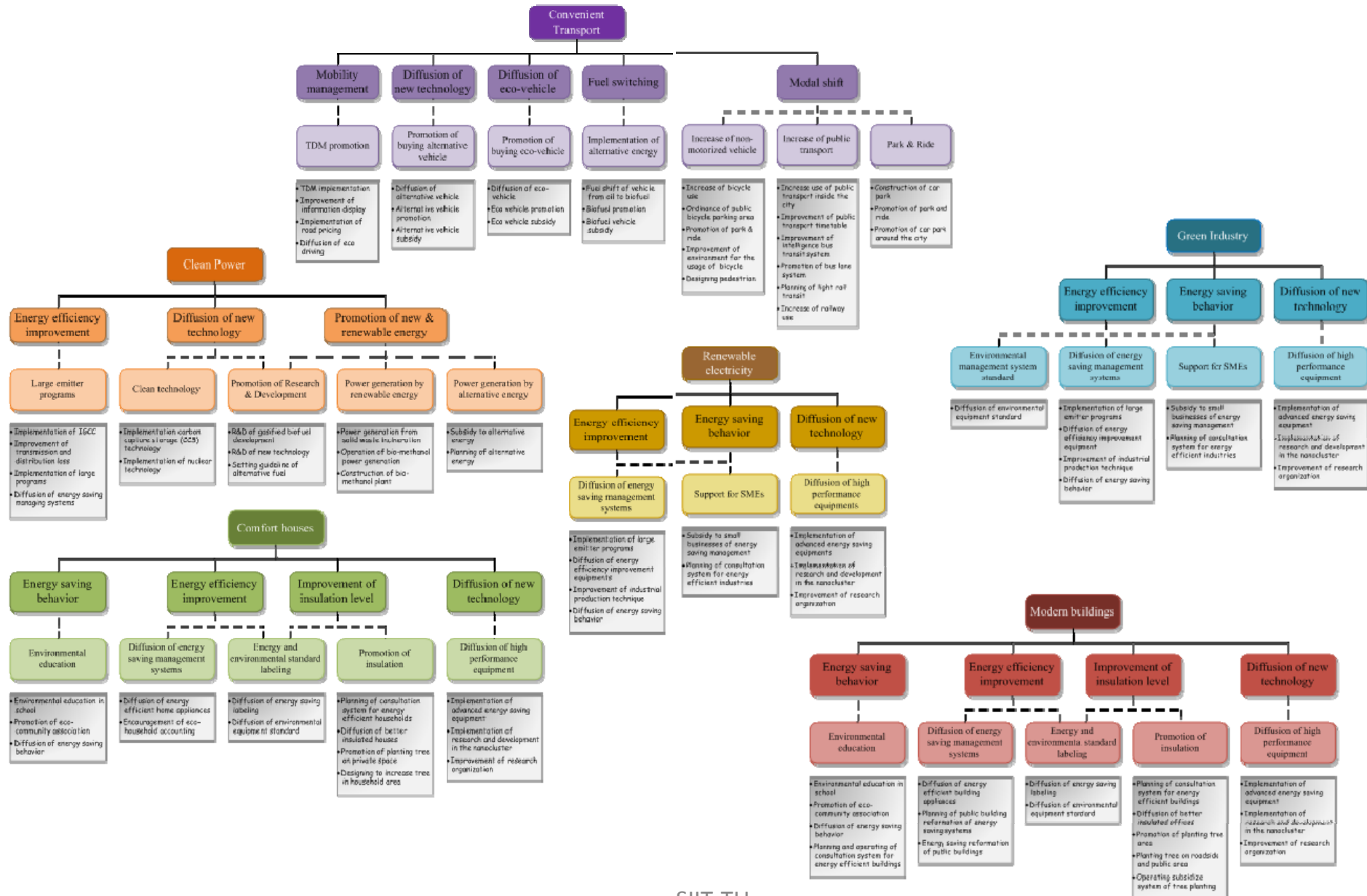
Year	DoPED*	Energy Intensity (toe/1000 USD)	CO ₂ Intensity (t-CO ₂ /USD)
2005	68.82	0.280	0.696
2020 BAU	69.24	0.274	0.564
2020 NAMA	76.63	0.225	0.461

* DoPED: Diversification of primary energy demand

AIM/CGE model for Thailand

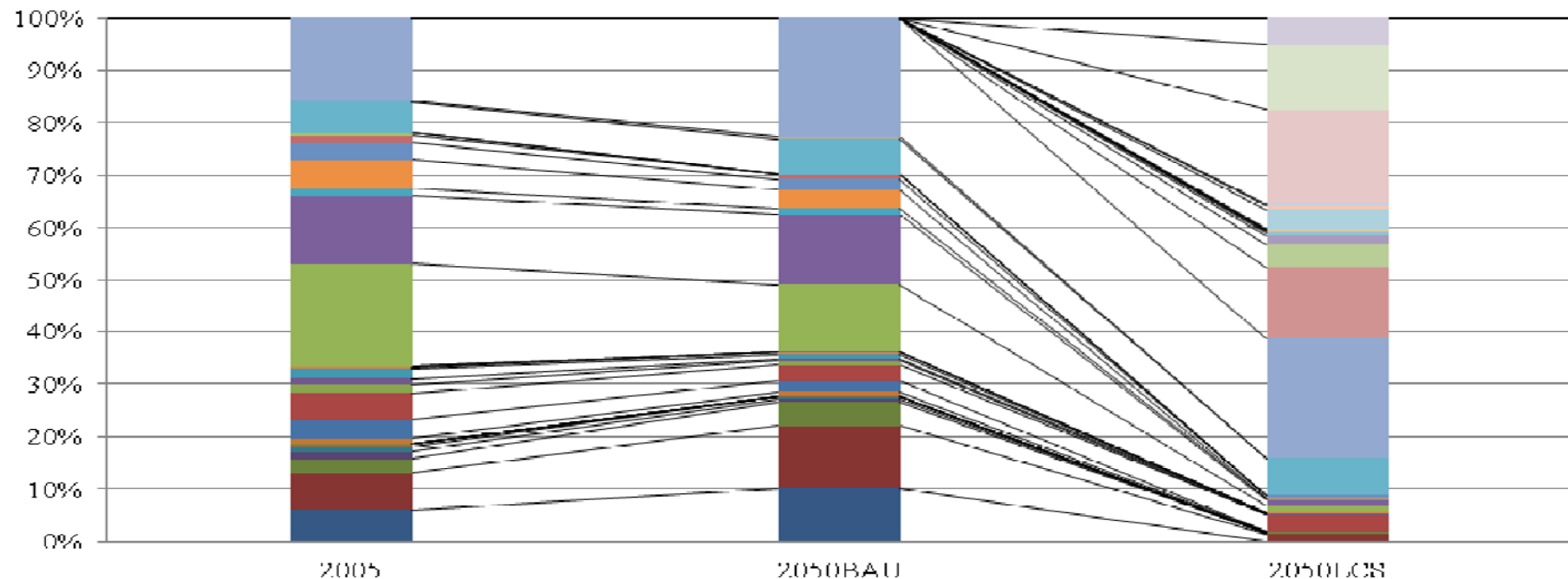
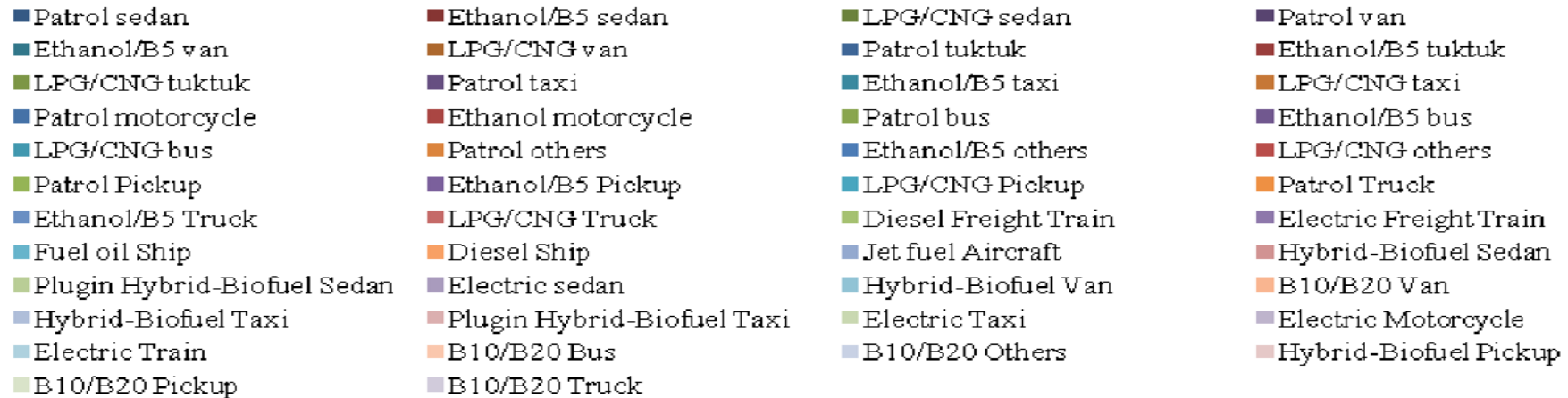


Roadmap to Low Carbon Thailand towards 2050 by AIM/Enduse



Roadmap to Low Carbon Thailand towards 2050 by AIM/Enduse

Technology Mix in the *Convenient Transport*



Thank you