



มหาวิทยาลัยธรรมศาสตร์
THAMMASAT UNIVERSITY



Decarbonised and Resilient Asia Thailand

12 November 2022

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Roadmap to Low Carbon Thailand towards 2050 by AIM/Enduse



Source: (SIIT-TU, 2012)

Roadmap to Net Zero Emissions 2050

Thailand



A Roadmap to Net Zero Emissions 2050



Thammasat University
Asian Institute of Technology
Asia Pacific Integrated Model (AIM)
National Institute for Environmental Studies (NIES)
Institute for Global Environmental Strategies
Kyoto University
Mizuho Research & Technologies



AIM CGE (Oct. 2022)

Thailand's AIM Brochure

Roadmap to Low Carbon Thailand towards 2050



A Roadmap to Low Carbon Growth



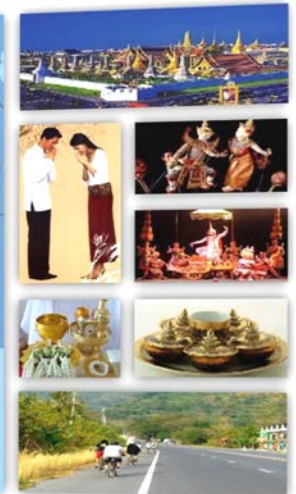
Sirindhorn International Institute of Technology, Thammasat University
Asian Institute of Technology
Asia Pacific Integrated Model (AIM)
National Institute for Environmental Studies (NIES)
Kyoto University
Mizuho Information & Research Institute



November, 2012

AIM Enduse 2012

Low-Carbon Society Vision 2030 Thailand



November, 2010



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

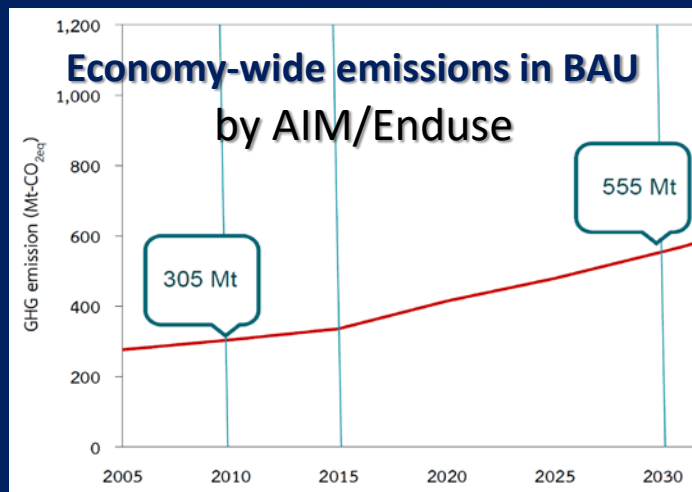
AIM ExSS 2010

Linkages between SDGs and Thailand Net Zero Emissions 2050

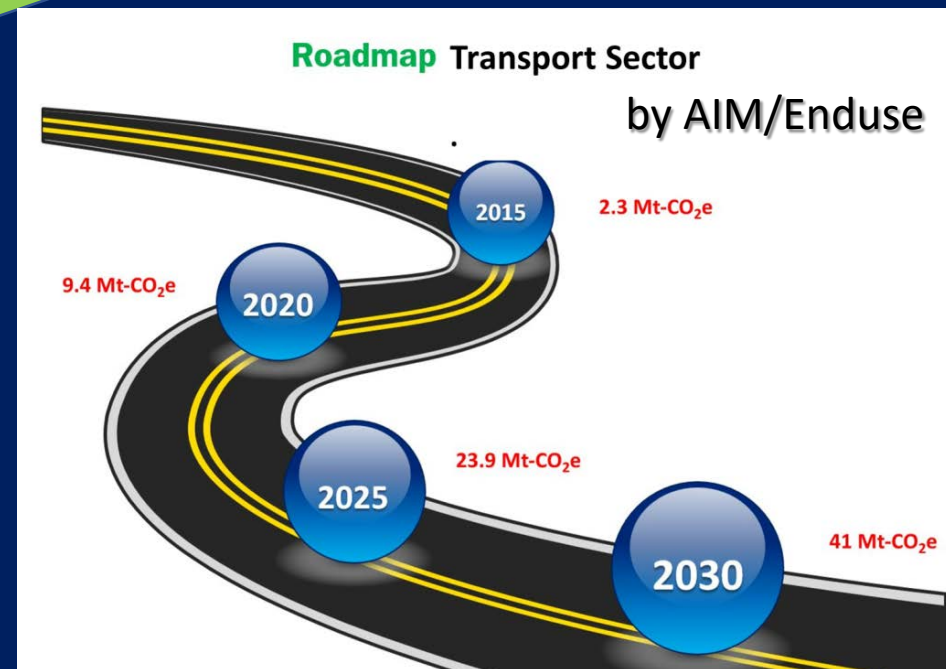
SUSTAINABLE DEVELOPMENT GOALS



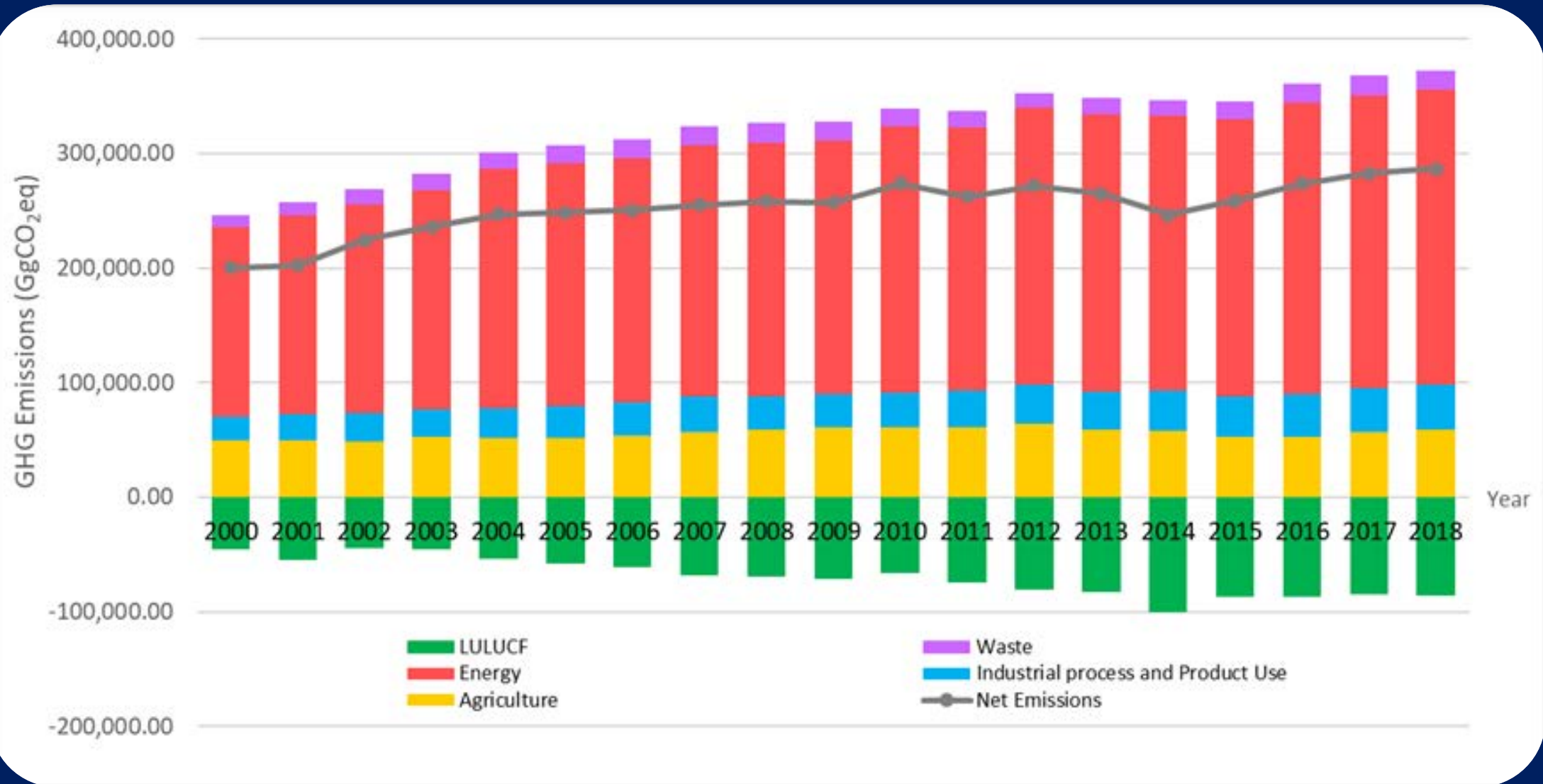
Thailand's PM Delivered National Climate Pledge at Paris Summit, 2015



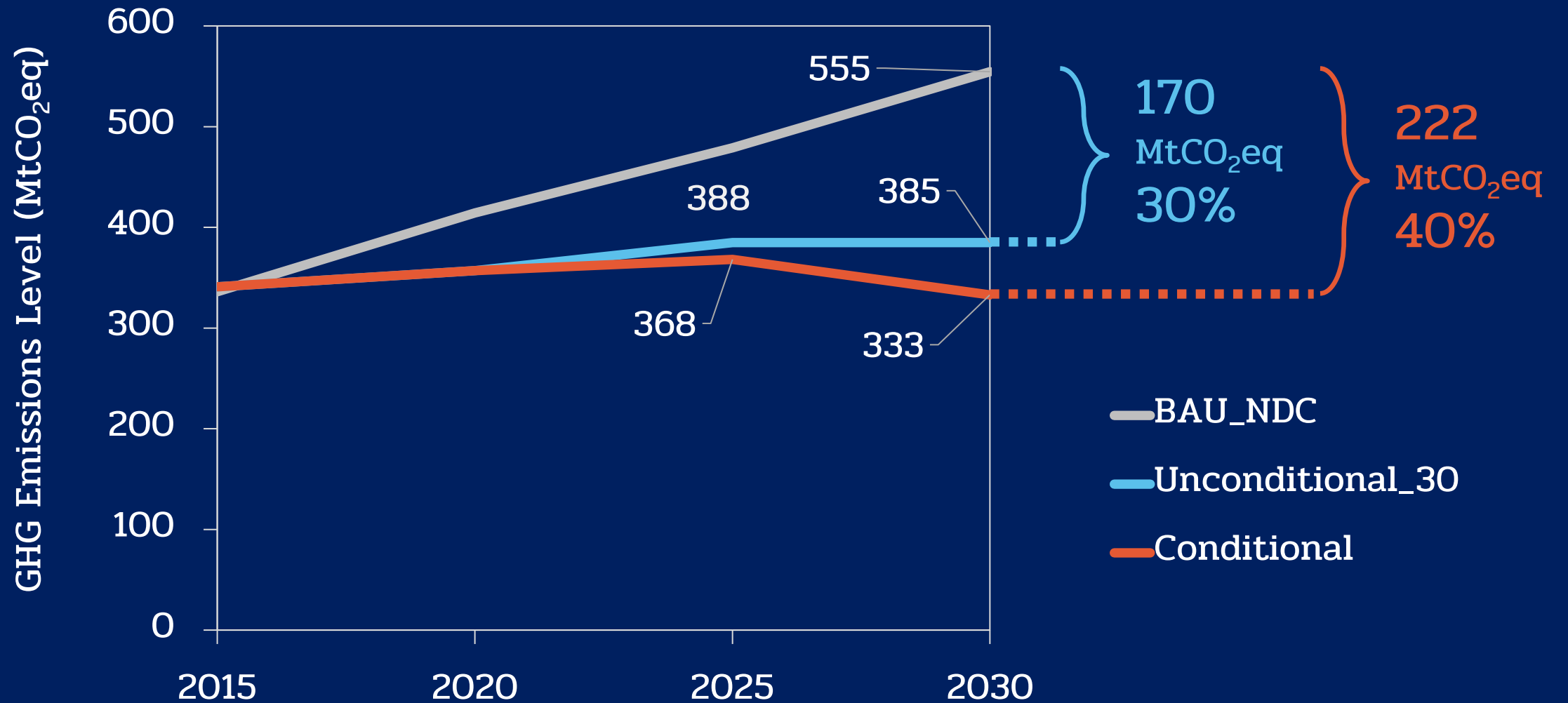
“The 20% is a goal to be achieved by the country's resources alone while the additional 5% will require international support in terms of finance, knowhow and technology”



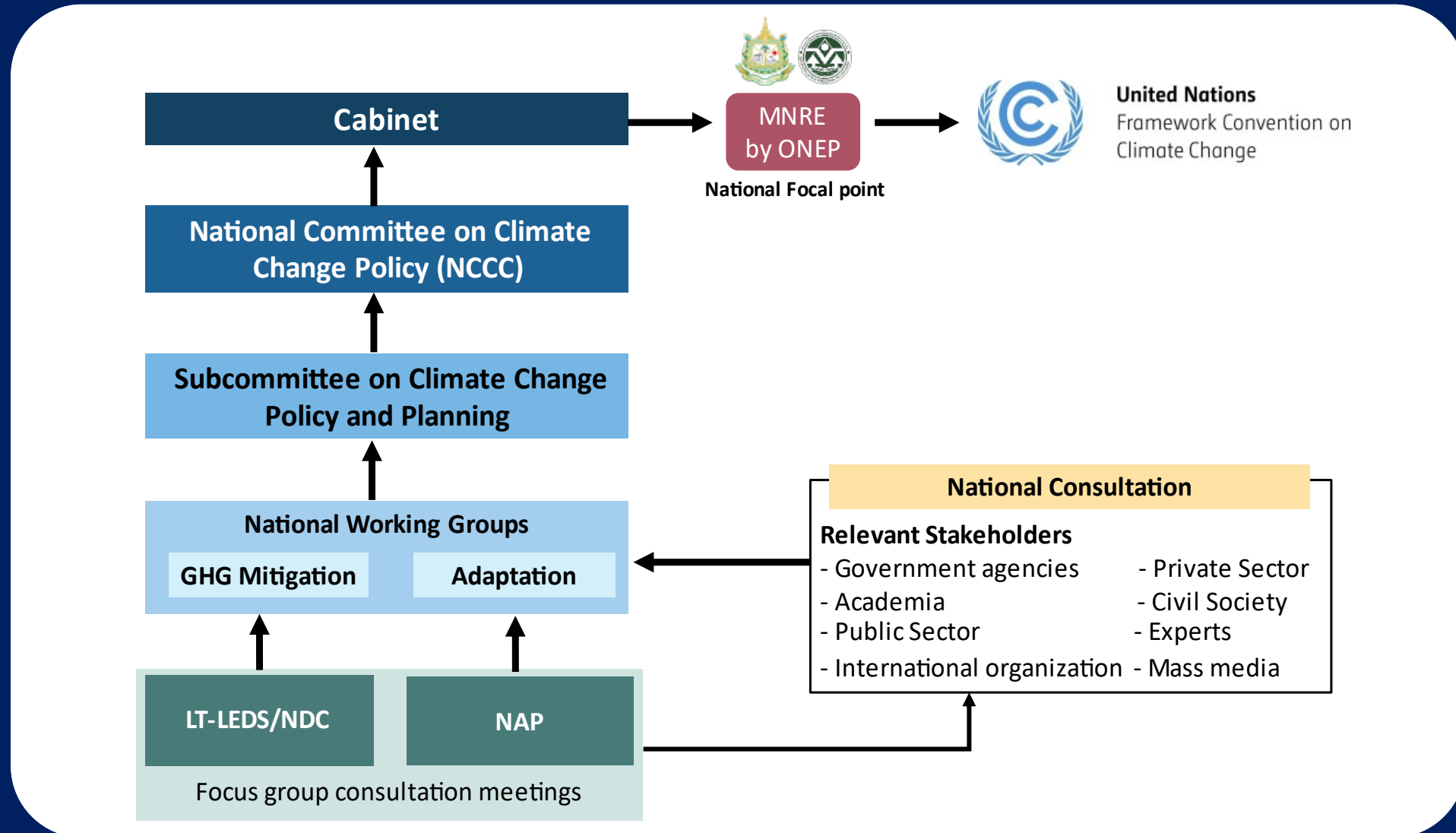
Thailand's GHG Emission Trend: 2000-2018



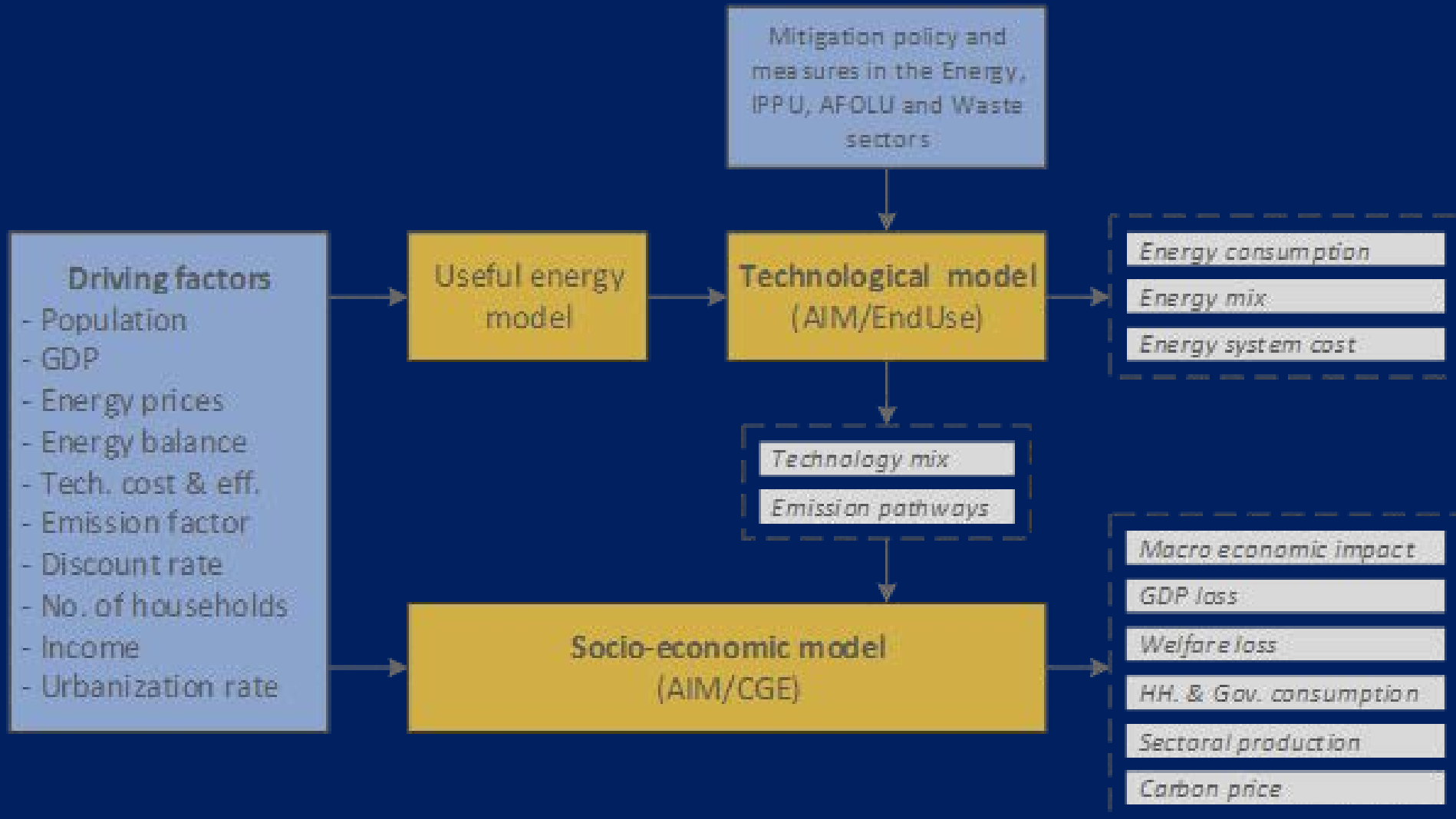
Thailand's 2nd Updated NDC



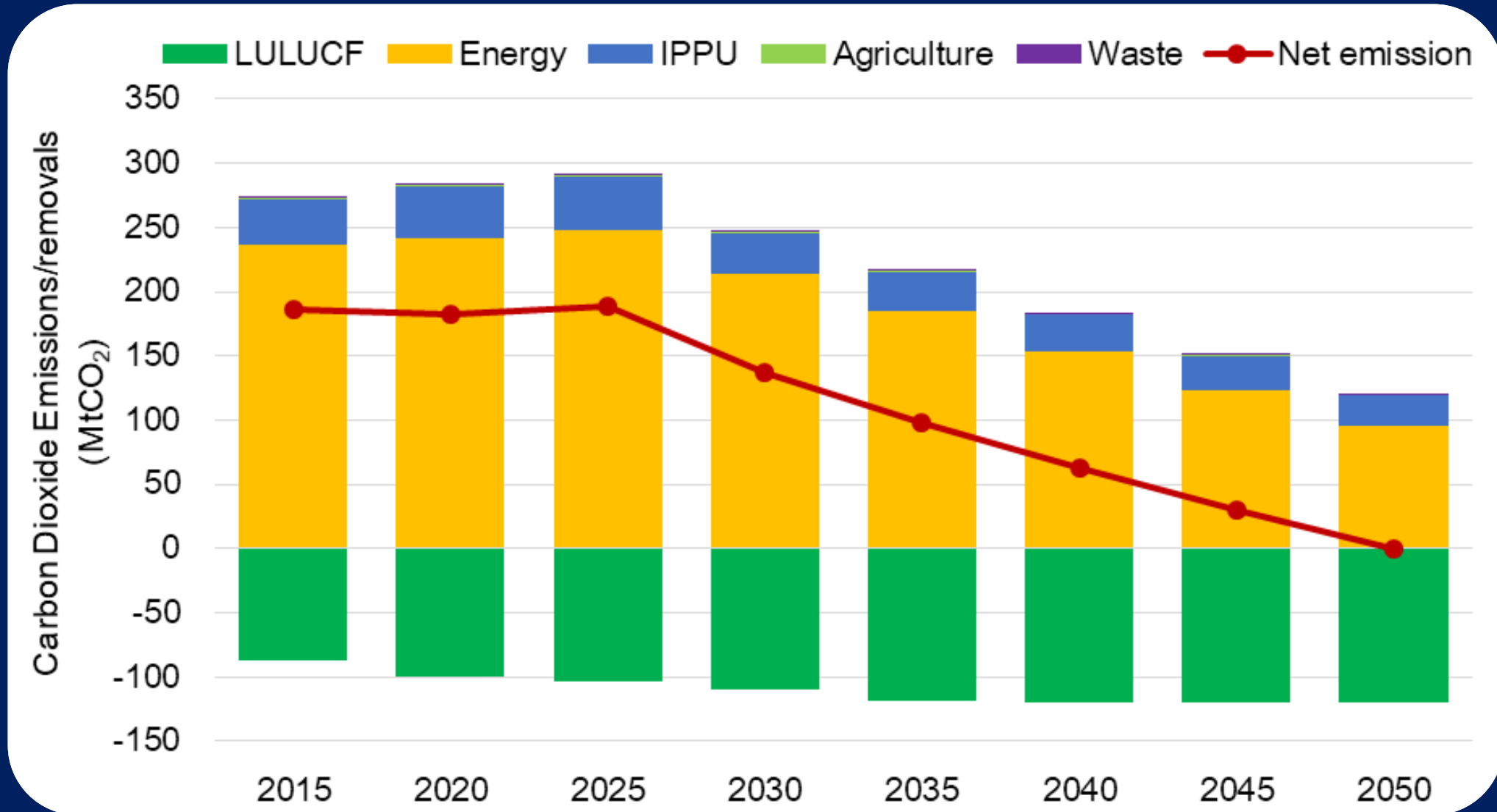
Preparation and approval process of Thailand LT-LEDS



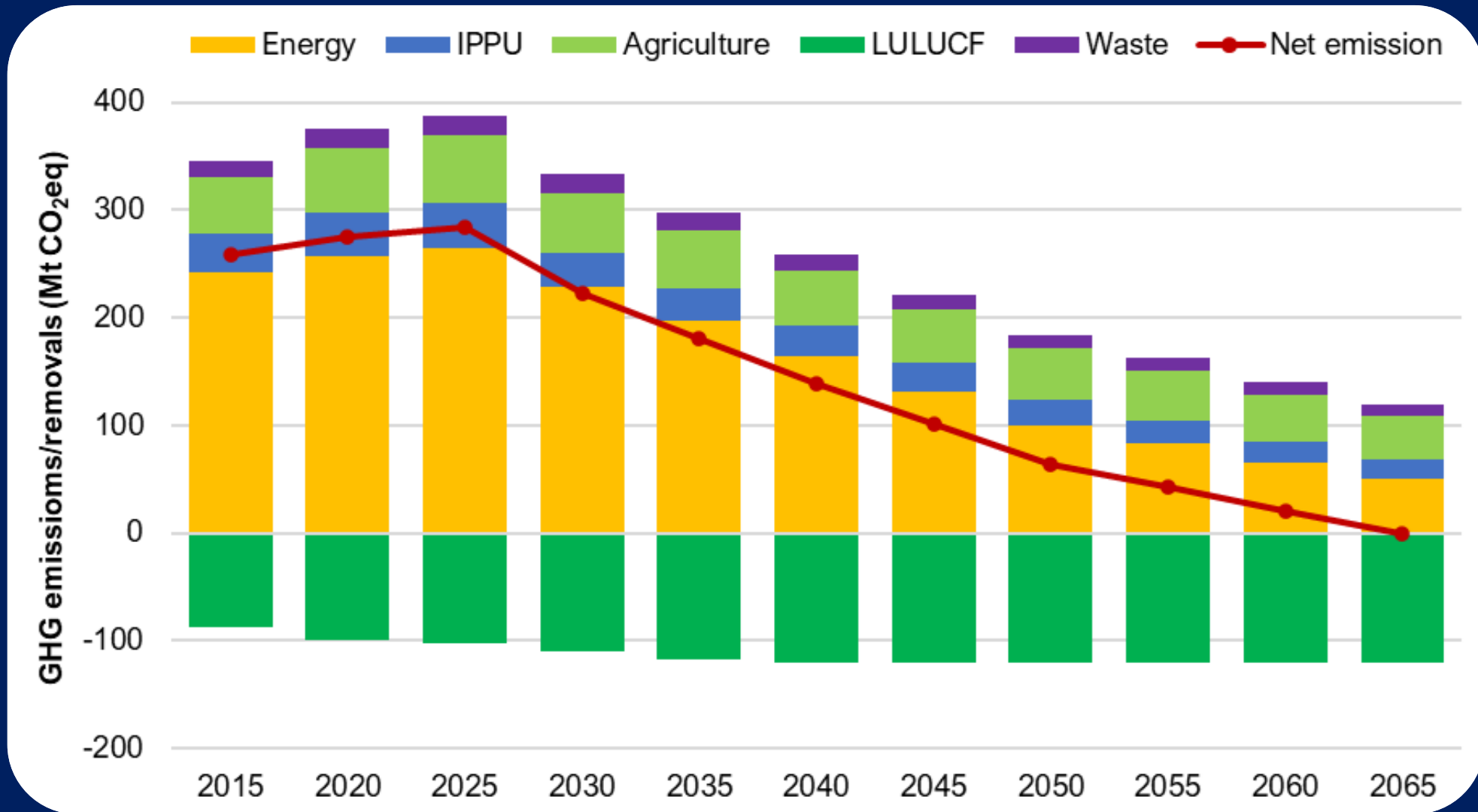
Framework of Thailand Updated NDC and Updated LT-LEDS



Thailand's 2050 Carbon Neutrality Pathway



Thailand's 2065 Net Zero GHG Emission Pathway



Timeline of Thailand's Net Zero GHG Emissions 2065

"Green Power Sector"



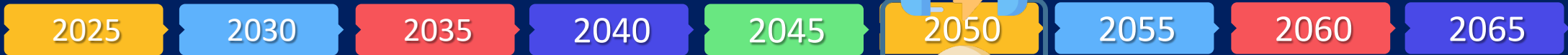
- Efficiency improvement in power plants
- Use of renewable energy (biomass, biogas, solar, wind)
- Phase out of oil power plants

- Phase down of coal power plants
- 68% share of RE electricity

Thailand net zero CO₂



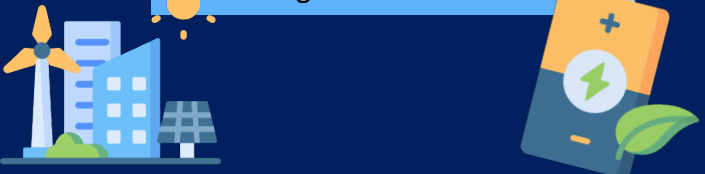
Thailand net zero GHG



- Solar/wind with battery storage

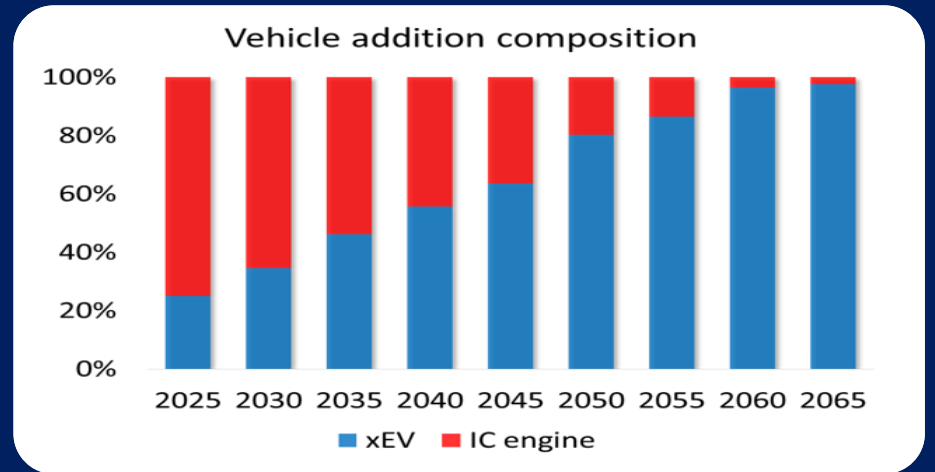
- CCS, CCU & BECCS

- Combined cycle natural gas used best in class
- 74% share of RE electricity
- Phase out coal power plants
- Net zero emission electricity
- Biomass-based generation fully equipped with CCS technologies



Timeline of Thailand's Net Zero GHG Emissions 2065

"Zero Emissions Transport"



- Efficient engine vehicles (gasoline & diesel)
- Renewable energy (E10, E20, E85, B10, B20)
- Electric train

- Phase down of IC engines



Thailand net zero CO₂

Thailand net zero GHG



- Most efficient IC engine vehicles
- Phase down of IC engines
- Renewable energy (E10, E20, E85, B10, B20, B100)
- Electric vehicles 30@30

- Most efficient IC engine vehicles with biofuels
- High share of electric vehicles
- Fuel cell vehicles



THANK YOU
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ขอบคุณครับ