Thailand's Long-term Greenhouse Gas Emission Development Strategy

2030 NDC Target 40%

2050 Carbon Neutrality

2065 Net Zero



A transition towards low emission development

Aims to reduce GHG by 40% with international support



· Incresse and Remain Primary Fores

. Regenerate Natural Forest Area

· Increase Economic Forest Area · Increase and Remain Cropland Reduce Biomass Burning

Achievement of CO2

removals of 120 MtCO200

50% share of renewable electricity generation of new power generation capacity



Reduction of GHG emissions in various sectors:



Industrial Processes and Product Use (IPPU)



Agriculture



Waste

Land Use, Land Use Change, and Forestry

CARBON

NEUTRALITY

Achievement of

NET-ZERO GHG Emission

while looking forward to enhanced international cooperation and support on finance, technology, and capacity-building to achieve this ambition

2021

• NDC

Nationally Determined Contribution Implementing starts

NDC

Target 20-25%

 Submission of LT-LEDS Long-term Low Greenhouse Gas **Emission Development Strategy** Implementing towards achieving net zero GHG emission and Carbon Neutrality within this century

Improve Energy Efficiency and **Promote Energy System** Transformation through

- Decarbonisation
 - Deregulation
- Digitalisation
 - Electrification
- Decentralisation

2035

the market

Adaptation Plan (NAP)

development.

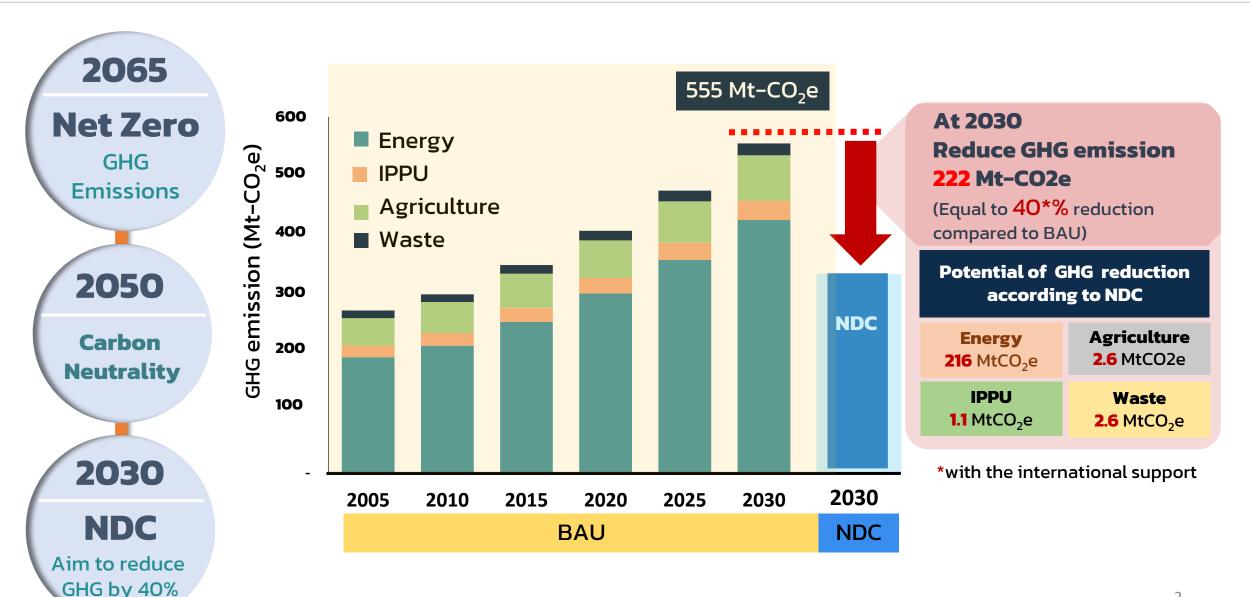
Thailand is resilient with adaptive

capacity to climate change impacts

and moves towards sustainable

VISION

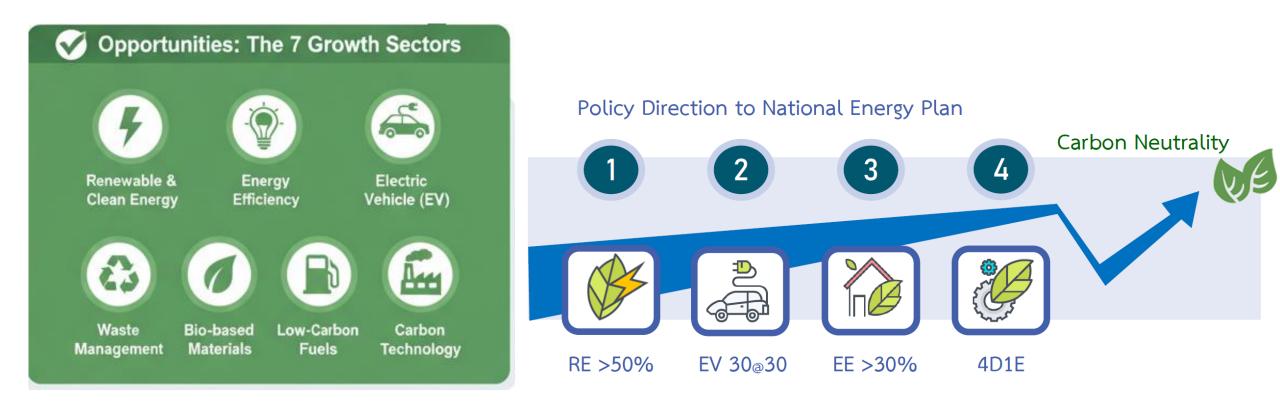
Thailand's Nationally Determined Contribution (NDC) •••



Accelerating Towards Net Zero 2050

29th September 2025:

- Thailand announced her intention to moved the national Net Zero goal forward by 15 years, from 2065 to 2050, citing an issue of economic survival, not an option, and aligns Thailand with international standards.





DIGITALIZATION

Distributed energy resources enabled by big data-driven alignment of supply and demand Data-driven asset strategies including preventative and condition-based maintenance and predictive outage

4D1E Policy

Smart grid and smart pipes allow automated controls to improve network resiliency, safety, and efficiency Customer interactions governed by analysis of customer journeys, segmentation, and personalized communication

Platform supports distributed energy resources and marketplaces



DECARBONIZATION



ELECTRIFICATION



DECENTRALIZATION



DE-REGULATION

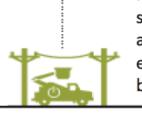
Back-office automation and data-driven decision making



Field workforce with mobile access to maps, data, work-management tools, and real-time expertise

4D1E supporting the Energy Transformation

toward Carbon Neutrality



High level of situational awareness to enable energy balancing



Open up opportunity for drives from the public and private sector.

Driving directions on Energy sector

Towards CARBON NEUTRALITY & NET ZERO

- 1 Decarbonization Technology
- H₂

• **EE**

- EVBESS
- Hydrogen
 - CCS
- 2 Energy Management



Demand

- Reduce energy intensity
- Increase Energy Efficiency
- Support Clean Technology
- Zero Energy Building
- + **Increase** Electricity generation from RE at least 50%
- + Increase RE in Industry and Transport
- + Utility Green Tariff
- + H₂ blending for power generation
- + Emerging Biofuel: SAF

3 Infrastructure Investment



Smart grid Technology/ Grid Modernization



Increase EV Charging Station



Investment of Battery on Grid scale /PHS

- 4 Driving Mechanism
- Policy Incentives
 (RE mandates, FiT, EE standard)
- Carbon Pricing

(Carbon credit, Transfer of credit)