The 2nd Seminar on "Sharing Experiences on Legal Development and Implementation of Emissions Trading Scheme (ETS)" 10-11 June 2019

ETS Development in Thailand

Sumon Sumetchoengprachya Strategy Office

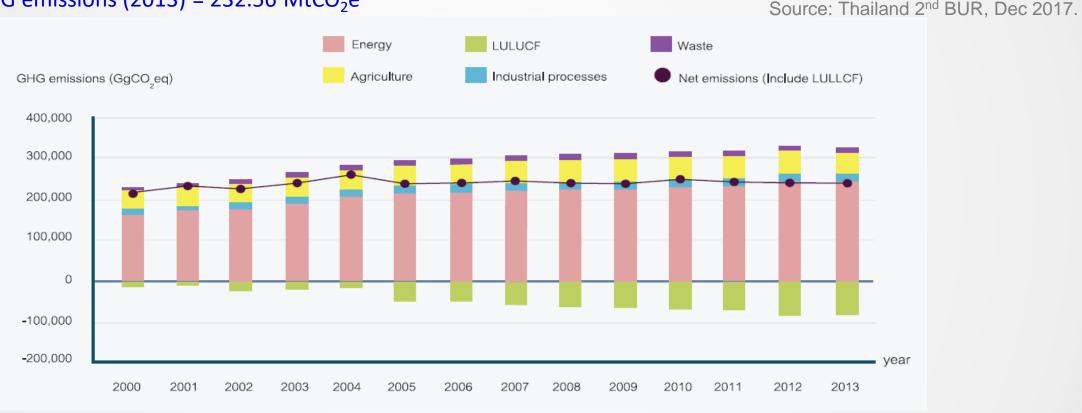


Thailand Greenhouse Gas Management Organization (Public Organization)



Trends of GHG emissions/removals 2000-2013

Total GHG emissions (2013) = $318.662 \text{ MtCO}_2\text{e}$ Net GHG emissions (2013) = $232.56 \text{ MtCO}_2\text{e}$



Total GHG emissions (exclude LULUCF) from 2000 to 2013 has been increased from 226.1 M tCO₂e to 318.7 M tCO₂e. With the inclusion of the LULUCF sector, the net emission in 2013 increased by 8.63% when compared with the net emission in 2000.

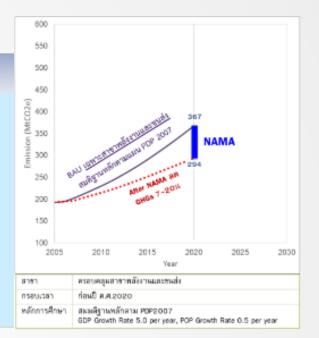
Thailand Mitigation Targets

Nationally Appropriated Mitigation Actions (NAMAs) – Pre 2020



"Thailand will endeavor, on a voluntary basis, to reduce its GHG emissions in the range of 7 to 20 percent below the Business as Usual (BAU) in energy and transportation sectors in 2020, subject to the level of international support provided [...]"

ge:	RE	EE	Bio-fuels	Transport



Nationally Determined Contibution (INDC) – Post 2020

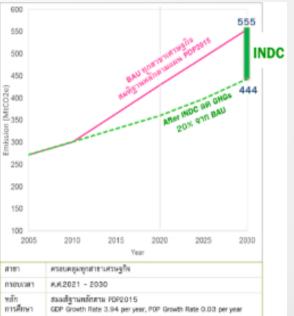


"Thailand intends to reduce its greenhouse gas emissions by 20 percent from the projected business-as-usual (BAU) level by 2030. The level of contribution could increase up to 25 percent, subject to adequate and enhanced [support] through a balanced and ambitious global agreement [...]"

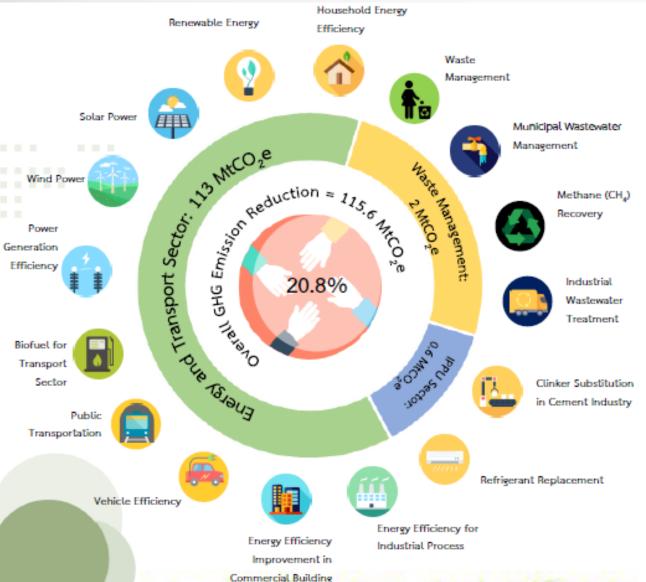
Coverage:

Economy-wide

Inclusion of LULUCF will be decided later



Thailand NDC Roadmap (2021-2030)



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Primary plans supporting implementation of NDC Roadmap

- Energy Efficiency Plan 2015-2036
- Alternative Energy Development Plan 2015-2036
- Power Development Plan 2015-2036
- Smart Grid Development Plan 2015-2036
- Environmentally Sustainable Transport System
 Plan 2013-2030
- National Industrial Development Master Plan
 2012-2031
- Environmental Quality Management Plan 2017-2021

• Implementation under the Montreal Protocol

Sources: Kollawat Sakhakara, Office of Natural Resources and Environmental Policy and Planning (Oct 2018)

Voluntary Carbon Market in Thailand

Voluntary Emission Reduction Projects (VER)

• Type: Project-based

Eligibility: Emission Reduction Projects, Preregistered CDM

MRV: International standards (VCS, GS, etc.)

Carbon Credit: VERs

Registry: Standard Owners

Buyers: International buyers

Status: Existing

Thailand Voluntary Emission Reduction Program (T-VER)

• Type: Project-based

Eligibility: EE, RE, WM, etc.

MRV: ISO 14064-2 / CDM/ KVER / J-VER / 14064-3 / 14065

Carbon Credit: TVERs

Registry: T-VER

Buyers: Government / CSR companies / Brokers

Status: launched in Oct 2013

Thailand Voluntary Emission Trading Scheme (Thailand V-ETS)

• Type: Cap-and-Trade

Target: Industrial sector

MRV: ISO 14064-1 / 14064-3 / 14065

Carbon Credit: Allowances

Registry: ETS

Buyers: Entities / Traders

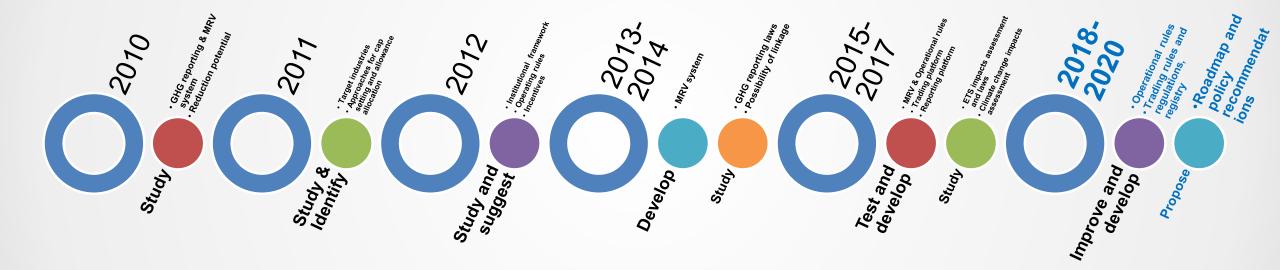
Status: launched 1st Pilot Phase (2015-2017) in Oct 2014 to test MRV system and develop operational rules

 2nd Phase (2018-2020) to test trading system and operational rule



Action Plan for ETS in Thailand

(Voluntary phase)





Thailand V-ETS Pilot implementation

- Operation Period:
 - Phase 1: 2015-2017
 - Phase 2: 2018-2020
- Objectives:
 - To develop sector specific MRV guideline and test MRV system
 - To develop trading platform and related regulations
- Base Year Emission:
 - average 3 years emissions
- Others:
 - Offset credits: TVERs, JCMs credits generated in Thailand, LCC-TVERs credits (15%)
 - Banking and borrowing: Allow banking, no borrowing

Targeted industries (voluntary basis)

1 st Year	2 nd Year	3 rd Year
Power (11)	Cement (4)	Refinery (2)
Petrochemical (7)	Iron and Steel (4)	Glass (2+1)
	Pulp and Paper (4)	Plastic (6)
		Ceramic (3)
		Food and feed (8)

- Coverage:
 - CO₂ from direct and energy indirect emissions (scope 1, 2)
- Results:
 - 9 Sectors Specific MRV Guidelines

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Thailand V-ETS MRV

- The MRV system under Thailand V-ETS has been developed in line with ISO 14064-1, 14064-3, and 14065.
- 3rd party verification
 - Registered VBs under TGO's CFO scheme in the first few years
 - Since Oct 2019, all
 VBs shall be
 accredited by
 National Standard
 Committee with ISO
 14065
 - Reasonable assurance (5% materiality)



Reporting boundaries

Where your emissions occur spatially in accordance with Factory License

Facilities, assets and resources that are included in your inventory. This boundary is determined by applying an operational control approach.

The scopes and GHGs that are included in your inventory.



ETS Development 🧇

JCM



Thank you for your Attention

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