



Current Status of ETS in Thailand

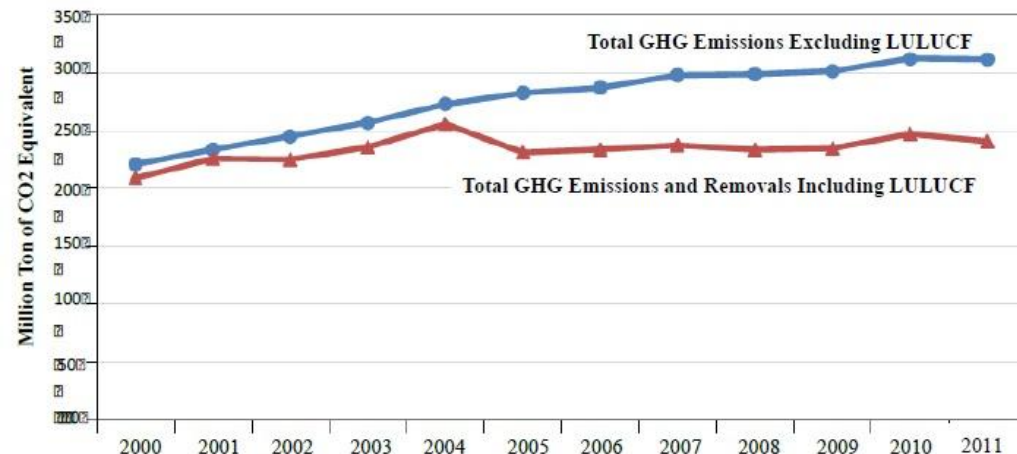
Sumon Sumetchoengprachya

Carbon Business Office





Historic GHG emissions



- Net GHG emission from the year 2000 to 2011 has been increased from 209 M tCO₂e to 306 M tCO₂e (Increase at 3.2% per year).

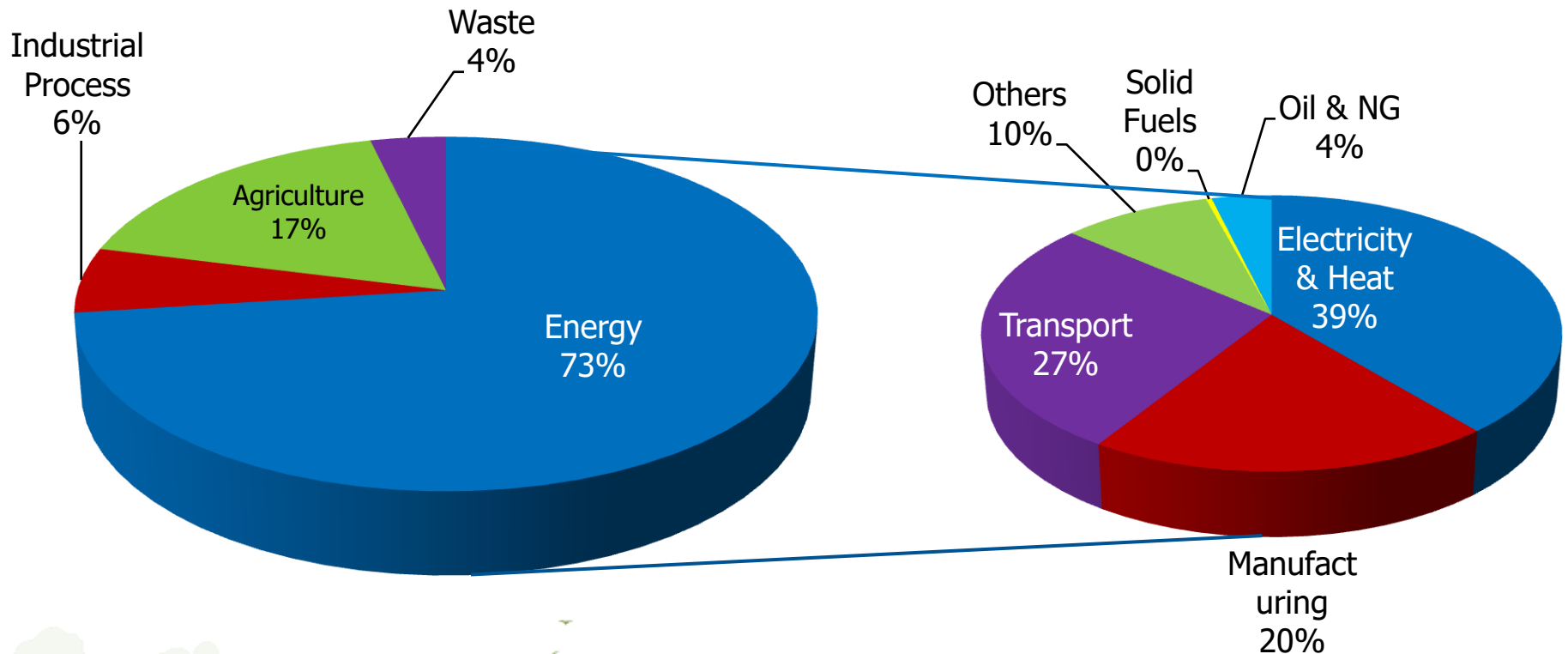
- During the period 2000 to 2011, GHG emissions from the Energy Sector and Industrial Processes Sector have increased on average of 3.32% and 2.67% per year, lower than an average annual growth rate of GDP, which was 4.1% over the same period





Thailand GHG Emissions (2011)

Total GHG emissions = 305.52 MtCO₂eq (excl. LULUCF)
= 234.58 MtCO₂eq (incl. LULUCF)

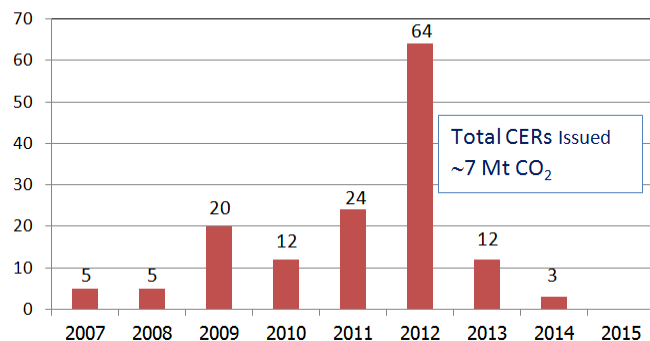




Mitigation Efforts by Thailand

Clean Development Mechanism : CDM

No. of registered CDM Projects



- Biogas
- Biomass
- Waste heat
- Solar
- Hydro
- Wind
- Energy efficiency
- Transportation

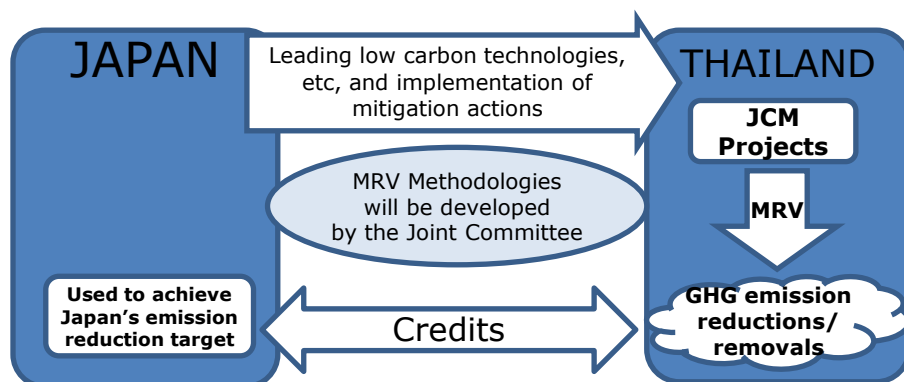
Carbon price: 0.05-0.5 Euro/CER

NAMA Pledge

- Announced in Lima to reduce 7-20% reduction from BAU of Energy sector
- Based on domestic & int'l supports
- Focus on Energy & Transportation
- Measures include:
 - Renewable energy development
 - Energy efficiency improvement
 - Bio-fuels production
 - Environmentally sustainable transport system
- MRV under development, based on existing system



Joint Crediting Mechanism : JCM



Signing ceremony on November 19, 2015

Partnership for Market Readiness : PMR

Component 1

Preparation of key market components for the voluntary **Energy Performance Certificate scheme (EPC)**

Component 2

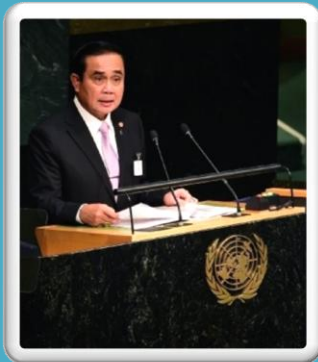
Development of Local Greenhouse Gas Abatement Plans and a study on **Low Carbon City (LCC)** Pricing and LCC Fund for the LCC program;

Component 3

Policy recommendation on **legal framework** to establish the **Emission Trading Scheme (ETS)**;



Thailand's INDC (Post 2020)



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

Coverage:

Economy-wide

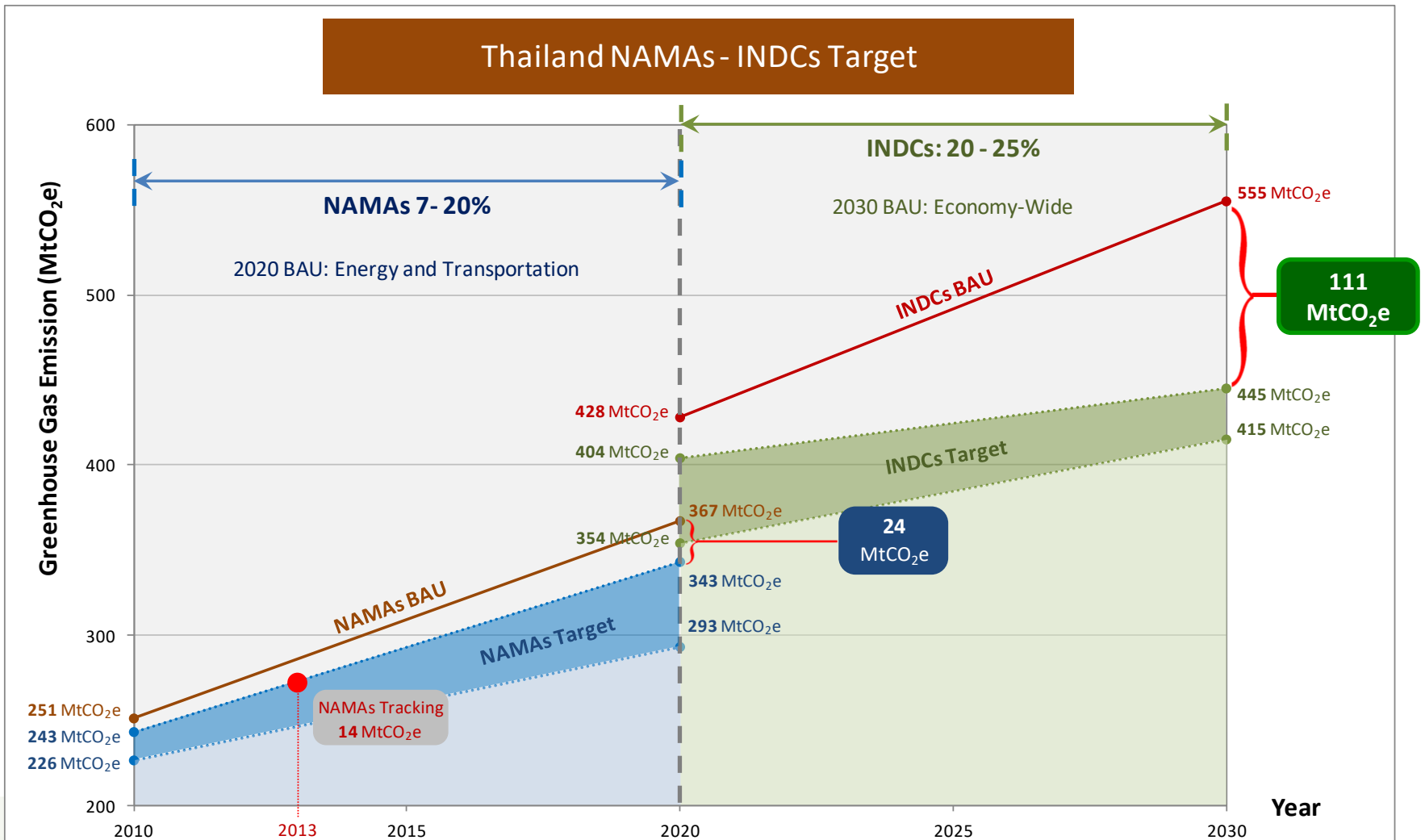
Inclusion of LULUCF will be decided later

Role of market mechanism: **“Thailand recognizes the important role of market-based mechanisms to enhance the cost effectiveness of mitigation actions, and therefore will continue to explore the potentials [...]”**

- **ETS** : is one among other options, which Thailand will explore potential and prepare infrastructures, incl. MRV system, for policy makers, but it is not included in the INDC yet.



Thailand NAMA-INDC Target



Source: TGO, 2016



Voluntary Carbon Market in Thailand

Voluntary Emission Reduction Projects (VER)

- **Type:** Project-based
- Eligibility:** Emission Reduction Projects, Pre-registered 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 14064-1 / CDM/ KVER / J-VER / 14064-3 / 14065
- Carbon Credit:** TVERs
- Registry:** T-VER
- Buyers:** Government / CSR companies / Brokers
- Status:** launched in Oct 2013

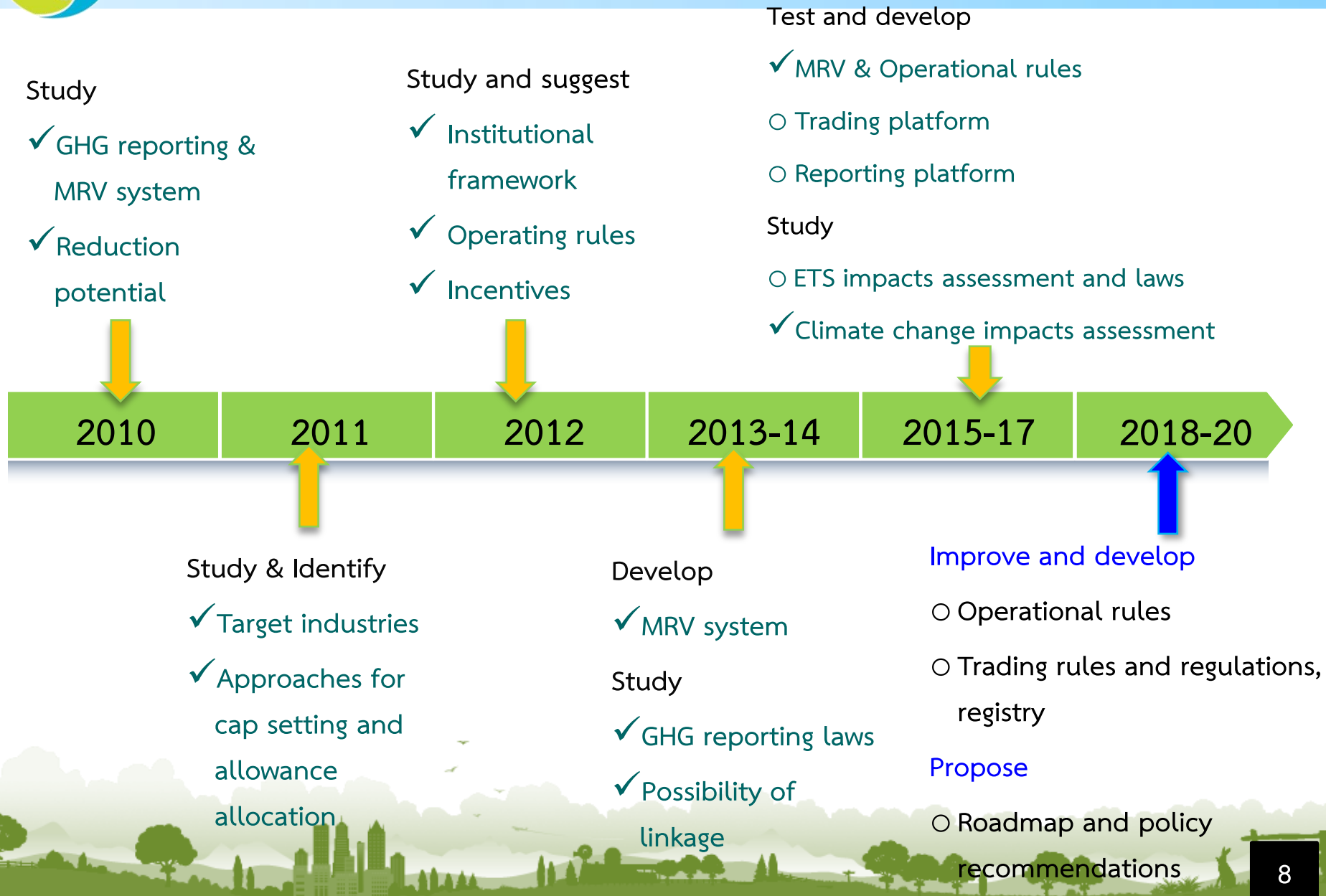
Thailand Voluntary Emission Trading Scheme (Thailand V-ETS)

- **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





Action Plan for Thailand V-ETS





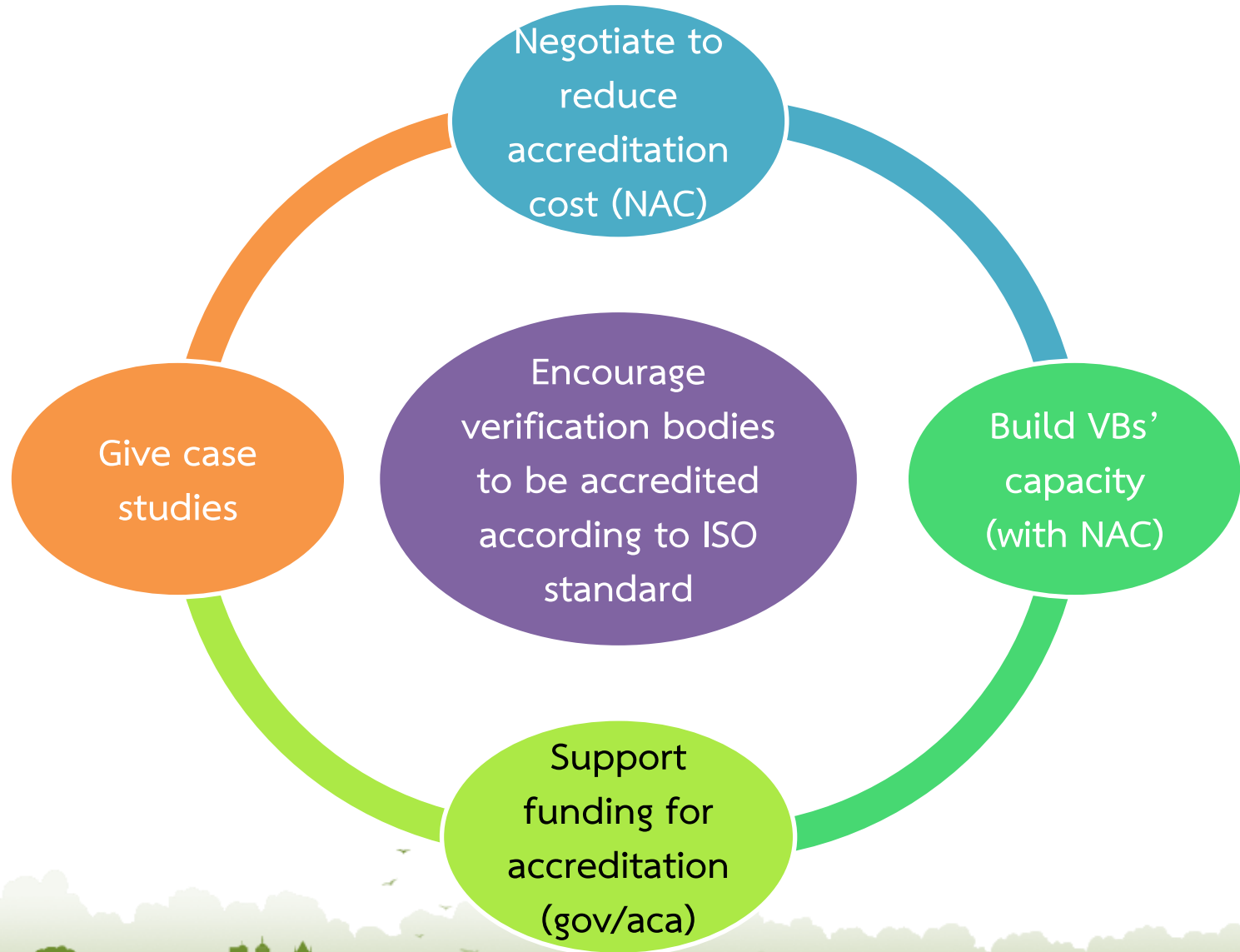
Pilot project for Thailand V-ETS (FY2015-2017)

- Objectives
 - To test MRV system and develop sector specific MRV guideline
 - To design ETS features (cap setting, allowance allocation)
- Targeted industries (voluntary basis)

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



Next Step: Upgrade Verification System





ADB's Technical Assistance Project

- TA-9062 REG : Supporting Low Carbon Development in Asia and the Pacific through Carbon Markets – Implemented by TGO and ADB's experts, supported by ADB
- Implementation Period: Dec 2016 - Dec 2017
- Scope of Works:
 - Support on key design features of the ETS (via consultation meetings with experts)
 - Advice on developing a domestic registry, market rules, and a trading platform with built-in features for facilitating linking
- Progress: Draft report





Partnership for Market Readiness: PMR

- CS-5 : A Study to Propose the Legal Framework for Establishing the ETS in Thailand
- Implementation Period: Oct 2017 – Feb 2019
- Scope of Works:
 - Study on the legal and institutional framework and draft laws and regulations for the establishment of
 - an integrated reporting system (to support the ETS)
 - the ETS in Thailand
- Progress: literature review





PMR: Additional Fund

- Impact of carbon pricing instruments on national economy and contribution to NDC
- **Implementation Period:** Nov 2017 – Mar 2019
- **Scope of Works:**
 - Economic modeling and scenario analysis (incl. political economy and potential new technology developments) of carbon tax and/or ETS with and without crediting mechanism as a part of the instruments.
 - Interaction and consistency between the country's ETS/carbon tax and national existing policies and regulations
 - Capacity building
- **Progress:** literature review





THANK YOU for Your Attention



120 Ratthaprasasanabhakti Building, 9th Fl. The Government Complex Commemorating His Majesty, Chaengwattana Road, Laksi, Bangkok 10210 Thailand. www.tgo.or.th
sumon@tgo.or.th Website: carbonmarket.tgo.or.th / thaicarbonlabel.tgo.or.th

