ADB Support to Thailand on the Development of Emissions Trading; Project synopsis

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Scope of work

Policy objectives

- NDC alignment
- International context

Policy design

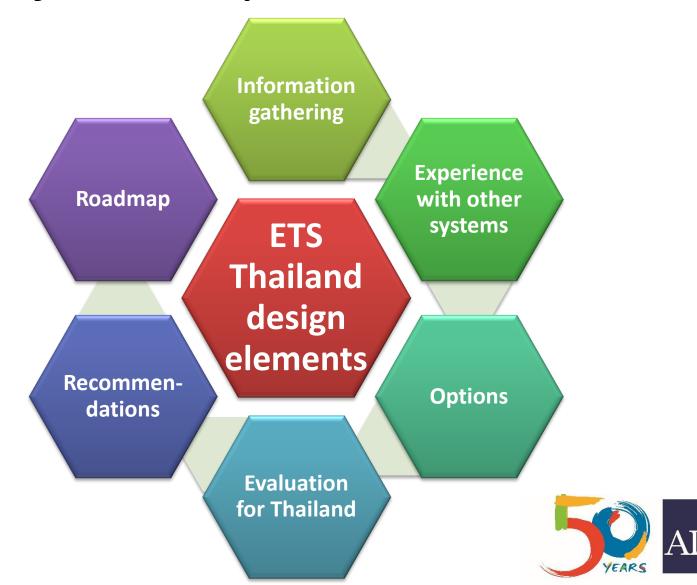
- Scope
- Cap setting and allocation
- Flexibility mechanisms

Implementation systems

- MRV
- Regulatory regime
- Infrastructure and systems



Project analytical framework



Sectoral and emission coverage

Scope of work:

- Sectoral coverage
- Emission coverage
- V-ETS in Thailand
- Approaches in other ETSs
- Framework for deciding on coverage



Sectoral scope

V-ETS coverage

Year of inclusion	Sector (number of installations)
2015	Petrochemical (7)
	Electricity generation engaged in scoping analysis
	but not included (11)
2016	Cement (4), iron and steel(4), pulp and paper(4)
2017	Refinery(2), plastic(6), glass(2), ceramic(3), food(8)

V-ETS Selection criteria

- Data readiness
- Human capacity
- Budget
- Policy or vision for sector
- Potential to manage MRV



International examples – selection criteria

EU ETS

- Environmental effectiveness
- Economic efficiency
- The potential effects on competition
- Administrative feasibility
- The possible existence of alternative policies and measures

"Best to start with relative small number of sectors that contribute significantly to total emissions"

WCI

- Economy wide emissions
- Minimising compliance costs by covering a broad set of emissions sources
- Creating a level playing field for all fuels
- Ensuring that carbon is priced throughout the economy
- Creating a more robust GHG trading market

"Best to have as broad a scope as possible - transport, residential and commercial fuel also included"



Suggested framework for Thailand

- Environmental effectiveness
- Cost effectiveness
- Competition and carbon leakage
- Data availability (readiness)

Sectoral coverage

- Cost effectiveness
- Structure of sector
- Alternative approaches

Installation coverage



Coverage road map elements



- Sectoral inclusion
- Installation thresholds
- Emissions coverage



- Emissions
- Energy use
- Abatement potential



- Thresholds
- Alternatives



Plan for phased inclusion?

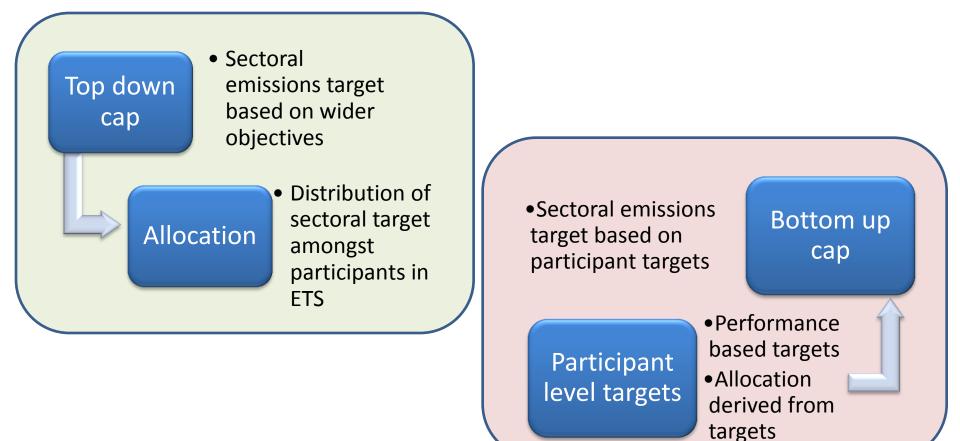
Cap setting

Aim:

- Provide overview of cap setting options: top down, bottom up, based on prevailing policy, or climate science.
- Evaluate the options and recommendations
- Identify further information and analytical tasks



Caps vs allocation





Determining factors for Cap decisions

Factor	Options	Relevance to Thailand
Cap metrics	Intensity or absolute caps	Emissions growing NDC based on % reduction against BaU – suggests absolute
Cap method	Top down or bottom up	VETS intensity bottom up Top down aligns best with NDC
If top down, then traded vs non-traded ambition	Equal costs, equal effort or benchmarks	Need to align with sectoral ambitions in NDC
Cap setting period	Long period certainty vs shorter term flexibility	To align with pathway to 2030 NDC target

Cap setting roadmap elements

Preliminary approach: Absolute cap set top down aligning with NDC metrics and timescales

- Evaluation of cap setting options and role of ETS in meeting NDC objectives
- Application of cap setting approaches to ETS sectors
- Traded vs non-traded ambition accounting for abatement potential, costs of abatement and economic impacts of carbon pricing

Allowance allocation options

Potential approaches

- Allocation based on past emissions installation level
- Allocation based on past production installation level. Uses sector benchmark
- Allocation based on <u>actual</u> installation production
 - >Installation level intensity target, or
 - ➤ Sector level benchmark

Allocation data issues

Allocation approach	Historic data		Forecasting	Ongoing monitoring	
	Installation	Installation	Sector	Future	Installation
	emissions	activity	benchmark	installation	level
			(emissions and	targets	activity
			activity)		
Allocation based on past emissions -	X				
installation level	<i>A</i>				
Allocation based on past production -		X	X		
sector level intensity metric		^	^		
Allocation based on actual installation					
production - installation level intensity	X	X		X	X
target					
Allocation based on actual installation					
production - sector level intensity			X		X
metric					



Framework for allocation assessment

Key priorities	Implications		
Consistency with cap setting approach	Ex ante approach, if cap set on that basis		
Mitigate cost of introduction of carbon pricing	High level of free allocation		
Accommodate sector level output growth	Allocation relative to anticipated BaU		
Protect sectors against international competition	Carbon leakage rules preferentially allocate for trade exposed sectors		
Treat all sectors on same basis	Standard rules. No installation specific targets, common basis for sector ambition		
Avoidance of confidentiality of data issues	Minimise confidential data		

Allocation roadmap elements

- Further develop approaches to allocation
- Develop carbon leakage allocation rules
- Gather data supporting option development and evaluation
- Model impacts of options
- Finalise allocation rules based on anticipated impacts and aligned with principles



Flexibility mechanisms

- Drivers for considering price mechanisms
 - Cost containment (ceilings, buyout, offsetting etc)
 - Price incentive (floor)
 - Flexibility (reserve)



Flexibility mechanisms

Flexibility mechanism	Environmental integrity within system	Environmental integrity overall	Based on volume	Easy to understand	Cost and risk to government
Fixed use of project credits					
Ceiling price "safety valve" - variable use of project credits			Depends on design		
Ceiling price – release additional allowances			Depends on design		
Ceiling price - buyout			Depends on design		
Floor price – government purchase					
Floor price – auction reserve					
Floor price – supplementary measure					
Flexibility reserve					

Roadmap – key considerations

- Floor-type measures
 - Difficulty with government purchase approaches
 - Auction options less effective with high free allocation
- Ceiling-type measures
 - Important to protect industry
 - Impact of net revenue raising approaches
 - Complexity of revenue recycle
- Candidates
 - Ceiling mechanisms through offsets, safety valve or additional allocation
 - Floor through flexibility reserve or supplementary measure



Flexibility roadmap elements

Rationale and priorities

- Stakeholder views
- Candidate models



- Scenarios
- Impacts
- Revenue recycle

Design • Detailed rules



Thank you for your time

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