



New Market Mechanisms

**Bridging from Existing to New Mechanisms; how should
Thailand position itself?**

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Overview

- The Big Picture: Why do we have to talk about new market mechanisms?
- Which design options for NMM
- The first big decision: cap & trade or baseline & credit
 - Learning from experience: EUETS and CDM to promote mitigation action
- EU vs. Japan perspective on NMM
- Considering the uncertainty, what should Thailand do today?

The Big Picture

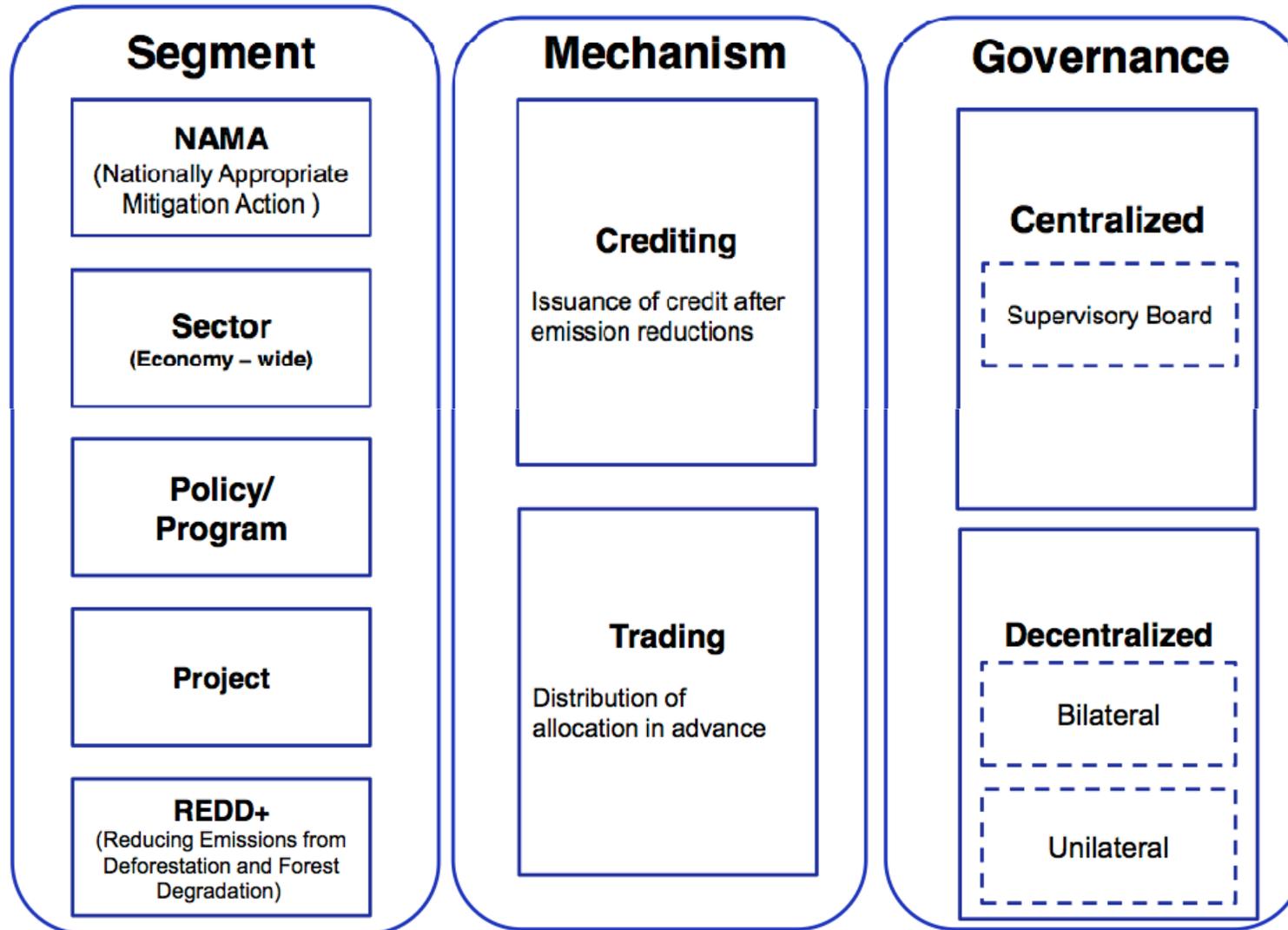
Why do we have to talk about NMM?



- The Ambition Gap
 - Current global pledges fall short by 6-11 bn tons of CO2 reductions p.a. in 2020
 - of the total, 4 bn tons can come from accelerated RET deployment, 3 from EE in buildings, 3.7 bn from industry.
 - The potential is there but the mechanisms are said to be lacking
- Facilitating the Implementation of Existing Pledges
 - Many countries have made pledges but there is a sense that design of existing instruments is not sufficient to implement them.
- There is a sense that the design of existing mechanisms (CDM, JI) is not suitable to facilitate scaled-up mitigation actions
 - The CDM has delivered 200 bn USD in investment for RE and EE. Some studies suggest that this figure needs to increase by a factor of 10 by 2020.
 - Also many investments in RET occur because of other incentives, mainly feed-in-tariffs and tax credits, not CDM which suggest that the CDM does not interface well with such schemes.



Which design options for New Market Mechanisms?



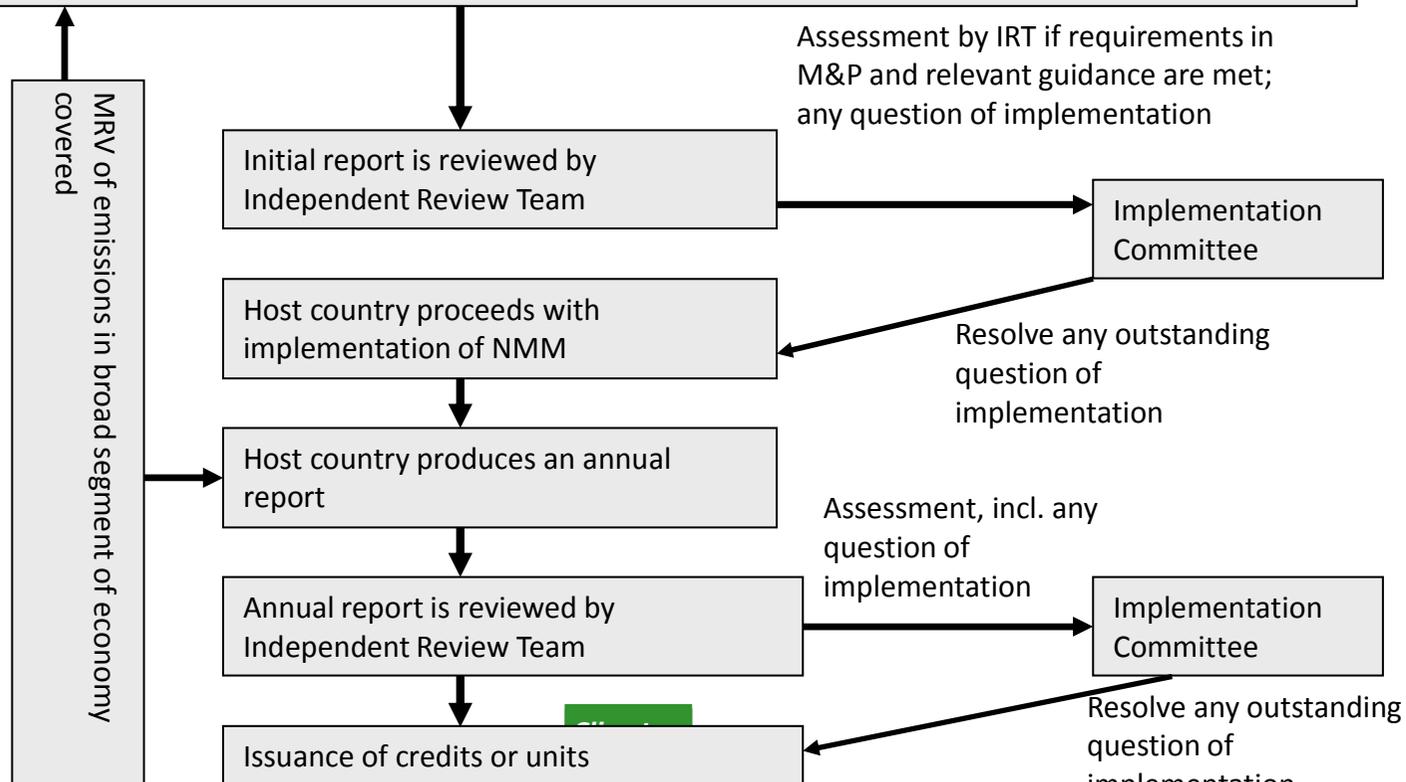
NMM operational cycle



Illustrative example

A developing country prepares an Initial report:

- Chooses coverage (i.e. sectors and gases) based on common definitions where possible
- Estimates baseline emissions pathway for these sectors and gases based on methods and criteria agreed in M&P
- Chooses a trading and/or crediting route
- Determines crediting threshold or target for broad segment of economy based on criteria or methodology agreed in M&P
- Chooses the domestic actions it will undertake to reach this threshold or target
- Assesses the risk of carbon leakage to sectors not covered by the threshold/target and presents any measures necessary to address it
- Demonstrates it meets participation requirements





Key Decision: cap & trade or baseline & credit

Design parameter	Cap & trade	Baseline & credit
Issuance of units	Ex-ante allocation of units via allocation plan. The sum of all allocated allowances is the target.	Project-/program/sector level baselines. Reductions below the baselines are issued as ex-post credits for sale.
Source coverage	Determined by scope of the system via mandatory regulation (facility-level definitions)	By eligibility criteria, voluntary participation, mandatory elements can be brought in over time.
MRV	Detailed MRV procedures that every regulated facility must abide by.	Detailed MRV procedures for facilities that join voluntarily, then binding to generate credits. Lower MRV requirements to establish baseline.
Acceptability of units in intl. market	Depends on the integrity of the overall system and compliance of every participant.	Issued credits are per definition acceptable/have integrity because based on achieved outcomes.
Governance/enforcement	Allocated units create a large asset base that requires extensive over-sight and enforcement to detect misuse (prior to any action taking place).	Limited oversight because units are only issued against already achieved results.
Contribution to low carbon development	EUETS experience has shown no substantial uptake of low carbon technology.	Provides a direct incentive for low carbon technologies but the CDM experience shows that it works best in conjunction with domestic instruments.

Detailed experience with the EUETS

(the largest compliance system and main buyer of CER)



- 11.000 sources covered (> 20 MW), 40% of EU emissions
- 5 year development process
- Major implementation issues
 - It took 2 years to establish/validate base year emissions
 - Negotiating the allocation plan is political, subject to intense lobbying.
 - Implementing comprehensive MRV system is costly for small sources
 - Many exemptions were made to protect competitiveness of internationally trading industries, compromising env. effectiveness.
- Lessons learnt thus far (summary of research by academics)
 - Impacts the way operators use their existing facilities (fuel-mix, merit order dispatch (based on carbon price and coal-to-gas price spreads)).
 - Did not contribute to the RET development nor energy efficiency in Europe
 - RET policies were outside of EUETS: feed-in-tariffs, REPOs.
 - EE potential was only covered indirectly, no incentive from EUETS
 - A number of financial scandals have tarnished the reputation of the EUETS because of regulatory oversight weaknesses.
 - Has served as main source of demand for CER (which has delivered RET)

Detailed experience with the CDM



- > 4000 investments in developing countries representing 200 bn USD
- 5 year development process but now firmly established in many countries
- > 5000 CDM professionals, most of them in developing countries
- Major implementation issues
 - It took 2-4 years to establish regulatory authority of DNA
 - Coverage initially limited but increasing as new methods became available
 - High frequency of method revision created substantial uncertainty (and killed some developers)
 - Substantial time-lag between project start and revenue from carbon credits made CDM less relevant for project finance purpose.
- Lessons-learnt thus far (summary of research by academics)
 - Project-based approach is extremely burdensome (transaction cost) and not the best way for large scale mitigation actions; a scaled-up approach and strong integration with domestic policy is required.
 - CDM is still evolving and has not reached the limits of its applicability; many of its building blocks can be scaled-up.
 - CDM Policy Dialogue has created many interesting suggestions for CDM reform; recommendations by the Panel will be very interesting (Sep 2012)

Proposals for design of NMM

Japan vs. EU



Design parameter	EU	Japan
Concept	Supported and credited NAMA Crediting for reductions beyond an ambitious baseline set in accordance to common procedures	Flexible design to facilitate technology transfer, countries can decide their own design, incl. bilateral schemes.
MRV	All sources within the covered sector, using intl. agreed 3 rd Party verified standards	Basic principles agreed internationally, operational design based on local requirements.
Relationship to existing mechanisms	Honor existing CDM projects but no new projects from sources covered by NMM.	Co-exist with existing mechanisms.
Architecture	Countries need to decide whether cap-and-trade or crediting based under no-lose targets	Sector crediting mechanism based on bilateral unit. Fungibility unclear but vision is future recognition under intl. agreement.
Summary assessment	Driven by EUETS experience and desire for global, fungible system as environmental policy instrument.	Driven by Japanese industrial policy and desire for technology export promotion.

What could a possible “middle-ground” look like?

New Zealand proposal/focus on seamless market transition



Design parameter	New Zealand	Focus on seamless market transition
Concept	NMM are complement to existing mechanisms.	Scale-up to sector crediting mechanism within modified CDM PoA framework
MRV	UN prepares accreditation rules that qualify a national scheme for international crediting.	Based on streamlined CDM MRV rules under standardized approaches and top-down/bottom-up integration.
Relationship to existing mechanisms	Countries decide how they want to handle this. If a country chooses to work via CDM governance, no new accreditation required.	Crediting is governed within the existing CDM regulatory authority (DNAs)
Architecture	Countries choose but must comply with standards, rules, modalities set by UN.	CDM EB with de-centralized authority related to eligibility criteria, standardized baseline setting, additionality by DNA.
Summary assessment	Let a 1000 flowers bloom approach and see what works (evolutionary approach).	Is operational immediately, can be used for wide range of purposes, is fungible, removes market uncertainty.

What should Thailand do?

What are the options?



- Government
 - In relation to the short-term
 - Continue as is with current CDM
 - Engage in CDM scaling-up activities
 - Promote the voluntary carbon market
 - Investigate different options for a Thai NMM pilot (with international partners)
 - Experiment with bilateral schemes
 - In relation to the long-term
 - Launch a Thai NMM (based on baseline and credit (no-lose target) or emissions trading system with linkage to an international global carbon market.

- Project Developers/investors
 - In relation to the short-term (now – 2015)
 - Invest in baseline technology instead or do nothing
 - Develop a CDM project
 - Join a CDM PoA
 - Develop VER for the voluntary market
 - Join a sector crediting pilot
 - In relation to the long-term (after 2015)
 - Be involved in stakeholder dialogue on NMM

Recommendations for Government



Option	Recommendation
Continue as is with current CDM	Regulatory mandate requires issuance of LoA to new projects that apply. Considering the changing market architecture, revision of current LoA issuance process might be advisable to ensure better fit with future design.
Engage in CDM scaling-up activities	DNA should promote scaling-up under existing rules: support PoA to achieve pre-2013 registration, recommend existing (registered) PoA to project developers seeking new LoA, submit standardized baselines to UN, promote integration of PoA CDM with domestic policies, promote pilot-sector crediting and implementation of bilateral schemes on the basis of scaled-up CDM.
Promote voluntary carbon market	Design operational elements and launch voluntary participation to build acceptance and create capacity for future compliance market under NMM.
Investigate options for a Thai NMM pilot (w international partners)	Investigate potential design options for NMM on the basis of different governance models: a) CDM, b) domestic governance, c) bilateral scheme as well as different architecture: a) baseline and credit, b) cap and trade and designs: a) strong integration with existing policies and mechanisms, b) stand-alone regulation (cap and trade).
Experiment with bilateral schemes	Implement a bilateral scheme with an interested international partner that is not overly committing the country to a certain path should the experiment fail (lack of fungibility with future NMM)
Launch a Thai NMM	Could be feasible even before an international agreement is reached to benefit from climate finance and shape the design of NMM.

Recommendations for developers



Option	Recommendation
Invest in baseline technology instead or do nothing	Generally not advisable: any investment today will be operating in a changed regulatory environment that will put a price on carbon emissions in one form or another.
Develop a CDM project	Too late if you start now.. If not registered before the end of 2012, there is currently no buyer in the compliance market who can use them.
Join a CDM PoA	Works if you join a PoA that is registered before end 2012. There is currently no registered PoA in Thailand but a few that are trying in the fields of grid-connected RET, solar PV, biomass, biogas and EE street light. However, prices are currently low and not likely to recover.
Develop VER for the voluntary market	Works. The voluntary market is decoupled from politics but prices have decreased lately because of over-supply but demand is likely to grow steadily.
Join a sector crediting pilot	This option is in the idea/design stage but could materialize in the next year: some EU government players and local private sector entities would like to pilot this idea. There is indication that pricing for CER from such pilot trade at substantial premium to normal CER.
Be involved in stakeholder dialogue on NMM	The Thai government has launched analysis into the potential design of NMM. The private sector can participate via stakeholder consultation, position papers, own analysis.

Thank You



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