

Side Event: Market Mechanisms in a Post-Durban International Climate Regime (Harvard University and ENEL Foundation)

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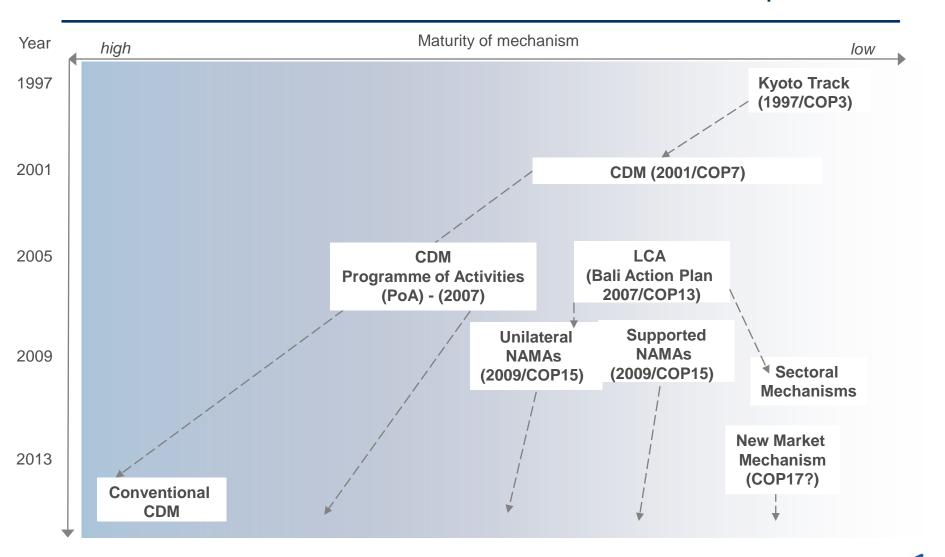
- Brief recap: evolution of market mechanisms in the UNFCCC context
- NMMs: A haze of conflicting aims?
- How to incentivize private sector participation?



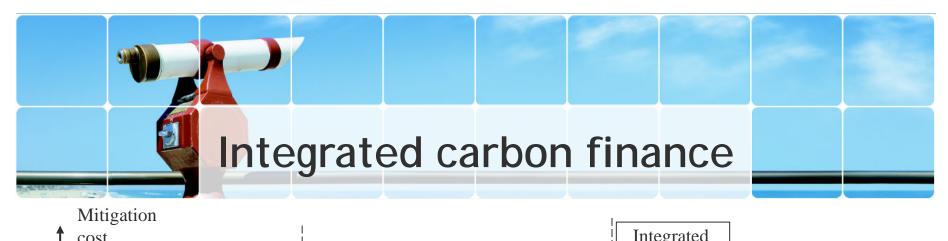
### The evolution of NMMs

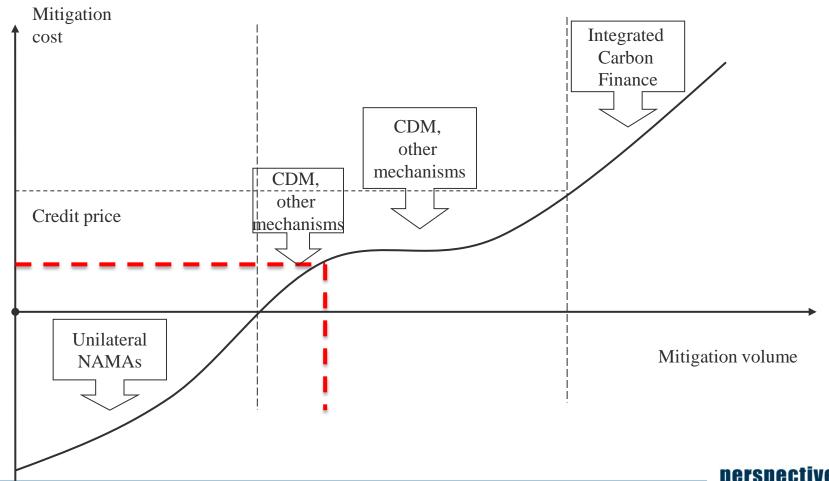


### Climate finance incentives for low carbon development











NMM type	Characteristics	Supported by
Project-based	Similar to CDM and JI	China, Japan <sup>1</sup>
Sectoral crediting	Credits are awarded if emissions from a sector are kept below a pre-defined level	AOSIS, EU, Japan, Norway, Papua New
	•	Guinea
Sectoral trading	Allowances are issued ex ante based on a	AOSIS, EU, Japan,
	sectoral target, with penalty for missing target	Norway, Papua New Guinea
NAMA <sup>2</sup> /policy crediting	Crediting of mitigation effects of policies and actions that go beyond projects	South Korea, Switzerland
Net avoided emissions	Credits for not exploiting fossil fuel deposits	Ecuador

-> No detailed decision by COP yet, the following analysis mainly focuses on sectoral approaches



Sector	Policy	
Energy production	Feed-in tariff, renewable portfolio standard, green credit lines, guarantees	
Industrial energy use	Carbon tax	
Transportation	Fuel efficiency standards, road fees, carbon taxes	
Buildings	Building codes, green credit lines, energy efficiency certificates	
Waste	Regulations	
Industrial processes	Performance standards for electric motors etc.	



-> Challenge: Usually policies are not related to carbon price

Source: KfW (2012), modified by the author

## NMMs: A haze of conflicting aims?



# Aims of policymakers re NMMs

- Upscaling mitigation beyond project-based mechanisms
- Reducing transaction costs through standardization
- Resolving the additionality challenge
- Contributing to global emission reductions
- Allowing design of NMM according to national preferences
  - Framework for various approaches



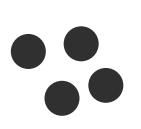
# Upscaling

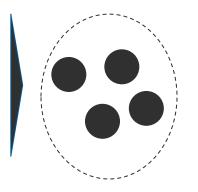
Single CDM projects

CDM Programme of Activites

Nationally Appropriate
Mitigation Action - NAMA

Sectoral Mechanism







Voluntary programme

Capacity building

Potential mix of funds (domestic, donor and carbon financing)



Source of Funds:



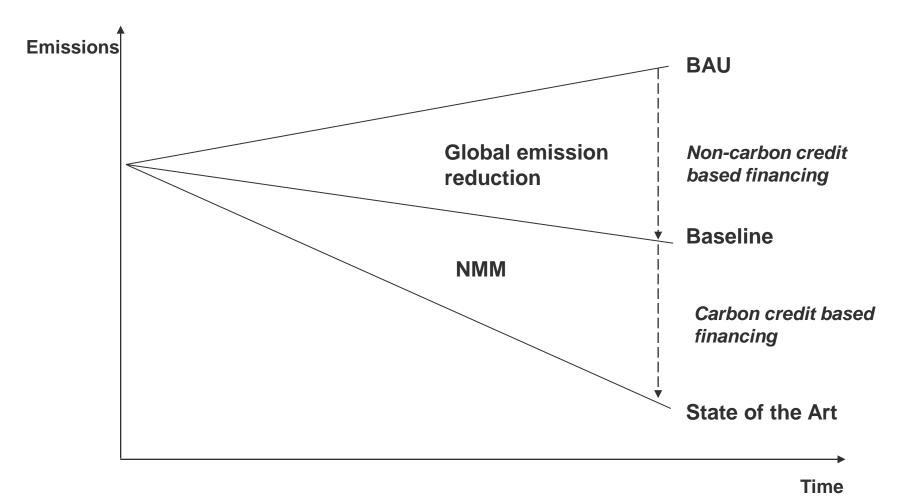


Regional/global carbon market?

Scale of mitigation financing



# Contribution to global reductions



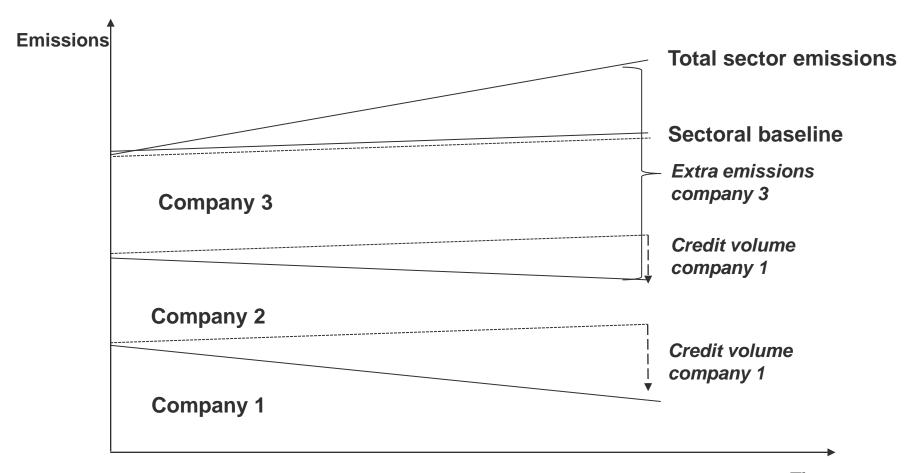


## Challenges for NMMs

- Free riding: dilution of mitigation incentives
- Elusive counterfactual: setting baselines and determining additionality
  - Uncertainties in BAU setting
  - Credibility of baseline
  - Additionality coverage through "false positive/negative" challenging
- Cut-throat competition between mechanisms on the national and international level



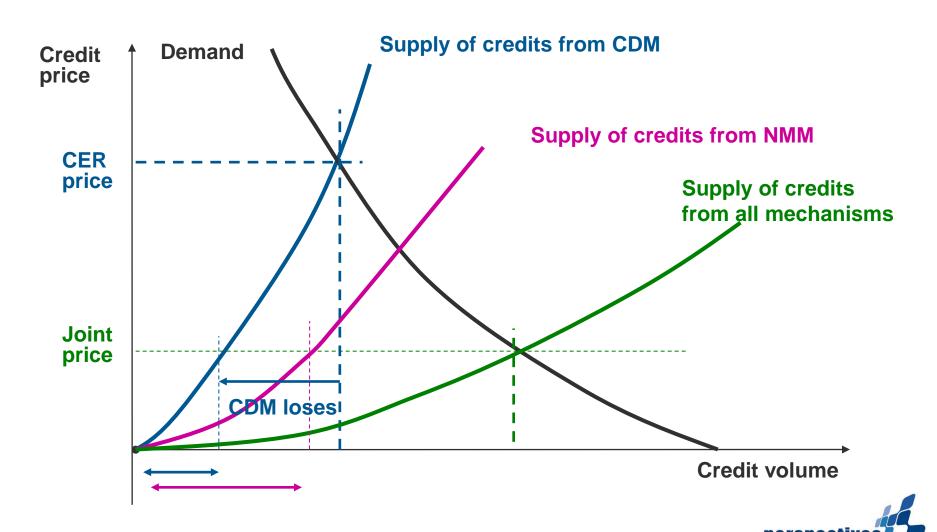
# Free riding



**Time** 



# Challenges for NMMs



## How to incentivize private sector participation?



### How to safeguard incentives for private sector mitigation?

### Binding commitments for emitters

- Mandatory emission trading with sufficient penalties
- Alternative: Intensity standard (tradable)
- Government guarantees for private mitigation
  - Regulator covers difference between baseline and sector emissions (financed by e.g. a low-level carbon tax)
- Deposit-refund systems
  - Emitters are required to provide deposits for emissions
  - Refund if emissions remain below the benchmark
  - Interest on deposit paid to emitters

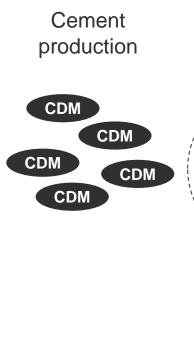


#### Short-term recommendations for stakeholders

- How to integrate NMMs in existing international mitigation mechs?
  - NMMs appropriate for sectors with distributed emission sources
  - Different sectors might require different mechanisms
  - Coexistence might be tested through pilots
  - Understand the robustness of baseline setting on different levels
  - Discount CERs in order to achieve global emission reductions
- Precondition for coexistence: <u>Strong national /</u> <u>international oversight and sufficient demand!</u>



## Coexistence of mechanisms



Power sector

Household sector

Waste

Landfill

Transport sector

CDM CDM CDM CDM

Buildings efficiency standards policy crediting

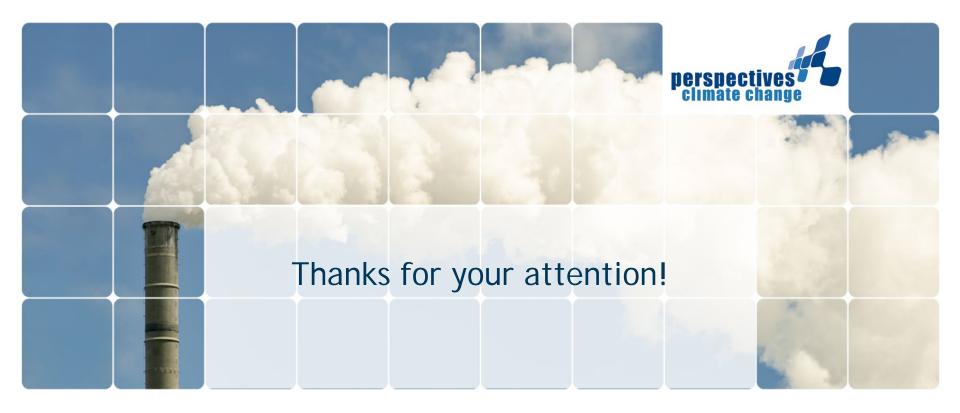
gas collection regulation policy crediting

Fuel efficiency standards sectoral crediting

Feed-in tariff policy crediting Appliance efficiency standards policy crediting

Wastewater methane collection regulation policy crediting





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