

# Market Mechanisms in a Post-Durban International Climate Regime

Hosted by

*The Harvard Project on Climate Agreements*

*The Enel Foundation*

*The International Emissions Trading Association*

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**Eighteenth Conference of the Parties**

*United Nations Framework Convention on Climate Change*

*Doha, Qatar*

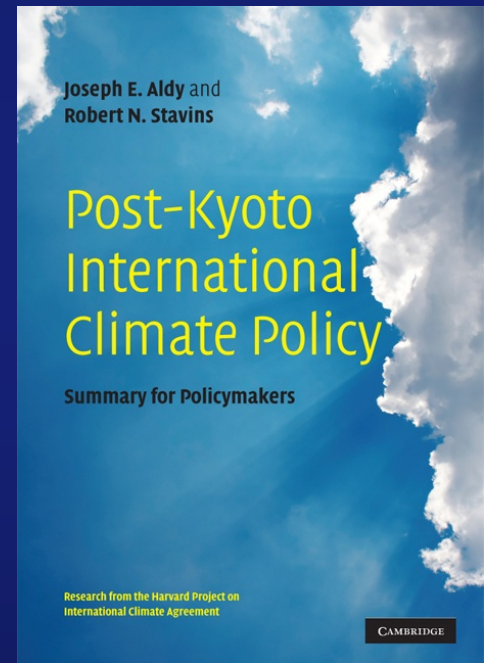
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# New Market Mechanism(s)

- **One outcome of COP-17 in Durban**
  - As part of the AWG-LCA track, consideration to be given to a “*new market-based mechanism*” (as a complement to or substitute for the Clean Development Mechanism, CDM)
- **What is a market mechanism?**
  - UNFCCC discussions: offset/crediting mechanism (at sector or policy level)
  - Broader, economic definition: (carbon) pricing mechanism
- **Either way, why think about carbon (or other GHG) pricing?**
  - No other feasible approach can provide truly meaningful emissions reductions, because of number & diversity of emission sources
  - It's the least costly approach in short term (heterogeneous abatement costs)
  - It's the least costly approach in the long term (incentive for carbon-friendly technological change)
- **So, it may be a necessary component of sensible & effective climate policy**
- **And there's been considerable experience! (EU ETS, U.S. SO<sub>2</sub>, and others)**

# Developing and Advancing Ideas for Climate Policy

- The Harvard Project on Climate Agreements
  - Mission: To help identify and advance scientifically sound, economically rational, and politically pragmatic public policy options for addressing global climate change
- Drawing upon research & ideas from leading thinkers around the world from:
  - Academia
  - Private industry
  - NGOs
  - Governments
- 50 research initiatives in Argentina, Australia, China, Europe, India, Japan, and the United States



# Potential International Climate Policy Architectures

- **Centralized architectures**
  - Kyoto Protocol
  - Formulas to Assign Targets
- **Harmonized national policies**
  - National Carbon Taxes or Trading Regimes
  - Regulatory Regimes
- **Decentralized architectures and coordinated national policies**
  - *Linkage* of Regional, National, & Sub-National Cap-and-Trade Systems
  - *Linkage* of Heterogeneous National Policies

# Linkage of National & Regional Tradable Permit Systems

(Matthew Ranson and Robert Stavins)

- **Cap-and-trade systems are preferred approach in many jurisdictions**
  - European Union, Australia, New Zealand, California, Quebec, Korea, etc.
  - *Linking* -- bilateral recognition of allowances – across these cap-and-trade systems *reduces* overall costs, market power, and price volatility
    - But linking *causes* automatic propagation of cost-containment design elements: banking, borrowing, and safety valve
    - Therefore, advance *harmonization* required
- **The Emerging International Regime**
  - If cap-and-trade systems link with *common* emission-reduction-credit system, such as CDM, the cap-and-trade systems are *indirectly linked*
    - All the *benefits of linking* are *achieved* – cost savings, etc.
    - But propagation of design elements across systems *greatly diminished*
  - This is evolving as part of *de facto*, bottom-up international policy architecture
  - It may become an element of future *de jure* international policy architecture

# Linkage of Heterogeneous National Policies & Systems

(Gilbert Metcalf and David Weisbach)

- **National sovereignty is common in international agreements – so, some national policy heterogeneity is likely**
  - Cap-and-trade, taxes, performance standards, technology standards
- **Linking can reduce overall costs, market power, and price volatility**
  - Some linking across different systems relatively easy (CAT & tax), challenging (CAT & quantity standard), difficult (CAT & technology mandates), or impossible
  - Most likely approach would be *indirect linking* – if individual systems allow offsets from a *common* emission-reduction-credit system, systems *indirectly linked*
- **In absence of formal linking, *de facto* linkage occurs through leakage**
  - Trade flows and movements of carbon-intensive activities
  - Prices converge – to some degree – towards lowest price among emitting countries (price is *not* zero for non-carbon-constraining countries, because of co-benefits)
  - But price not high enough to bring about “sufficient” emission reductions

# Linkage in a Future International Climate Policy Architecture

- **Two Broad Possibilities**

- Linkage as an *element* of a broader architecture
  - *Top-down targets & timetables*, with a comprehensive set of multilateral linkages
- *Stand-alone* architecture
  - Set of unilateral commitments in *pledge-and-review* system (Cancun)
  - Decentralized *set of links* (some indirect through enhanced CDM)

- **A Political Role for Linkage**

- Could be similar to pattern observed with international trade scheme – General Agreement on Tariffs and Trade *transitioned* into the World Trade Organization
  - Bottom-up system of links could – in principle – provide basic institutional framework for a broader climate agreement of multilateral links
  - Could provide participation incentives for nations to adopt market-based climate policies (example: EU ETS post-2012 policy towards CDM – China loses FDI via CDM, but can regain through linked CAT)

# Four Lessons from Harvard Project on Climate Agreements

1. **Market-based approaches are probably essential**
2. **Getting (carbon) prices right is necessary, but *not* sufficient**
  - Because of *public-good nature of R&D*, private sector will under-invest
  - Possible need for *government-funding of private-sector R&D*, such as for CCS
3. **“Developing country” participation is essential**
  - *Impossible* to address climate change *without* meaningful participation by key emerging economies (*even if* OECD emissions were *zero*)
  - A *central task* in international negotiations is developing means of bringing key emerging economies on board to fulfill the Durban Platform for Enhanced Action, while remaining faithful to UNFCCC principle of “common but differentiated responsibilities and respective capabilities”
4. **Defacto *interim* (or post-2020) policy architecture *may* already be emerging**
  - Linkage of national and regional cap-and-trade *and other* systems through common ERC system (such as enhanced CDM)
  - May be simultaneous with Copenhagen-Cancun pledge & review system



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# For More Information

## **Enel Foundation**

[http://www.enel.com/en-GB/enel\\_foundation/](http://www.enel.com/en-GB/enel_foundation/)

## **International Emissions Trading Association**

<http://www.ieta.org/>

## **Harvard Project on Climate Agreements**

[www.belfercenter.org/climate](http://www.belfercenter.org/climate)

## **Harvard Environmental Economics Program**

[www.hks.harvard.edu/m-rcbg/heep/](http://www.hks.harvard.edu/m-rcbg/heep/)

[www.stavins.com](http://www.stavins.com)