

# **Linkage of Regional, National, & Sub-National Climate Policies under the Paris Agreement**

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**Can National Policies and INDCs Alone Lead to a Workable and Effective  
Climate Regime?**

*21st Conference of the Parties, United Nations Framework Convention on  
Climate Change, Paris, France  
December 8, 2015*

# Key Challenge for COP-21

## ▪ Central Question

- Can Paris Agreement, with INDCs *anchored* in domestic political realities, ...
- ... *adequately* address emissions with sufficient ambition?
- Are there ways to enable and facilitate *increased ambition* over time?
- **Linkage of regional, national, and sub-national policies can be part of the answer** – connections among policy systems that allow emission reduction efforts to be redistributed across systems

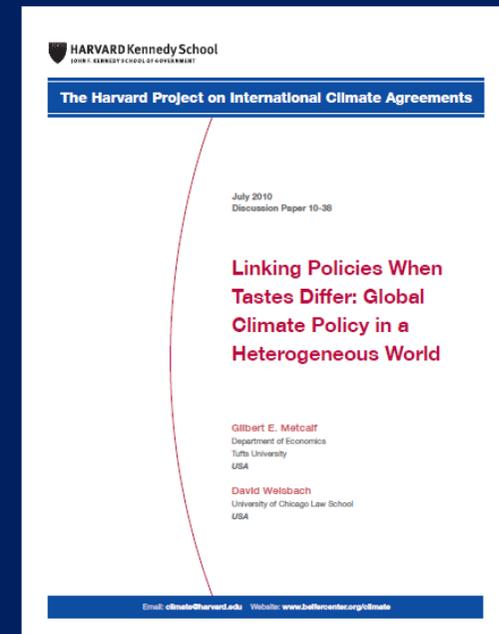
## ▪ Cap-and-trade emerging as instrument of *choice* in many countries

- Regional, national, and sub-national levels
- European Union, New Zealand, Northeast USA, California, Quebec, Ontario, China, Korea, etc.

## ▪ But, national (& sub-national) policies will be *heterogeneous* ...

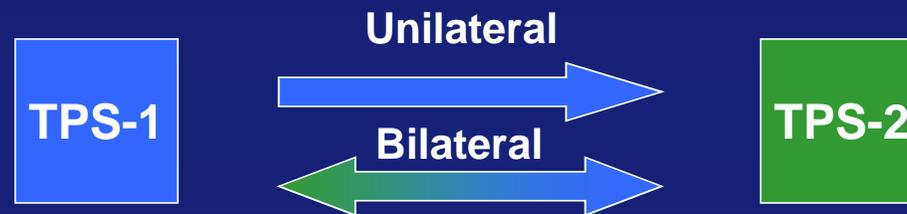
# Policy Linkage in a Heterogeneous World

- Global agreement should accommodate heterogeneity – both in locus of regulation (super-national to sub-national) and policy instrument:
  - Cap-and-trade systems
  - Carbon tax systems
  - Emission reduction credit systems
  - Command-and-Control regulations
- Linkage among heterogeneous policies ranges from straightforward to infeasible
- But benefits of linkage are considerable
  - Cost savings → greater ambition
  - Reduce market power
  - Reduce total price volatility
  - Allow for distributional equity (UNFCCC’s “common but differentiated responsibilities”) *without* sacrificing cost-effectiveness

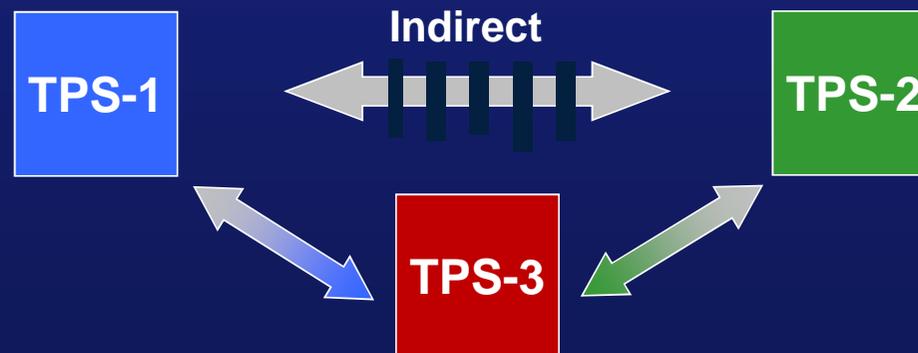


# What is linkage?

- **Definition:** Connections among cap-and-trade systems – or heterogeneous policy instruments – that allow emission reduction efforts to be redistributed across systems
- **Direct linkage:** One or both systems *recognize* the other's allowances for compliance (can be unilateral/one-way or bilateral/two-way)

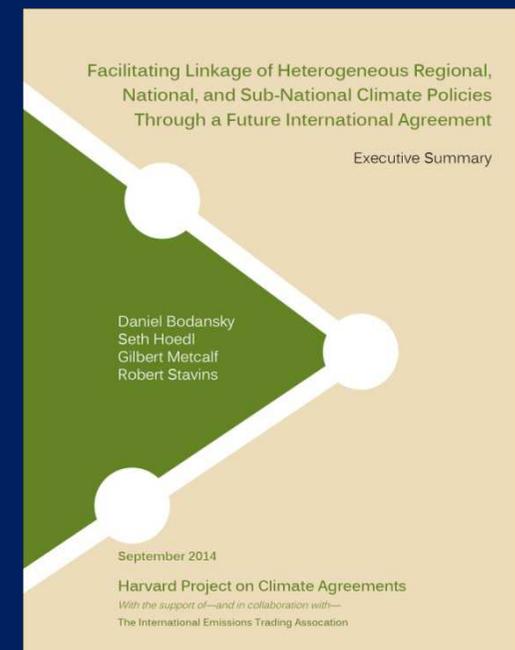


- **Indirect linkage:** Allowance supply and demand in one system *affects* S&D in another system through direct links with a common system



# What needs to be in the Paris Agreement to facilitate effective linkage?

- “Facilitating Linkage of Heterogeneous Regional, National, and Sub-National Climate Policies through a Future International Agreement”
- First principle: Do No Harm ...
  - If poorly designed, the 2015 agreement could actually inhibit effective linkage
  - Example: “supplementarity requirements,” as were discussed in Kyoto (and included in KP)
- What should the 2015 agreement include?
  - Statement that countries can achieve parts of their INDC targets by financing or otherwise facilitating actions in other jurisdictions



# The Institutional Path Ahead

- **Copenhagen** illustrated problems with process under United Nations
  - 197 countries, when 20 account for about 90% of global emissions; and UNFCCC (default) voting rule is consensus (unanimity?)
  
- **Major Economies Forum** – accounts for about 90% of global emissions; but initiated and led by USA, and forum for discussion, not negotiation
  
- **G20** – finance ministers; have met on climate change; similar to MEF list
  
- Other multilateral, bilateral, including China-USA

# The Institutional Path Ahead (continued)

## ■ Climate Clubs

- Bottom-up nature of Paris 2015 agreement opens doors for “coalitions of the willing”
  - Clubs could be parallel to, and within or outside of UNFCCC context
- Possible Approaches –
  - Club of National Carbon Taxes (Victor 2011, Barrett 2013, Nordhaus 2015)
  - Carbon-Market Coalitions (Stewart 2013, Morgan 2013, Keohane 2014)
- Benefits: greater c/e, market liquidity, reduced concerns about competitive distortions, free-riding, and carbon leakage
  - And by providing exclusive membership benefits, club can encourage wider uptake
- But need for exclusive benefits raises serious concerns, such as with recommendations for imposition of *border adjustment measures* on non-members

# Conclusions

- International cooperation essential, but key action will be at national levels
  - Paris Agreement provides opportunity for new path forward
    - One key necessary condition met: adequate scope of participation (INDCs from countries accounting for more than 93% of global emissions)
    - Other key necessary condition: adequate ambition of policies
      - Paris is only the first step, review INDCs every 5 years
      - But even Paris INDCs significant
- In years to come, major locus of international cooperation:
  - May continue to be UNFCCC
  - Or it may be other existing venues (G20?)
  - Or it may be climate clubs
- But under any of these venues, importance of carbon-pricing and linkage remain!

# For More Information

Harvard Project on Climate Agreements

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

Harvard Environmental Economics Program

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

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