Transnational Voluntary Climate Change Initiatives for Local Governments

Key Variables, Drivers, and Likely Effects

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Osgoode Hall Law School
IUCN AEL 10th Annual Colloquium
Baltimore, USA, July 4, 2010
Cities & climate change: A puzzle

- Climate change is a global phenomenon
- Any one locality’s emissions too small to affect global GHG concentrations
  - Reductions would have no measurable effect on climate change, benefits shared with entire world
- Local governments have little incentive to take costly local action, strong incentives to free-ride
- Yet local governments have been among the earliest & most active movers on climate change
  - Thousands have joined transnational voluntary climate change policy initiatives for local governments
  - Recently fêted at Rio+20
Questions and methodology

• Research questions:
  – What are local governments doing?
    • Survey existing transnational voluntary local government CC initiatives
  – Why are they doing it?
    • Identify drivers for local government action
  – How do their initiatives compare?
    • In terms of key variables likely to affect performance
  – How effective are they likely to be?
    • Theoretically-informed speculation

• Methodology:
  – Lit review, analysis of publicly available info on Internet (English only); cutoff end 2011
1. What’s out there?

• Looking for: initiatives in which local government authorities in multiple countries make voluntary commitments in relation to climate change adaptation or mitigation

• Found: 14 initiatives, 10 global, 4 regional

• Four categories
  – One-off manifestos
  – Pledge & action frameworks
  – Knowledge-sharing & capacity-building programs
  – Registries
One-off manifestos

• Typical features
  – One-time exhortations, general commitments, no planning/implementation framework

• Examples
  – **Regional**: African Local Government Declaration on Climate Change (2009), African Mayors Climate Change Declaration (2011)
Pledge & action frameworks

• Typical features
  – Framework to measure emissions, set targets, develop action plans, implement policies & measures, monitor results; supporting tools & services; maybe reporting, verification; rarely sanctions

• Examples
  – Klima-Bündnis (Climate Alliance) (1990) (Europe)
  – ICLEI Cities for Climate Protection campaign (1993)
  – EC Covenant of Mayors (2008) (Europe)
  – Mexico City Pact (2010)
Knowledge-sharing fora

• Typical features
  – Fora to develop, share & implement knowledge, best practices, tools; build local capacity; educate & advise; engage in advocacy, maybe make commitments

• Examples
  – C40 Cities Climate Leadership Group (2005)
  – UNISDR Resilient Cities Campaign (2009)
  – Pledge & action frameworks often share some of these features
Registries

• Typical features
  – Portals for public reporting (& maybe verification) of performance, targets, plans, policies & measures

• Examples
  – Copenhagen City Climate Catalogue (2009)
  – carbonn Cities Climate Registry (2010)
2. Why do they do it?

1. **Realize local benefits**
   - Cost savings (eg energy), co-benefits (eg. air quality)
   - Adaptation vs. Mitigation puzzle

2. **Satisfy voter demand**
   - Voters may over-estimate benefits, downplay costs, reject cost-benefit calculus, reward symbolic action
   - Favours flexible, vague commitments

3. **Enhance political capital**
   - Political entrepreneurs exploit publicly salient issues to enhance political fortunes, as pioneers (eg Greg Nickels, Seattle) or piggy-backers (eg Kathy Taylor, Tulsa)
(More reasons...)

4. Exploit “green” market opportunities
   - Green business, carbon markets

5. Influence future regulation

6. Pressure higher levels of government to act
   - US vs Europe puzzle

7. Act on principled beliefs

8. Engage in collective learning
   - Favours initiatives that stress networking, information exchange
3. How do they compare?

- Literature on voluntary approaches to environmental policy identifies 6 key variables likely to affect performance
  a) Process vs. performance orientation
  b) Self-determined vs predetermined targets
  c) Specificity of commitments
  d) Scope (goodness of fit with problem)
  e) Measurement, reporting and verification
  f) Enforcement and sanctions
### Process-oriented elements

<table>
<thead>
<tr>
<th>Green = integral</th>
<th>Yellow = optional</th>
<th>White = absent</th>
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<tbody>
<tr>
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<td>Durban Adaptation Charter</td>
<td>African Declaration 2009</td>
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<td>African Declaration 2011</td>
<td>Covenant of Mayors</td>
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#### Global Initiatives

- Integrate climate into decision making
- Develop plans, policies or strategies
- Measure emissions or prepare inventory
- Monitor results
- Report publicly
- Have results independently verified
- Conduct risk or impact assessment
- Develop or use tools
- Share knowledge
- Provide or use education or training
- Involve particular stakeholders
# Performance-based Elements

- **green** = integral
- **yellow** = optional
- **white** = absent

<table>
<thead>
<tr>
<th>Reduce GHG emissions</th>
<th>Adopt local emission reduction targets</th>
<th>Implement policies and measures</th>
<th>Conserve energy, increase renewable energy, enhance energy efficiency</th>
<th>Change land use patterns</th>
<th>Reduce motorised transport</th>
<th>Eliminate ozone-depleting substances</th>
<th>Enhance physical infrastructure</th>
<th>Encourage reforestation</th>
<th>Avoid unsustainably harvested timber</th>
<th>Reduce vulnerability to impacts</th>
<th>Protect ecosystems</th>
<th>Install emergency warning/response systems</th>
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Pre-set vs self-set targets

- Expected trade-off between stringency and uptake not observed: 2 schemes w/ pre-set GHG targets have more members than 2 w/ self-determined, & all 4 have more members than schemes that don’t require targets
Specificity of commitments

**Clear, measurable targets & timetables facilitate accountability, effectiveness**

**Vagueness facilitates agreement in face of divergent interests**

- **Challenge:** right mix of specificity & flexibility
  - Precise, measurable performance targets
  - Clear processes for planning and implementation
  - Flexible choice of means to fulfill targets
  - Standardized measurement and reporting methodologies
# Examples

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<tr>
<td>Reduce local GHG emissions 10% every five years, halve 1990 per capita emissions by 2030</td>
<td>Reduce, measure and report GHG emissions</td>
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<td>Reduce local GHG emissions by at least 20% by 2020</td>
<td>Improve on at least one listed ‘essential step’</td>
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<td>Register emission inventory, emissions reduction target (if any) &amp; actions on cCCR</td>
<td>Pursue development strategies that reduce citizens’ vulnerability to climate change</td>
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<tr>
<td>Conduct emissions inventory, adopt local emissions reduction target and timetable, develop action plan, implement policies and measures, monitor results</td>
<td>Integrate climate change into decision-making</td>
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Klima-Bündnis  EU Covenant  Mexico City Pact  CCP, EU Covenant  World Mayors  Resilient Cities  Bonn Decl.  Durban
Measurement, reporting & verification

“local commitments and actions must be measurable, reportable and verifiable in order to attract recognition and support” (Mexico City Pact)

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Enforcement & sanctions

- Clear consequences for failure & rewards for success promote effectiveness, credibility
  - But threat of sanctions can deter both leaders and laggards from participating in a voluntary scheme
  - Expectation: many schemes will provide rewards, few will impose sanctions, and these will be discreet, mild

- Only 1 of 14 programs provides for sanctions
  - The only one initiated by a higher authority
  - EU Covenant: cities that fail to submit action plan within 1 year, miss emissions reduction target, or miss two successive reporting periods face termination (around 100 quiet suspensions so far)
4. What are their likely effects?

• Data scarce, very few studies of results & performance; but some prediction possible

A. Effects on GHG emissions?
   1) Local (primary) emissions reductions: doubtful
      – Cities influence many of largest emission sources
      – But given barriers to local action, it is no surprise that
         • Few programs require mandatory emissions measurements (7), targets (4), reporting timetables (2), or verification (1)
         • Most analysts predict local programs unlikely to have significant positive impact
         • Little evidence of results (many unsubstantiated claims)
A. Effects on emissions /

2) Secondary reductions (triggering national or international action): a little less doubtful

- Little sign or prospect of direct influence on national or international policy
- Some prospect of indirect influence via policy experimentation, technological innovation
3. **Policy learning: promising**

- Most programs promote knowledge-sharing
  - Klima-Bündnis: unique, persistent forum for dialogue between Northern cities & rainforest-dwelling indigenous peoples
- But policy learning exceedingly rare, faces many cognitive, institutional barriers
- Requires persistent, purposeful, inclusive institutions and a reiterative cycle of explicit experimentation, reflection, adaptation
  - Not just one-way diffusion
4. Adaptation: promising

- Local action more likely to be rational due to local benefits; cities well positioned to act

In conclusion: cautious optimism about the potential of transnational local government CC initiatives to foster climate change adaptation and policy learning in the long run, tempered by skepticism about their potential to reduce global GHG emissions in the short run.