Transnational Voluntary Climate Change Initiatives for Local Governments

Key Variables, Drivers, and Likely Effects

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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
  - Global: Jeju Declaration (2007), World Mayors & Local Governments Climate Protection Agreement (2007), Bonn Declaration of Mayors (2011), Durban Adaptation Charter (2011)
  - 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)
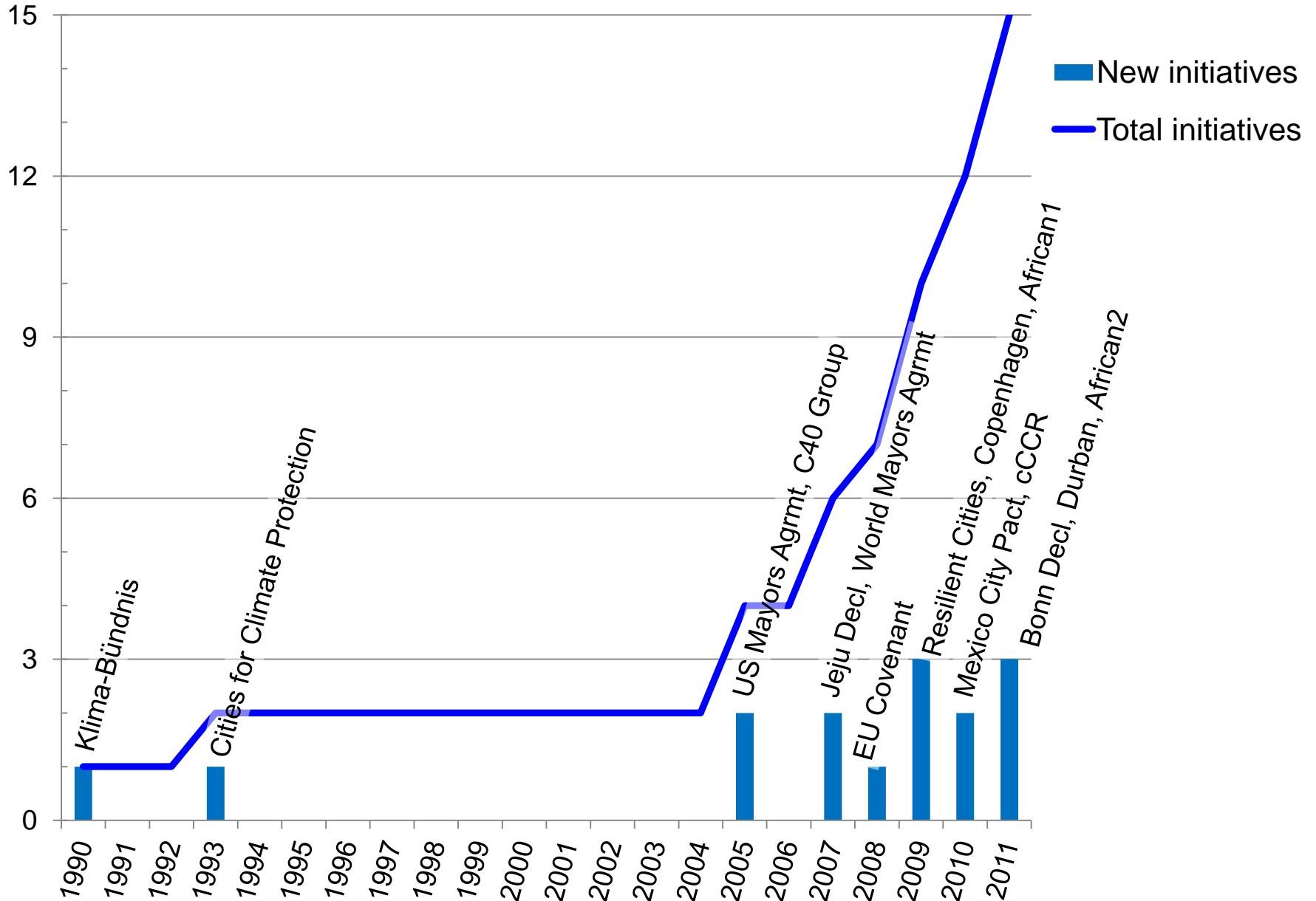 - Pledge & action frameworks often share some of these features

Registries

- Typical features
  - Portals for public reporting (& maybe verification) of performance, targets, plans, policies & measures
- Examples
  - Copenhagen City Climate Catalogue (2009)
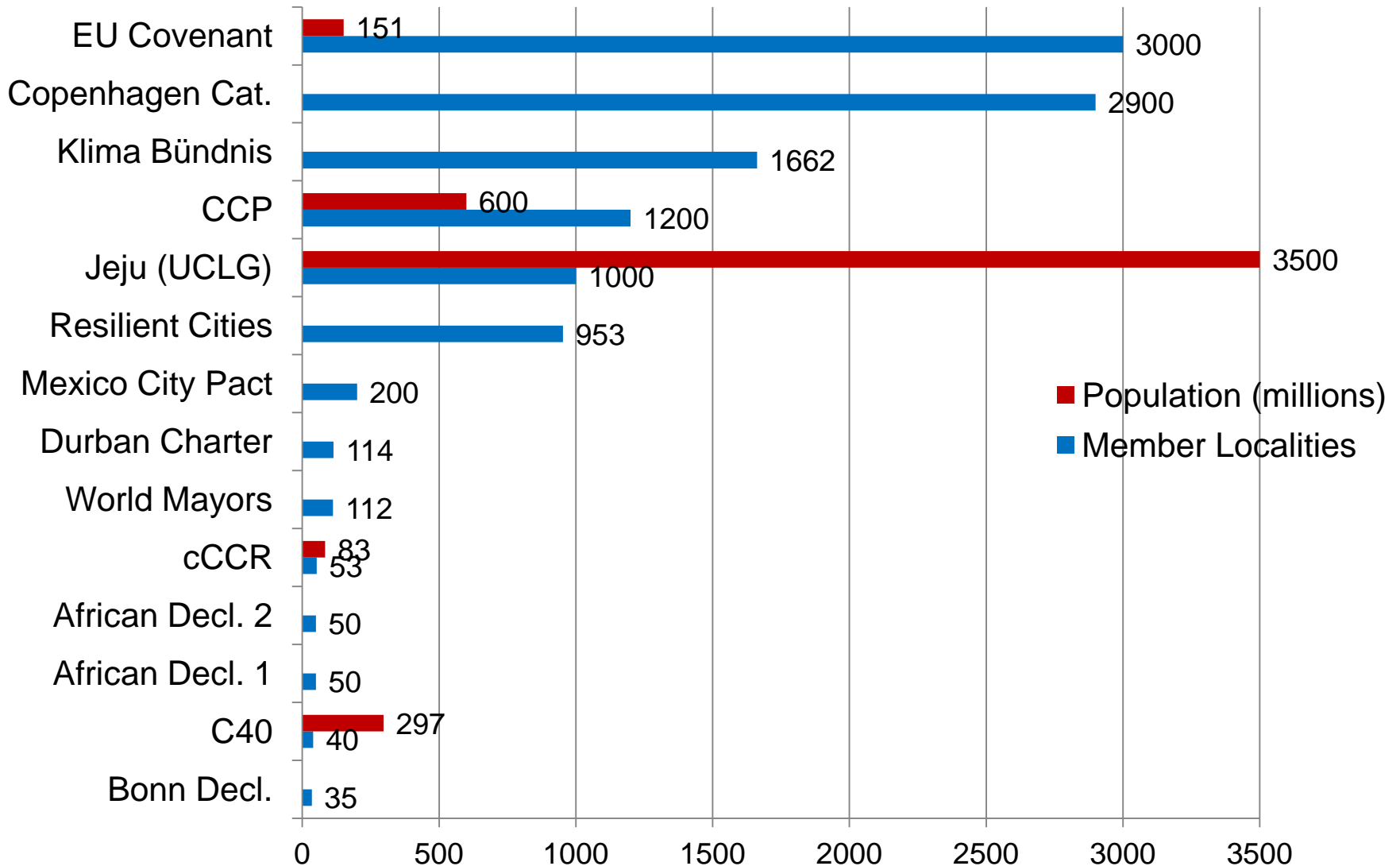 - carbon*n* Cities Climate Registry (2010)

THE CITY CLIMATE CATALOGUE

The Copenhagen world catalogue of city commitments to combat climate change

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Number of Initiatives
(including 2005 US Mayors Agreement)

Number of Members and Population

	Population (millions)	Member Localities
EU Covenant	151	3000
Copenhagen Cat.		2900
Klima Bündnis		1662
CCP	600	1200
Jeju (UCLG)	3500	1000
Resilient Cities		953
Mexico City Pact		200
Durban Charter		114
World Mayors		112
cCCR	83	53
African Decl. 2		50
African Decl. 1		50
C40	297	40
Bonn Decl.		35

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

green = integral
yellow = optional
white = absent

Process-oriented elements	Global Initiatives									Regional				
	Cities for Climate Protection	C40 Cities Group	Jeju Declaration	World Mayors Agreement	Resilient Cities Campaign	Copenhagen Catalogue	Mexico City Pact	cCCR	Bonn Declaration	Durban Adaptation Charter	African Declaration 2009	African Declaration 2011	Climate Alliance	Covenant of Mayors
Integrate climate into decision making			green							green	green	green	green	
Develop plans, policies or strategies	green					yellow	green	yellow		green	green	green	green	green
Measure emissions or prepare inventory	green			green		yellow	green	yellow			green			
Monitor results	green					yellow							green	green
Report publicly	yellow			green	green		green					yellow	green	
Have results independently verified								yellow						green
Conduct risk or impact assessment					green					green				
Develop or use tools	green	yellow						green						
Share knowledge	yellow	yellow			green	green	green	green	yellow	green				
Provide or use education or training	yellow	yellow			yellow							yellow		green
Involve particular stakeholders							green				green	green	green	

Performance-based elements

green = integral
yellow = optional
white = absent

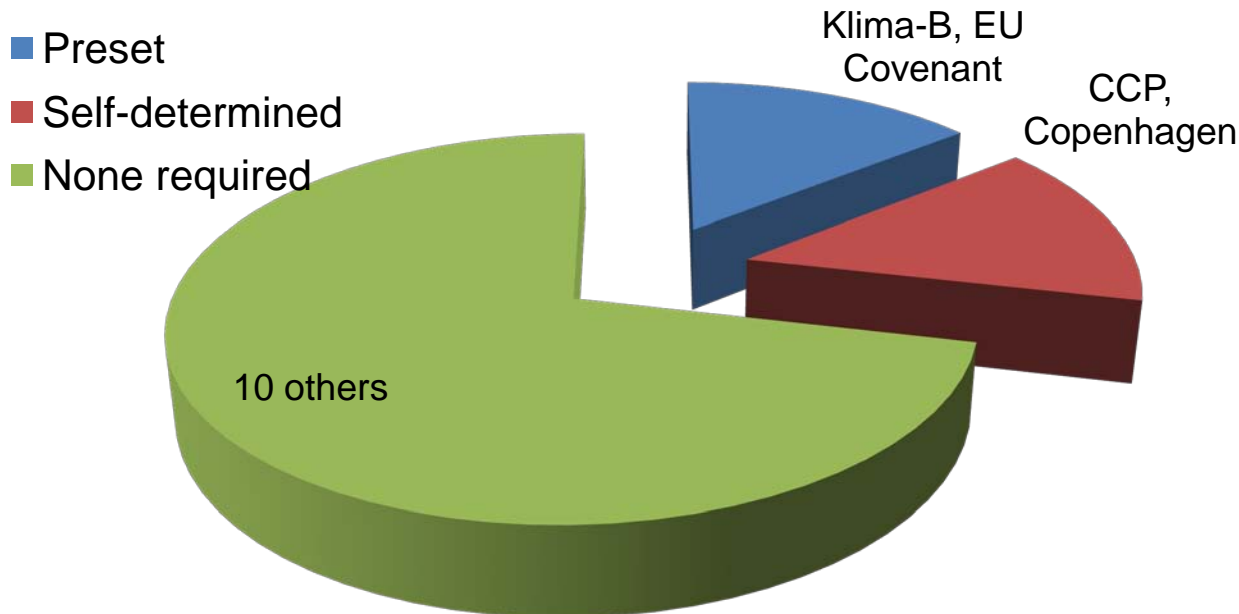| Performance-based elements	Global Initiatives										Regional			
	Cities for Climate Protect.	C40 Cities Group	Jeju Declaration	World Mayors Agreement	Resilient Cities Campaign	Copenhagen Catalogue	Mexico City Pact	cCCR	Bonn Declaration	Durban Adaptation	African Declaration 2009	African Declaration 2011	Climate Alliance	Covenant of Mayors
Reduce GHG emissions		green		green			green						green	
Adopt local emission reduction targets	green	yellow				green		yellow					green	green
Implement policies and measures	green	yellow		green		yellow	green	yellow					green	green
Conserve energy, increase renewable energy, enhance energy efficiency		yellow	green	green									green	
Change land use patterns			green		green									
Reduce motorised transport													green	
Eliminate ozone-depleting substances													green	
Enhance physical infrastructure		yellow	green		green				yellow					
Encourage reforestation			green											
Avoid unsustainably harvested timber													green	
Reduce vulnerability to impacts		yellow							green					
Protect ecosystems					green									
Install emergency warning/ response systems					green									

Pre-set vs self-set targets

Legend:
- Preset
- Self-determined
- None required

Klima-B, EU Covenant

CCP, Copenhagen

10 others

Pre-set targets
Pro: stringency, uniformity, fairness
Con: inefficiency, rigidity, low uptake

– 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

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

Measurement, reporting & verification

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

	Measure	Monitor	Report	Timetable	Verify
EU Covenant	✔	✔	✔	✔	✔
Klima Bündnis	✔	✔	✔	✘	✘
Mexico Pact	✔	✘	✔	✔	✘ *
CCP	✔	✔	✘ *	✘	✘
World Mayors	✔	✘	✔	✘	✘
Copenhagen	✘ *	✘	✔	✘	✘
cCCR	✘ *	✘	✔	✘	✘ *
African1	✔	✘	✘	✘	✘
African2	✔	✘	✘	✘	✘

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.