Transitions in Sustainable Energy Infrastructures: What Role for Cities and Regions?

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SURF

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1.Introduction

- To what extent are cities and regions able to actively shape the development of sustainable energy transitions?

- Why does this matter anyway?

  1. Urban and regional scale not adequately understood within energy policy and technological transitions…

  2. Yet decentralisation of some aspects of energy, technology, innovation and competitiveness policy to cities & regions…

  3. But cities and regions are actively shaping energy transitions through strategic intermediaries…
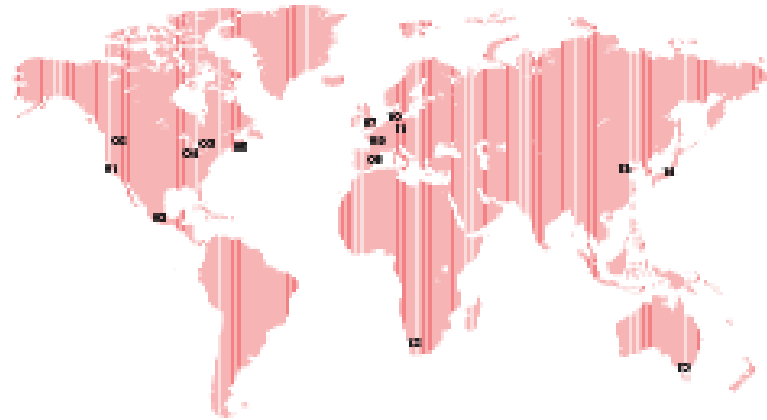
22 Cities Join Clinton Anti-Warming Effort

By [Juliet Eilperin]

Washington Post Staff Writer

Wednesday, August 2, 2006; Page A03

Twenty-two of the world's largest cities announced yesterday that they will work together to limit their contributions to global warming in an effort led by former president Bill Clinton…

"CITIES ARE THE REGION THAT IS REALLY GOING TO MATTER, THEY HAVE THE MAJORITY OF THE POPULATION, THEY HAVE THE MAJORITY OF THE ECONOMIC POWER, AND WHEN CITIES CHANGE THEIR MIND AND MOVE IN PARTICULAR DIRECTIONS, THEY HAVE A VERY BIG INFLUENCE"
DAVID RISSTROM, CITY OF MELBOURNE COUNCILLOR

"OUR ACTIONS CAN BE AN EXAMPLE TO OTHERS – IT IS UP TO MUNICIPAL GOVERNMENTS TO TAKE OWNERSHIP OF THIS CRITICAL ISSUE"
MAYOR GAVIN NEWSOM, SAN FRANCISCO

"THE DAY IS LONG PAST WHEN GOVERNMENT STOOD ON ONE SIDE OF ENVIRONMENTAL ISSUES AND PRIVATE ENTERPRISE ON THE OTHER – NOW WE UNDERSTAND THAT WE SHARE COMMON INTERESTS"
MAYOR RICHARD M. DALEY, CHICAGO

LOW CARBON LEADER: CITIES
01: SAN FRANCISCO
02: SEATTLE
03: MEXICO CITY
04: CHICAGO
05: TORONTO
06: NEW YORK CITY
07: LONDON
08: BARCELONA
09: PARIS
10: COPENHAGEN
11: BERLIN
12: CAPE TOWN
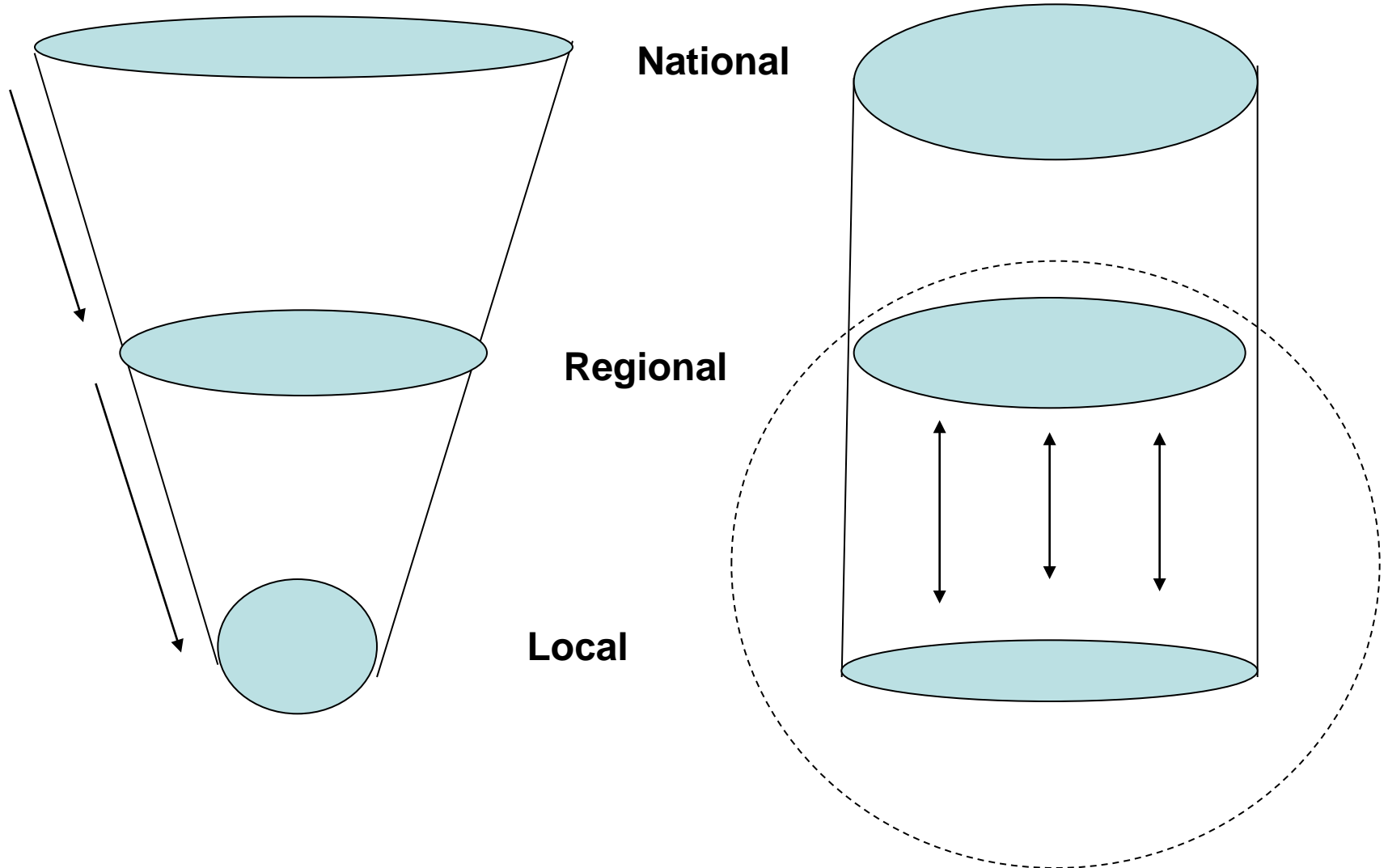13: BEIJING
14: TOKYO
15: MELBOURNE

2. Why cities, energy and transitions?

- Over 75% of energy consumption is related to cities and major city-regions.

- Cities are highly vulnerable to the impacts of climate change.

- Cities can implement novel socio- technical solutions that may be widely replicable.

- Networks of cities are working together on climate change.

- Selective cities targeted as key demonstrators for MNCs testing new energy systems.
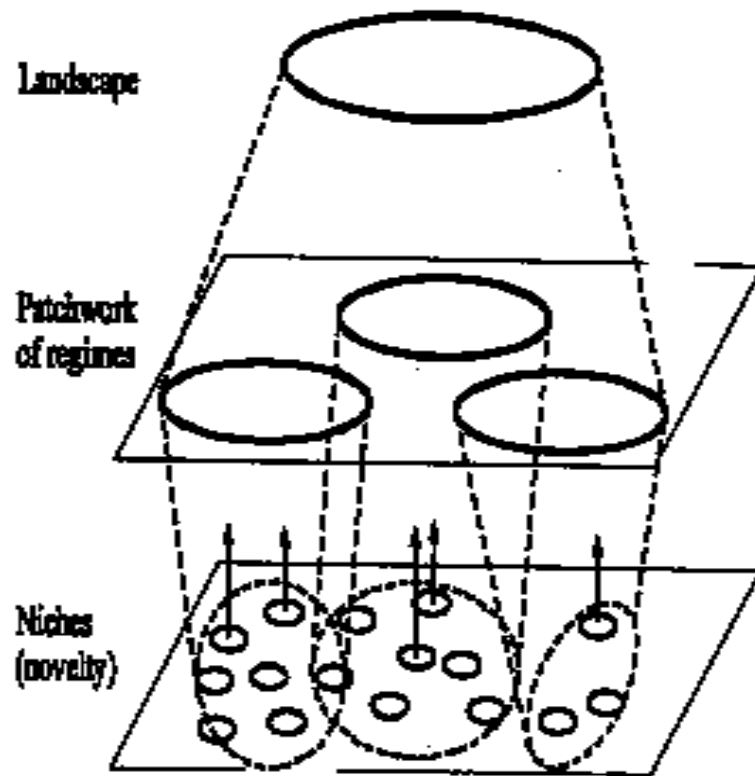
3. Role of Cities and Regions in Energy Transitions?

- What is the problem?

- Cities and regions in energy policy – 'sites for implementation' of national priorities… e.g. White Paper

- Cities and regions in innovation and technology policy – 'localism, competitive entrepreneurialism'

4. C/R as 'Sites' for National Policy, as Relatively 'Autonomous'…or 'Co-Producers'?

National

Regional

Local

5. Thinking through Transitions

Landscape (macro) – political cultures, economic growth, macro economic trends, etc

Regimes (meso) – incumbent technologies intertwined with configurations of institutions, practices, regulations etc, imposing a logic on socio-technical change

Niches (micro) – 'protected' spaces within which actors learn in various ways about new technologies and potential uses
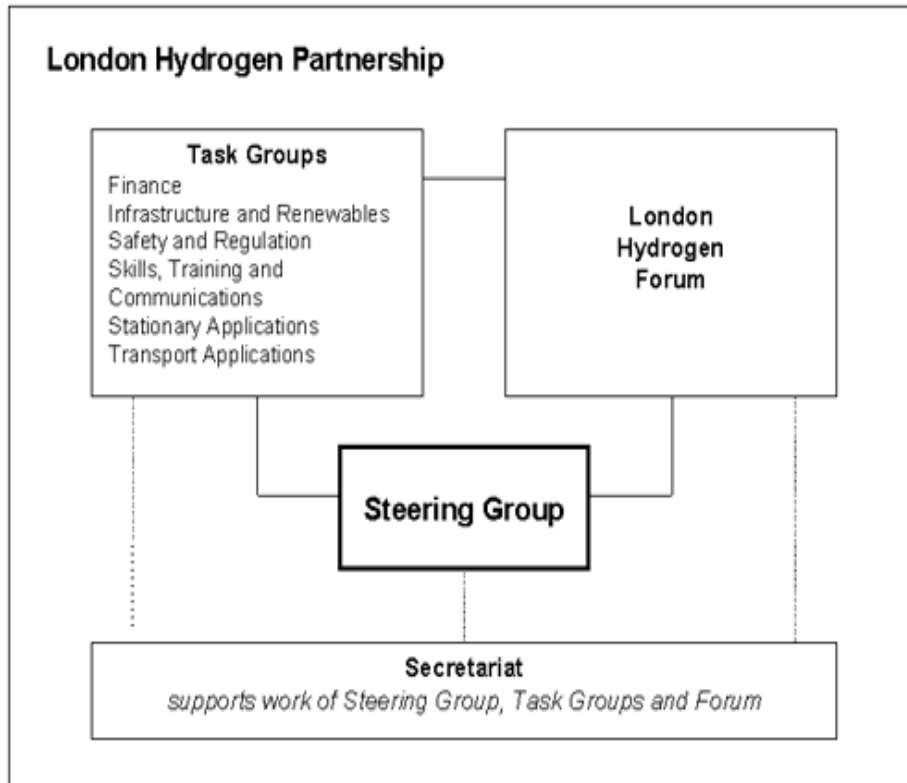
6. Transitions: where are C/R?

- In transitions approaches urban and C/R scale not addressed:

    - 'Re-emergence' CR - 'hollowing out' of national state through devolution up and down esp. for technology and innovations

    - Dominant discourse of CR race for economic competitiveness through technology.

    - Differential positioning of CR through economic, social and political relations.

    - Uncertainty about role of CR in environmental governance

    - CR actively shaping relations within and outside to shape TT.

7. Mediating between CR and TT

- Strategic intermediaries selectively shape views of the future through transitions in infrastructures and place…

  – Build selective social networks at various (international, national, regional, local) scales to manage transition processes within a context

  – Develop place-based visions & images of transitions in infrastructures

  – These are underpinned (sometimes implicitly) by assumptions about relationships between CR and transitions

  – Assumptions with differential consequences

8. Intermediaries

London Hydrogen Partnership

Task Groups
Finance
Infrastructure and Renewables
Safety and Regulation
Skills, Training and Communications
Stationary Applications
Transport Applications

London Hydrogen Forum

Steering Group

Secretariat
supports work of Steering Group, Task Groups and Forum

renew
TEES VALLEY LIMITED
new energy + recycling = new opportunities

9. Sensitising TT to CR?

- Bring back in politics, power and scale…

- Critical importance of

  1. Place-based visions - whose view inform (and are excluded) from visions?

  2. What governance interactions take place at which scales? And how are they 'held together'?

  3. Producing what consequences?

Transition Style	'Transformative Obduracy'	'Strategic Glurbanisation'
Exemplar	Teesside	London
Narrative/Vision	Develops **transformative** vision; addresses deindustrialisation and job losses adapting existing skills and knowledge base to potential of new economic possibilities, e.g. H.E.	2 (apparently contradictory) logics: a) 'progressive urban governance' ('internal' agenda on air quality, transport, noise, economic development) b) politics of world city in CO_2 emissions reduction ('external' agenda on relationships with corporates, supranational, world cities 'holding together' economy and environment
Who?	'Stitching together' internally	Strategically populating new institutions of London governance – proximity of relationships between London and 'national'. World cities 'by-passing' the national and working together and with corporates as showcases
Consequences?	**Obduracy** in 'national' perceptions of Teesside as industrial/demonstration site. Having the hydrogen economy 'done to it'	Differentially positioned – as 'national exemplar' - to other UK cities and regions. Permits conjunction of strategic localism and globalisation shaping urban development **Strategic glurbanisation**

11. Conclusions

- Crucial acknowledgement of differential positioning of CR in infrastructure transition
  - e.g. World City and Peripheral Region

- Critical role of strategic intermediaries in CR **actively** working between infrastructure transition possibilities and the local contexts within which transitions may occur.

- Further understanding of transition styles necessary
  - e.g. what would transitions look like in contexts of 'autonomous' regions, medium-sized cities, etc?

- Finally, challenge of 'looking across' styles to develop understanding of role of cities and regions in infrastructure transitions