Secure Urbanism and Resilient Infrastructure

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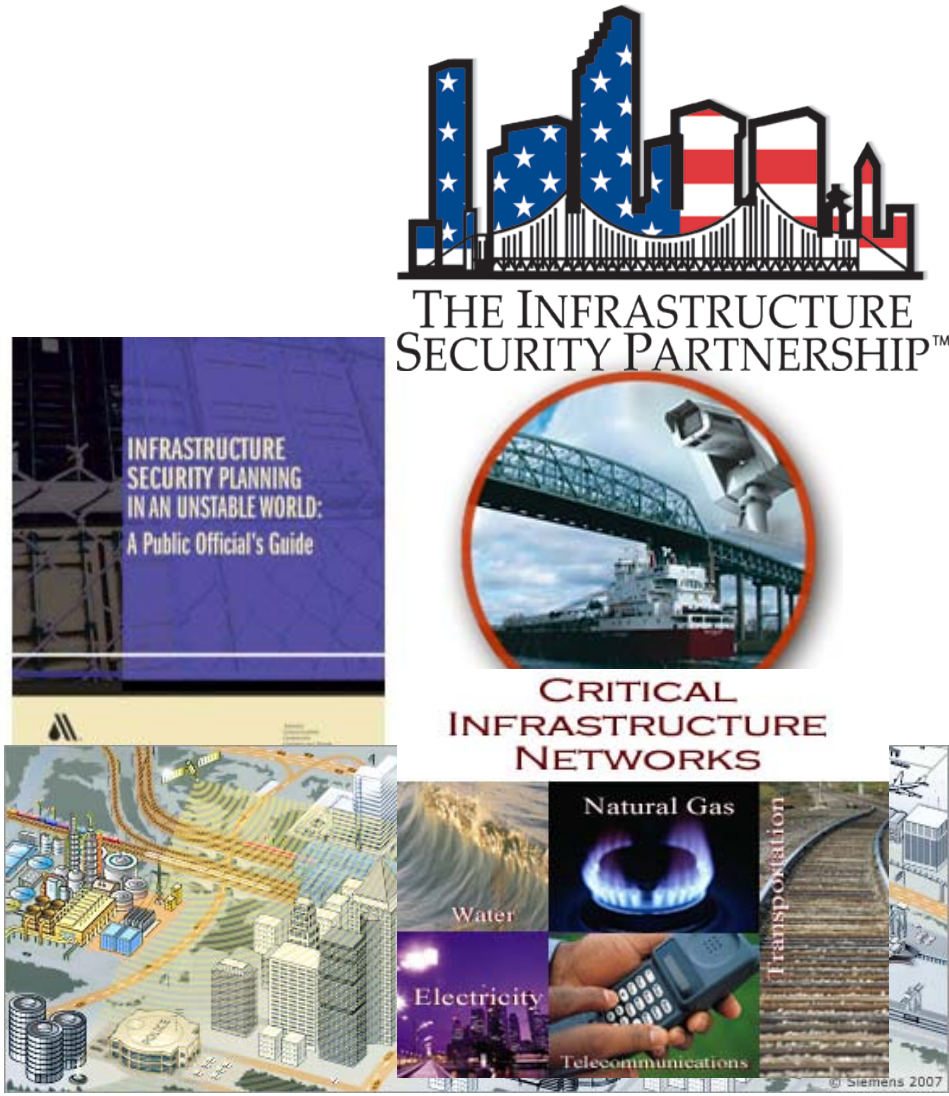
SURF

Context

- SURF – who are we?
- What are we interested in?
- Our argument
  - UES creates conditions under which cities & regions strategically attempt to secure resources necessary for their ecological & material reproduction – within this context ‘new’ styles of infrastructure provision emerging.

Intertwining of infrastructure and “ecological” security.

- Key national concern for infrastructure security.
  - The ‘threats’ to ‘critical’ national infrastructures (e.g. energy, transportation, waste, flood defence, etc):
    - attack from other states, individuals or groups
    - including bio terrorism
    - cyber terrorism
    - natural and man-made disasters (hurricanes, fires, flooding, etc)
    - maintaining levels of economic growth in a context of economic globalization and competitiveness
- Now overlaid by ecological questions in an era of resource constraint and climate change.
  - resource scarcity and the geopolitical consequences of this
  - multiple aspects of demographic shifts (migration, ageing population, etc.).
  - energy security
  - constraints on water resources
  - growth of diseases
  - Increased flood risks
- Critical issue for national governments is the ability to ensure secure & continued access to the resources needed to ensure their economic and social reproduction.
- How can access to infrastructure resource be guaranteed?



Cities are key sites of challenge and opportunity

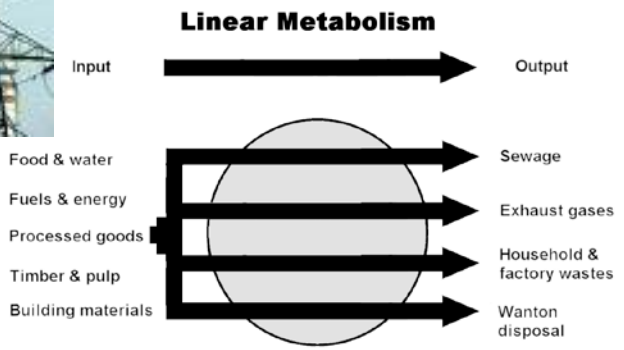
- **Changing relationship between national state & territory?**
  - KWS – national aspirations for spatial homogeneity
  - Competition state - new (uneven) state spaces & competition between places in the knowledge economy
  - Eco-state? Over-layering ecological questions, resource constraint and security of supply to competition between places

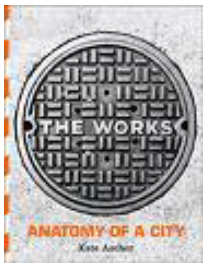
- **Cities as Producers of CC**
  - Approx 50% of world population live in cities (60% by 2030).
  - Consume 75% of world energy - responsible for 80% GG emissions.
  - Cities drivers of regional and national economies.

- **Cities as Victims of CC**
  - The effects of climate change are often more keenly felt in cities
    - Rising sea levels & flooding - mega-deltas of Asia & Africa.
    - Urban Heat Island effect.
    - Reducing water availability in regions supplied by meltwater from major mountain ranges (Himalayas, Andes, Rockies).

- **Cities as Potential Contexts of Response**
  - Innovative contexts to address CC – through experimentation, concentration of resource, novel approaches
  - Cities – and more generally local governments – closer to lives on the ground & contexts for the implementation of change.

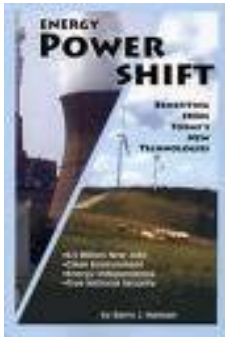
- How to manage 'economic growth' and 'ecological constraint' – how to try and achieve Urban Ecological Security?





Cities are developing systemic transitions in their infrastructure.

- Challenges in developing a notion of urban transitions
  - Recognising the redistribution of responsibilities across scales
  - Pressures to reshape infrastructure as new targets passed to regions and city-regions.
  - New decentralised technologies.
  - Consider demand management along side supply options.
  - New coalitions of social interests coalescing around cities and regions
  - Pressure for development of long-term vision and transitions for infrastructure and places.

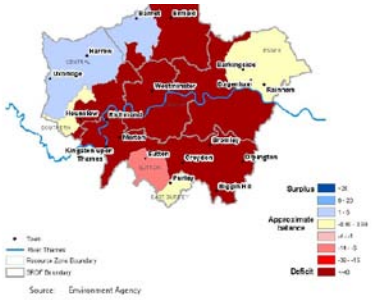


Secure Urbanism and Resilient Infrastructure:
Urban Responses to UES

- New ‘styles’ of infrastructure provision
  - Protection
  - Autarky
  - Global urban agglomerations

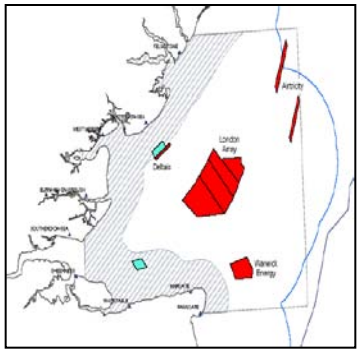
Style 1: Ensuring Protection

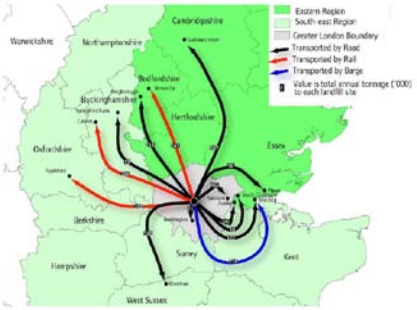
- Ensuring strategic protection of cities from the impacts and effects of CC & associated resource constraints
- Central to such strategies - systemic understanding of the city-specific and long-term effects of climate change. Especially in relation to:
  - flood risk and temperature rise and the development of systemic responses through strategic flood protection, green infrastructure and retrofitting.
- Emblematic of such responses is the positioning of central government by the GLA to take responsibility for the potential investment required to protect London post-2030 from climate change induced flooding.

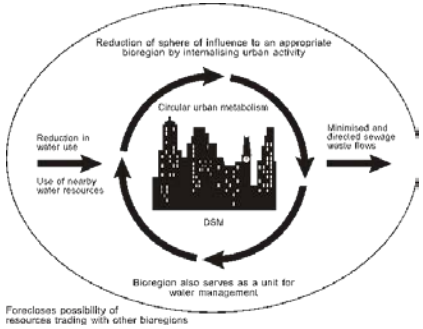


Style 2: Building Autarky

- Building autarky – close cities, boundaries, enclaves - in supply of water & energy, the mobility of people and goods & disposal of wastes.
- Cities seeking to re-internalise resource endowments and create the re-circulation of wastes as they withdraw from reliance on international, national and regional infrastructures.
  - New York's strategy of energy independence
  - Recent doubling of energy targets in London
  - Melbourne's development of renewable powered desalination.
  - Cities are attempting to reduce reliance through:
    - water and energy conservation
    - waste minimization schemes
    - developing pricing mechanisms for car based mobility
    - reducing reliance on 'external resources'







Style 3: Developing Global Urban Agglomerations

- New urban agglomerations and collaborations.
  - C40 - CCI
  - Mobility systems
  - Retrofitting
  - Standards, purchasing, expertise

- By-passing – regional and national
  - government joining in a "carnival of debate" and doing too little.
  - ‘The fight to tackle climate change will be won or lost in cities. Whatever the discussions between our national governments, as cities we are not waiting for anyone else to move first’ (Mayor of London, C40 Summit, New York, 2007).
  - ‘Mayors are in the doing business’ (Bill Clinton).

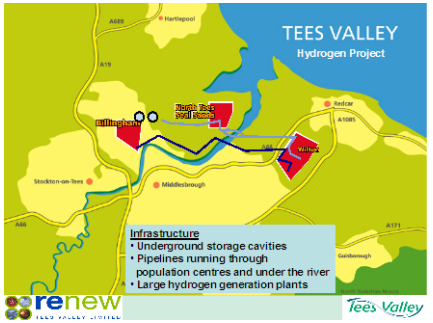
- Not just collaboration but competition
  - Race between world cities

The Race to ‘Guarantee’ UES:

Differences in cities’ capacity to reshape their infrastructures

- The Race amongst cities to become ‘the greenest city on the planet’. World cities are clearly ‘ahead of the game’ – developing systemic strategies for infrastructure to attempt to ‘guarantee’ growth.
- Uneven capacity to reshape infrastructure - Implications for other cities?
- Normal cities – restricted capacity to shape infrastructure – generally ‘making do’ or ‘imposed’ transitions
- Southern cities – absence of infrastructure plus new fixes such as “Dontang” as exemplar for ‘periphery of mega cities’
- Alternatives that point to a “different way” e.g. Transition Towns

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



Potential Implications of UES?

How do world cities "visions and expectations" become translated into action that has material consequences?

1. From "competitive city" to "eco-competitive city"?

- Does ecological pressures reinforce the existing urban hierarchy…?
- Will cities "compete" on their ability to overcome constraint through guaranteeing resource reproduction?
- Can world cities produce new configurations and lead greenness – and what does that materially produce?

2. From "sustainable city " to "secure urbanism"?

- Is there a narrowing of the local sustainability agenda with a sharper economic and competitive focus
- Do new stakeholders – corporates and networks of world cities – dominate framing of problem and solutions?
- Are these interests piloting new models of reproduction ?

3. From "vulnerable" to "resilient infrastructure"?

- Is this a strategic response of systemic enclosure of ecological resource – building spatial autarky and political disconnection?
- Does the parallel response of building new global urban connections – mobilities, testing and political relationships inevitably selective?
- Does this prioritise of intra-urban and inter-urban connections within and between world cities?

Key Issues & Next Steps

A series of propositions that need critical analysis:

- Are we now talking about new secure “archipelagos” of world cities developing systemic socio-technical change? What are the benefits for these cities?

- What about other cities – by-passed, imposed? Where and which voices are missing?

- How can alternative be developed? Where are the debates about the “responsibilities” of world cities, mutual interdependencies, fair shares, environmental justice, collective solutions?