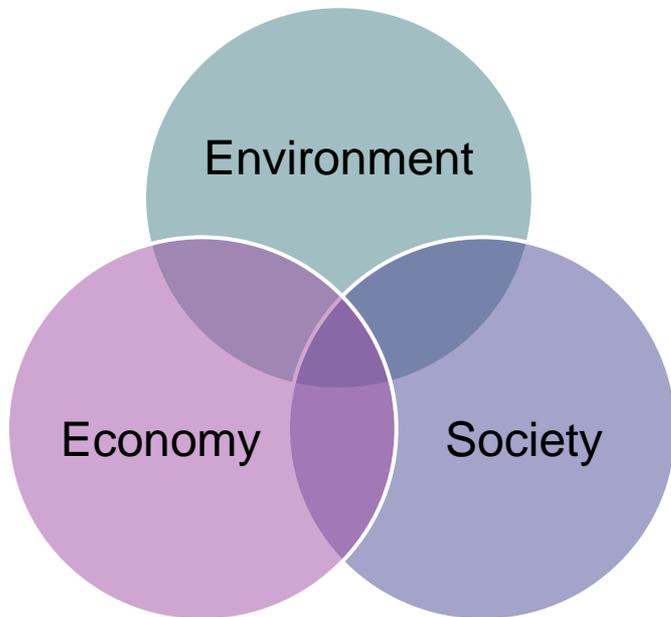


SUSTAINABLE CITIES AND CLIMATE CHANGE

Professor Harriet Bulkeley, Durham University,
UK

Cities and the new 'sustainability'



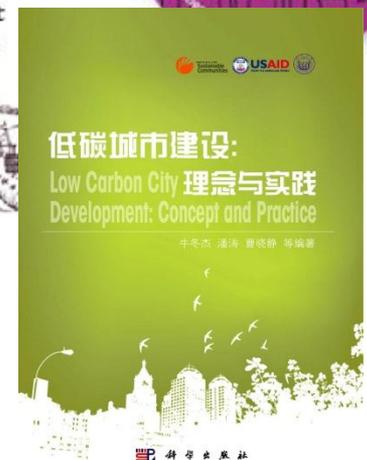
Resilient
Cities *series*

ICLEI
Local
Governments
for Sustainability



TRANSITION CULTURE

an evolving exploration into the head,
heart and hands of energy descent



The urban climate change challenge

Vulnerability/Resilience

- Urban experience of climate risk – cities places in which vulnerability to climate change is significant
- Potential hazards include; coastal flooding; heat waves; potential water supply problems; disease

Emissions/Mitigation

- Urban production of climate risk - cities a key site within which greenhouse gases are produced
- An 'urban world' – concentration of people, industry, energy consumption in cities



Climate change and urban sustainability

- Responding to climate change is essential for urban sustainability, but is not the only issue in town
- Climate change actions have multiple possible ‘co-benefits’ – urban response has often focused on these issues rather than directly on climate change
- Urban climate change agenda started in 1992, increasingly complex, diverse agenda with many 1000s cities involved
- Forms of **municipal voluntarism** dominate urban responses – small scale, voluntary, limited mandate
- Increasingly climate change is a matter of **strategic urbanism** – global cities and those with specific vulnerabilities – integrated economic & social development

What is driving urban responses?

Multilevel Governance

Vertical:
international and national arenas
mandate, resources
and political support

Horizontal:
transnational
networks and
agencies provide
learning, resources,



Thane, India: ICLEI have played a key role in promoting the city's low carbon energy approach

What is driving urban responses?

Intermediaries and Partnerships

Multiple interests engaged in urban infrastructure networks and service provision

Neither private nor public actors can govern alone; intermediary organisations and partnerships create



London, UK: Community Draught Busters, part of the Low Carbon Zone a partnership between the GLA, Lambeth Borough Council and Transition Town Brixton

What is driving urban responses?

New Climate Economies

Climate finance –
voluntary and
compliance
carbon markets

Climate risks –
potential costs of
disaster vs. DRR

Green Economy –
new areas of
economic growth
attract new actors



Cape Town, South Africa: renewable energy projects funded by CDM in Kuyasa

What is driving urban responses?

Experimentation

Municipalities, private and civil society actors seek to demonstrate, experience, learn and challenge what it might mean to respond to climate change through a multiplicity of interventions, projects and schemes - these are not one off schemes, but a way of governing complex



Cooler
Block Contest



**Climateers Ambassador
Experiential Programme**

**Sai Kung &
Wan Chai
District**



Thane, India, Philadelphia, US, Melbourne, Australia, and Hong Kong: multiple innovations with climate change response

What are the challenges?

- Lack of comparable data and evidence of improved resilience – draws attention to the need for knowledge, but limited evidence this is key barrier
- Barriers – capacity, resources, politics (interests vested in continued vulnerability and high carbon society) and ‘lock in’ of socio-technical systems
- Potential – increasingly strategic issue, public and private actors committed to action, innovation potential, rapid urban development and infrastructure provision



Enabling Transformation

Need to move from a focus on *institutional* change (good governance, planning, municipal goals) to *urban* change (in the fabric, infrastructure and politics of the city)

New imperatives for policy intervention

Urban Infrastructure

- Systems and services
- Investment
- Governance
- Access
- Innovation

Climate Justice

- Common but differentiated responsibilities
- Recognition of inequalities as starting point for meeting climate rights
- Participation in determining climate changed urban futures

Key Lessons for Policy

- Climate change has been a strong mobilising force for cities to act on the broad agenda of sustainability
- Specific urban networks, goals and approaches have been required to realise this potential – in an enabling multilevel governance context
- Institutional change is not sufficient – political and infrastructural change is needed
- This requires *strategic intervention, intermediation & experimentation* by multiple urban actors together
- Ensuring *climate justice* must be at the heart of any response

An Urban SDG

- These findings tend to support the view that there should be a specific Urban SDG
 - Urban responses do not cascade down: they have their own momentum that needs to be realised
 - Urban responses require co-operation within/between cities and by multiple actors – avoid fragmentation
 - Ensuring urban potential for innovation and experimentation is harnessed
 - Supporting resilience and low carbon transition requires working across different infrastructure systems and services – this co-ordination could be lost

Climate change in an Urban SDG

- Any Urban SDG should have responding to climate change as a key part of its goals
 - ▣ Current proposals focus on reducing vulnerability, enhancing resilience, enhancing renewable energy provision and promoting energy efficiency – each has merit, but also risks fragmenting the agenda
 - ▣ Development of these proposals could specifically task governments to ensure that cities put in place plans to address climate change in line with their ‘common but differentiated’ responsibilities
 - ▣ Further, they could require cities to ensure that climate justice is adequately taken into account in the development of new urban developments, infrastructure and services

Urban Worlds

Department of Geography

Harriet Bulkeley, Andres Luque, Simon Marvin, Jon Silver

- ▣ https://www.dur.ac.uk/geography/urban_worlds/
- ▣ <https://www.dur.ac.uk/geography/staff/geogstaffhidden/?id=929>
- ▣ E-mail: h.a.bulkeley@durham.ac.uk

References

- Bulkeley, H. (2013) *Cities and Climate Change*, Routledge, London
- Bulkeley, H., Luque, A. and Silver, J. Housing and the (re)configuration of energy provision: making space for a progressive urban climate politics? *Political Geography* (in review)
- Bulkeley, H., Carmin, J., Castán Broto, V., Edwards, G. A., Fuller, S. (2013) Climate justice and global cities: Mapping the emerging discourses, *Global Environmental Change*, Available online 25 June 2013
- Bulkeley, H. and Castán Broto, V. (2013) Government by experiment? global cities and the governing of climate change. *Transactions of the Institute of British Geographers*, 38: 361-375
- Bulkeley, H. and Betsill, M. M. (2013) Revisiting the urban politics of climate change. *Environmental Politics* 22 (1): 136-154.
- Bulkeley, H., Castan Broto, V., Hodson, M. and Marvin, S. (eds) (2010) *Cities and Low Carbon Transitions*, Routledge, London
- Hodson, M., Marvin, S. and Bulkeley, H. (2013) The Intermediary organisation of low carbon cities: a comparative analysis of transitions in Greater London and Greater Manchester *Urban Studies* 50 1401 – 1420
- Hodson, M. and S. Marvin (2009) 'Urban Ecological Security': A New Urban Paradigm? *International Journal of Urban and Regional Research* 33(1): 193-215.
- Hodson, M. And Marvin, S. (2010) *World Cities and Climate Change: producing urban ecological security*, Milton Keynes: Open University Press.