

## Adaptation: a comparative analysis

Dr Darryn McEvoy

Global Cities Research Institute, RMIT University

IVM, Vrije Universiteit, Netherlands

ICIS, University of Maastricht, Netherlands

CURE, University of Manchester, UK

Canberra  
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## The ADAM project

- 3 years lifetime (03/06 – 06/09)
- 11 Work packages (2 specific to adaptation)
- 13m € funding
- 26 partner institutes from 15 countries (NL 5, DE 3, UK 3, CH 2, FR 2, IT 2, SE 2, AT, BE, ES, HU, NO, PL, CN, IN)
- 120 researchers

[www.adamproject.eu](http://www.adamproject.eu)



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## Institutional adaptive management

- Tourism (Guadiana region)
- Drought and transnational institutions (Guadiana)
- Flooding (Tisza river basin)
- Desertification and sustainable livelihoods (Inner Mongolia)
- Insurance (non-geographical)
- Heat stress (London)
- Strategic planning and urban design (3 cities)



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## Key developments

1. Increasing scientific consensus of human contribution to a changing climate;
2. Shift of focus from impacts to risk management;
3. Need to consider non-climate stressors;
4. Recognition of the need for greater inter-disciplinary working;
5. Renewed efforts to bridge the gap between science and policy.

*As the policy debate moves from one of problem-framing to one more concerned with implementation; detailed political, ethical, social and normative analysis becomes increasingly important!!*



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## Why is urban adaptation important?

- Where most people live and work;
- Infrastructure has a long life expectancy (issue of retro-fitting);
- With new development, possibility of technological 'lock in';
- Long lead in time for transition due to institutional complexity of urban regimes.



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## Content of presentation

### Reflect on:

The assessment of climate-related risk in three EU cities (including risk perception and its influence on decision-making processes), examples of adaptation best practice, and importantly, the role of institutions in supporting the implementation of measures.

### Aiming to:

Highlight the underlying conditions and processes that enable best practice to occur, to identify some of the key barriers that may hinder the translation of theory into practice, as well as the building of adaptive capacity in existing urban regimes.



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## The three case studies: London, Manchester, Berlin

- Differing geographical locations;
- Differing systems of governance;
- Subject to urban development and restructuring;
- Ongoing policy / research initiatives;
- Cities of Northern Europe with architecture potentially ill suited to future climatic conditions.



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## London

- World mega-city
- Projected to experience significant population growth
- Operates administratively as a region



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## Greater Manchester



- World's first industrial city
- Relatively stable population total but changing urban fabric over past two decades
- 10 metropolitan borough councils



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## Berlin

- Reunified in 1990
- Considerable redevelopment activity since this time
- German capital city and one of 16 States



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## Risk and adaptation: London

- Considered at risk from multitude of climate-related hazards



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## Risk and adaptation: London

- Subject to wide range of scientific modelling and risk assessment initiatives
- Substantial knowledge base has translated and disseminated for use by policy and practitioner communities e.g. Checklist for Development
- Comprehensive adaptation strategy was introduced in 2008 (risk based approach: prevent, prepare, respond, recover)
- Thames Estuary 2100: next generation flood risk management options



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### Adaptation drivers: London

- Perception of being at risk from a multitude of climate-related hazards (informed by scientific evidence base);
- Recent experience of extreme events;
- National policy drivers emanating from the national level which require explicit consideration of climate change;
- Local statutory duties such as the need to produce a health inequalities strategy;
- The desire of the city to retain its position of influence as a world city;
- The commitment / leadership of Mayor in addressing environmental and climate issues.



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### Risk and adaptation: Greater Manchester

- Considered at less risk (urban flooding of particular concern);
- Lack of strategic approach;
- Counter-balance: subject to recent and ongoing research projects: e.g. ASCCUE (risk assessment methodology);
- Local advisory group / hosting of workshops;
- Knowledge in support of regional climate change unit.



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### Adaptation drivers: Greater Manchester

- Institutional fragmentation
- Science as a major influence in changing practice (Green and Blue Space Adaptation for Urban Areas)

#### ASCCUE:

- Involvement of an NGO as stakeholder champion
- National Steering Group
- Local Advisory Group
- Informal interactions with local stakeholders
- 'Risk and adaptation' stakeholder workshops (collaborative learning environment)



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### Risk and adaptation: Berlin

- Lowest perception of risk, adaptation as marginal issue;
- Decision-making relies on relatively coarse-level impacts data;
- Policy focus remains strongly on mitigation;
- Evidence of recent change: 'Klimaschutzbeirat' (Committee on Climate Protection), KomPass (Centre for Competence for Climate Impacts), and Mayor's declaration in 2008.



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### Adaptation drivers: Berlin

- Perception of low vulnerability (climate threats are less obvious)
- Little recent experience of extreme events
- Risk information is limited and not considered suitable for end users
- Culturally and ideologically predisposed to mitigation efforts
- Lack of political commitment to adaptation



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### Synthesis

- Interview dialogues suggest policy and informational advances (to differing degrees);
- London furthest up the adaptation 'ladder' (risk perception influencing behaviour);
- Best practice sparse - greenspace an exception - though complexity of issue obscures evidence;
- Much remains confined to single issue silos, yet to be integrated within climate change discourse (need to 'drill' down to operational level);



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## Synthesis (2)

- Importance of adaptation as a process;
- Different rungs of adaptation 'ladder':
  - 1) recognising risk (personal experience, scientific data)
  - 2) willingness to respond (attitude to risk, policy drivers, leadership)
  - 3) capacity to respond (access to information in suitable format, knowledge transfer, enabling policy framework)



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## Synthesis (3)

- 4) importance of adaptation as a learning process (information into usable knowledge, peer to peer platforms for interaction, mechanisms to facilitate communication across different practitioner communities, new ways of working between scientists, policy-makers and other stakeholders)
- 5) sustaining action in the longer term (clarification of roles and responsibilities, enabling policy framework, closer integration with the sustainable development agenda)



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## Barriers

- Complexity of the climate change, and adaptation issue - multi-scalar, multi-sector, multi-actor, and at some point in the future;
- Reframing of single issue management responses, and their greater integration with ongoing climate change discourse remains at an embryonic stage;
- Socio-physical complexity of urban systems - *'shaped by many players with competing priorities, as well as by physical and technical infrastructure'*;
- Critical nature of 'learning to adapt'.



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