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# CENTRE FOR URBAN & REGIONAL ECOLOGY

## **Annual Report 2010-2011**

*v0.1*  
05-08-11

**CENTRE FOR URBAN & REGIONAL  
ECOLOGY,**

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# Centre for Urban & Regional Ecology

## Annual Report

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# **1. Centre History and Themes**

Since 2000 the Centre for Urban & Regional Ecology has been working on 'sustainable city-regions' – the challenge of steering our behaviour, settlements and landscapes towards more sustainable futures.

Based in the School of Environment and Development at the University of Manchester, CURE carries out multidisciplinary research, both for scientific understanding and for practical application. CURE draws its expertise mainly from the disciplines of spatial planning, geography, environmental science, policy studies and systems studies.

Reflecting the rapidly developing nature of the research area, CURE also continues to respond to the changing science-policy nexus. Clearly the priority of environmental issues has increased in the last decade: but so have the scale of the risks and the challenges. The concept of integrated city-regional policy and governance has continued to develop: there are more sophisticated tools and evidence bases to help in this, but also more realism about what is possible.

## **CURE research agenda, themes and approaches**

The common theme is that of ecology – encompassing the organisation and interactions of the natural and human environments at multiple scales. This research agenda is applied across five main research themes, with many overlaps and synergies:

- **Spatial planning and urban-rural links:** spatial planning and policy: capacity building and adaptive learning; ICT applications, peri-urban and rural links: environmental impact assessment.
- **Climate change emissions and responses:** urban and regional emissions modelling with scenarios and policy studies: climate change mitigation: institutional and governance studies.
- **Climate change impacts and adaptation:** adaptation strategies and opportunities: resilient communities, cities and processes.

- **Landscape, land-use & restoration:** land-use change and landscape impacts: land restoration and reclamation: urban socio-cultural capital.
- **Urban environments and human ecology:** resource flows and urban metabolism: green and blue infrastructure: water resource and flooding issues: air quality and public health.

Within these themes CURE also specialises in the application of innovative research strands, i.e. an approach to complex problems which combines theory with methods and tools. These include: *foresight and future studies*; *adaptive learning and assessment*, *ICT and geographic information systems*; *systems and complexity studies*; and *risk and resilience*.

In combining these themes and approaches we aim for active links between theoretical and practical applications. Figure 1 outlines the range of research themes and approaches which are brought together by CURE.

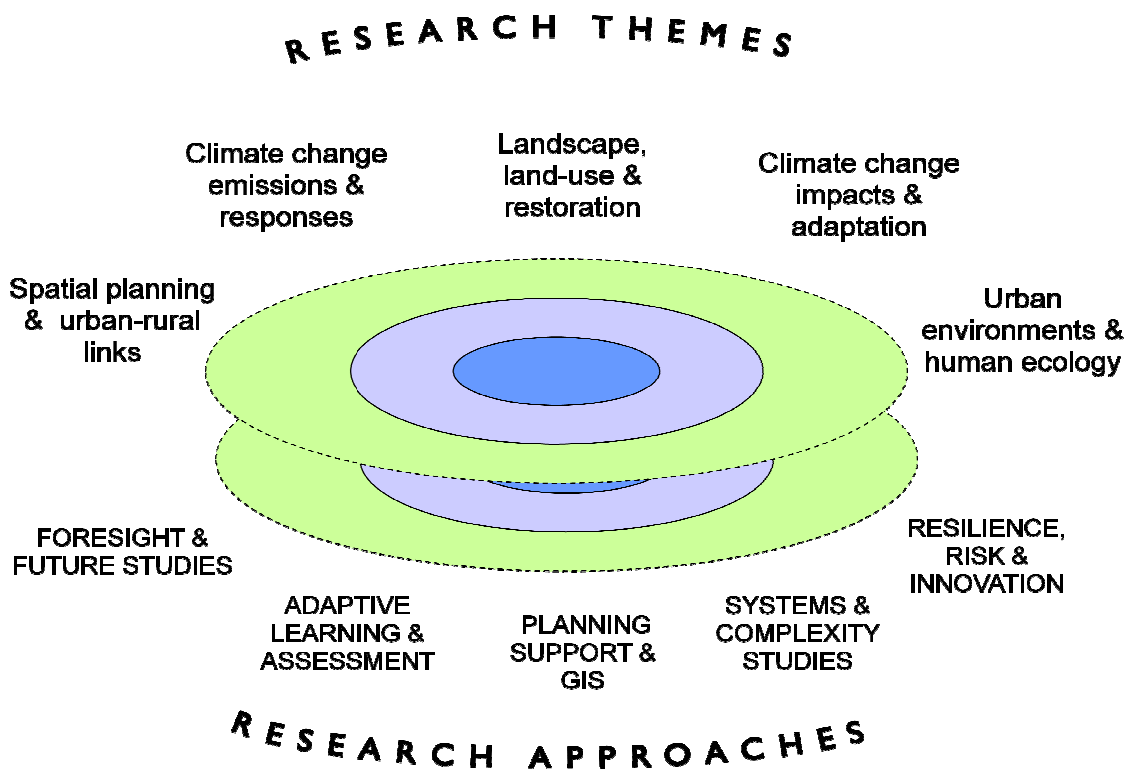


Figure 1: Research Themes and Approaches

## 2. Membership and Structure

The centre is overseen by the *SED Research Committee*, to which it reports on an annual basis. This is in the form of a report detailing the Centre's research activities and finances in the preceding and forthcoming years. The centre itself is managed through a *Management Board*, comprising the Executive Director and Co-Directors. The Management Board meets on a regular basis to develop strategy, oversee ongoing Centre projects and to offer support and assistance to the Executive Director in his management of the day-to-day aspects of CURE activities.

### **Director:**

Iain White (Planning)	<a href="mailto:iain.white@manchester.ac.uk">iain.white@manchester.ac.uk</a>
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### **Co-Directors:**

Joe Ravetz (Planning)	<a href="mailto:Joe.ravetz@manchester.ac.uk">Joe.ravetz@manchester.ac.uk</a> ,
John Handley (Planning)	<a href="mailto:john.handley@manchester.ac.uk">john.handley@manchester.ac.uk</a>

### **Academic Staff:**

Sarah Lindley (Geography, also Environmental Processes Research Group)	<a href="mailto:sarah.lindley@manchester.ac.uk">sarah.lindley@manchester.ac.uk</a>
Philip Bell (Planning)	<a href="mailto:philip.bell@manchester.ac.uk">philip.bell@manchester.ac.uk</a>
Joanne Tippett (Planning)	<a href="mailto:joanne.tippett@manchester.ac.uk">joanne.tippett@manchester.ac.uk</a>
Ian Douglas (Emeritus Prof.)	<a href="mailto:ian.douglas@manchester.ac.uk">ian.douglas@manchester.ac.uk</a>
Clive George (Visiting Senior Fellow)	<a href="mailto:clivegeorge@btinternet.com">clivegeorge@btinternet.com</a>
James Rothwell (Geography)	<a href="mailto:James.rothwell@manchester.ac.uk">James.rothwell@manchester.ac.uk</a>
Richard Kingston (Planning also CUPS)	<a href="mailto:richard.kingston@manchester.ac.uk">richard.kingston@manchester.ac.uk</a>

### **Research Staff:**

Jeremy Carter	<a href="mailto:jeremy.carter@manchester.ac.uk">jeremy.carter@manchester.ac.uk</a>
Seb Carney	<a href="mailto:sebastian.carney@manchester.ac.uk">sebastian.carney@manchester.ac.uk</a>
Graeme Sherriff	<a href="mailto:graeme.sherriff@manchester.ac.uk">graeme.sherriff@manchester.ac.uk</a>
Gina Cavan	<a href="mailto:gina.cavan@manchester.ac.uk">gina.cavan@manchester.ac.uk</a>
Aleksandra Kazmierczak	<a href="mailto:aleksandra.kazmierczak@manchester.ac.uk">aleksandra.kazmierczak@manchester.ac.uk</a>
Nigel Lawson	<a href="mailto:nigel.lawson@manchester.ac.uk">nigel.lawson@manchester.ac.uk</a>
Emily Prestwood	<a href="mailto:emilyprestwood@aol.co.uk">emilyprestwood@aol.co.uk</a>
Andrew Hoolachan	<a href="mailto:Andrew.hoolachan@manchester.ac.uk">Andrew.hoolachan@manchester.ac.uk</a>
Christopher Kenny	<a href="mailto:Christopher.kenny@manchester.ac.uk">Christopher.kenny@manchester.ac.uk</a>

## Research Students:

This includes students where CURE staff members are first or second supervisors.

### Research Students of Dr Iain White

Name	Staff Role	Discipline
Aponte-Gonzalez, Felix	Main Supervisor	Planning and Landscape
Gilbert, Abigail	Main Supervisor	Planning and Landscape
Strosnider, Daniel	Main Supervisor	Planning and Landscape

### Research Students of Dr Sarah Lindley

Name	Staff Role	Discipline
Skelhorn, Cynthia	Main Supervisor	Geography
Anna Molter	Co- supervisor	Medicine
Bachir Ismael Ouedraogo	Co-supervisor	MACE/SCI
Speak, Andrew	Main Supervisor	Geography

### Research Students of Mr Joe Ravetz

Name	Staff Role	Discipline
Miedzinski, Michal	Main Supervisor	Planning and Landscape
Zhou, Kai	Second Supervisor	Planning and Landscape

### Research Students of Mr Richard Kingston

Name	Staff Role	Discipline
Aponte-Gonzalez, Felix	Second Supervisor	Planning and Landscape
Owiunji, Isaiah	Second Supervisor	Planning and Landscape
Pineda Zumaran, Jessica	Second Supervisor	Planning and Landscape
Zhou, Kai	Main Supervisor	Planning and Landscape
Ziafati Bafarasat, Abbas	Second Supervisor	Planning and Landscape

### Research Students of Dr James Rothwell

Name	Staff Role	Discipline
Shuttleworth, Emma	Second Supervisor	Geography
Speak, Andrew	Second Supervisor	Geography

### Research Students of Dr Philip Bell

Name	Staff Role	Discipline
Strosnider, Daniel	Second Supervisor	Planning and Landscape

### Research Students of Dr Joanne Tippett

Name	Staff Role	Discipline
Astbury, Janice	Second Supervisor	Geography

Crawshaw, Julie	Main Supervisor	Sustainable Consumption
Kolodziejski, Ann	Second Supervisor	Planning and Landscape

### Honorary fellows

Name	Title	Duration of appointment	Email
Stephan Pauleit	Honorary Senior Fellow	From 2009	<a href="mailto:sp@kvl.dk">sp@kvl.dk</a>
William Sheate	Honorary Senior Fellow	From 2007	<a href="mailto:w.sheate@cep.co.uk">w.sheate@cep.co.uk</a>
Susannah Gill	Honorary Fellow	From 2007	<a href="mailto:susannahgill@merseyforest.org.uk">susannahgill@merseyforest.org.uk</a>

## 3. Main Achievements

The success of CURE in attracting long term research grant income has meant there has been less pressure on securing new funding with an emphasis on delivering existing and ongoing projects. Therefore CURE has been able to retain and recruit research staff despite uncertainty over cuts in research funding.

The high level of research activity has both generated data for high quality research outputs and enabled CURE staff to achieve research impacts and esteem. Over the last 12 months staff connected with the centre have brought in **10** new research grants worth **£971,473** and delivered **41** major academic publications (books, journal papers or book chapters). A selection of the successful grant applications, publications, knowledge and esteem activities are detailed below.

### Success in grant applications

**Lindley, S., Tippett, J. and Cavan, G.** 2010-13 [Climate Change & Urban Vulnerability in Africa \(CLUVA\)](#). **£340,000** (total award 3.5m Euros). 13 partners, 6 in Africa. SL the Manchester PI leading Task 2.2 on urban ecosystems and contributing to overall project management 2010-11 Justice, Vulnerability & Climate Change:

**Kingston R.** has gained funding from the EU Policy Support Programme for the project – ‘Smart Metropolitan Areas Realised Through intelligent People (SMARTiP)’ 2010-2012. **£325,733** (shared with MBS) (total award 2.2m Euros)

**Carter, J., White, I, Handley, J, Lindley, S:** Dutch Govt and research institutes: Climate Proof Cities. **£202,000** (total award 6.75m Euros) – Project Duration: 2011 – 2014. This research programme aims at "strengthening the adaptive capacity and reducing the vulnerability of the urban system against climate change and to develop strategies and policy instruments for adapting our cities and buildings". The project is funded by the Dutch government, the business community and scientific research institutes and Manchester are an expert foreign research partner.

**Ravetz, J.** National Research Foresight Exercise for the Republic of Mauritius, in collaboration with the Manchester Institute of Innovation Research. **£42000**

**Lindley, S.** Justice, Vulnerability and Climate Change **£40000** (W/ PI Prof John O'Neill, SoSS) for the Joseph Rowntree Foundation. Project brings together ethical and empirical analysis of distribution of vulnerabilities to climate change. SL (Co-I) led empirical analysis of geodemographic and urban morphological data.

**White, I.:** Forest Research: Brownfield Land Regeneration **£8000** – Project Duration: 2010 – 2011. This project helps to fund a PhD concerning developing a process to increase the sustainable redevelopment of brownfield land.

**Tippett, J.** Based on earlier research funded by the Sustainable Consumption Institute, we have reached agreement to work with the Ellen Macarthur Foundation to develop graphics and learning resources for teaching sustainability, worth **£6,000** support in a Phase One project. Further work is to be agreed in Sept, 2011, to take the shape of a pilot training programme in Sept.2011 – May 2012 with the Foundation and founding partners: CISCO, B&Q, Renault, BT and National Grid.



**Cavan, G.** (with J. McMorrow and J. Ayles). **£3740** SED Research Stimulation Fund: Wildfire risk management scoping project. 2011

**White, I.** (with P. O'Hare, M. Lombard and A. Stein). **£3000:** SED Research Stimulation Fund: Climate Change adaptation. 2011

**Tippett, J.** **£1000:** Taking a RoundView - Learning and development to accelerate institutional, cultural and behavioural change towards sustainability. 2011

## **Selected major publications**

### **Books**

**Douglas, I.** Goode, D., Houck, M. and Wang, R.S. (2011) *Routledge Handbook of Urban Ecology*, London: Routledge.

### **Journal articles**

Potter, K., Ward, S., Shaw, D., Macdonald, N., **White, I.**, Butler, D. and Kellagher, R. (In Press) Engineers and planners – the role of partnerships in pursuing sustainable water management objectives, *Engineering Sustainability*.

**White, I., Kingston, R.** and Barker, A. (2010) Participatory GIS and Public Engagement within Flood Risk Management, *Journal of Flood Risk Management*, 3 (4) pp 337-346.

**Douglas, I.**, Garvin, S., **Lawson, N.**, Richards, J., **Tippett, J.** and **White, I.** (2010) Urban pluvial flooding: a qualitative case study of cause, effect and non structural mitigation. *Journal of Flood Risk Management* 3: 112-125.

Smith, C. L., Webb, A., Levermore, G. J., **Lindley, S. J.**, Beswick, K. "Fine-scale spatial temperature patterns across a UK conurbation." *Climatic Change*(2011) .

A. Mölter, **S. Lindley**, F. de Vocht, A. Simpson, R. Agius. "Modelling air pollution for epidemiologic research Part I: A novel approach combining land use regression and air dispersion." *Science of the Total Environment* 408(2010) : 5862-5869.

A. Mölter, **S. Lindley**, F. de Vocht, A. Simpson, R. Agius. "Modelling air pollution for epidemiologic research Part II: Predicting temporal variation through land use regression." *Science of the Total Environment* 409 (2010) 211-217.

Albertson, K. Ayles, J. **Cavan, G.** McMorrow, J. (2010). Climate Change and the Future Occurrence of Moorland Wildfires in the Peak District of the UK. *Climate Research* 45: 105-118.

**Kazmierczak, A.** and **Cavan, G.** (2011). Surface water flooding risk to urban communities: Analysis of vulnerability, hazard and exposure. *Landscape and Urban Planning*. Accepted for publication.

Westerink, J, Haase, D, Bauer, A, Perpar, A, Grochowski, M, **Ravetz, J**, Aalbers, C (forthcoming) Expressions of the compact city paradigm in peri-urban planning across European city regions – how do planners deal with sustainability trade-offs?: *European Planning Studies*

**Rothwell, J.J.**, Taylor, K.G., Evans, M.G., Allott, T.E.H. (in press). Contrasting controls on arsenic and lead budgets for a degraded peatland catchment in Northern England. *Environmental Pollution*.

**Carter, J.** (2011) Climate change adaptation in European Cities, *Current Opinion in Environmental Sustainability* 3 (3) 193-198.

**Handley, J. and Carter, J.** (2011) The adaptation imperative – exploring the planning response, *Town and Country Planning*, 80(6) 252-259.

**Sherriff, G.** (2011) Perspectives on Getting the Region Involved in its Spatial Strategy: or, 'I have no idea what you're talking about. I have not met anyone who knows what an RSS is.' *Planning Practice and Research* (accepted for publication)

R.I. McDonald, **I. Douglas**, C. Revenga, R. Hale, N. Grimm, J. Grönwall, B. Fekete. "Global Urban Growth and the Geography of Water Availability, Quality, and Delivery". *Ambio* 40 (2011) 437–44

Walmsler, C. and **Lawson, N.** 2011 The Role of Formal and Informal Insurance Mechanisms for Reducing Urban Disaster Risk: A South-North Comparison. *Housing Studies*, Accepted for Publication

Smith, C.L. and **Lawson, N.** 2010 Identifying Extreme Climate Thresholds for Greater Manchester, UK: Examining the Past to Prepare for the Future. *Meteorological Applications*, Accepted for Publication.

**Kingston, R.** and Cavan, G. (in press) Development of a climate change vulnerability and risk assessment tool for urban areas. *International Journal of Disaster Resilience in the Built Environment*.

**Kingston, R.** (2011) Tooling up for risk and vulnerability. *Town and Country Planning*, June, 262-266.

## Book chapters

**White, I.** (2011 - forthcoming) 'Firm Foundations or Castles on Sand? the shifting sources of flood risk and the implications for flood governance', in Glavovic, B. And Smith, G. (eds) *Adapting to Climate Change: Lessons from Natural Hazards Planning*, Springer.

**George, C.**, Iwanow, T. and Kirkpatrick, C. (2011) Sustainability impact assessments applied to regional integration. In *The Regional Integration Manual*. London and New York, Routledge.

Pauleit S, Liu L, Ahern J and **Kazmierczak A** (2011) "Multifunctional Green Infrastructure Planning to Promote Ecological Services in the City." In Niemela J, Breuste JH, Guntenspergen G, McIntyre NE, Elmqvist T and James P (Eds) *Urban Ecology. Patterns, Processes, and Applications*. Oxford University Press, pp 272-285.

Georgi B, **Kazmierczak A** and Fünfgeld H (accepted) *Creating the knowledge base for resilient cities – a multi-level approach*. In: Resilient Cities 2011, Springer.

**Ravetz, J.** (2010) Urban ecology in a regional context: integrating the urban green with rural areas: In: Douglas, I. Goode, D, Houck, M.C, Wang, R (Eds) *The Routledge Handbook of Urban Ecology*, Abingdon, Routledge

**Douglas, I** and **Ravetz, J** (2011) Urban ecology: the bigger picture: In : ä, J, , J.H, , G, N.E, T, and , P(Eds): *Urban Ecology: Patterns, Processes, and Applications*: Oxford University Press

**Ravetz, J** (2011): Exploring creative cities for sustainability with deliberative visualization: In Girard, L.F. and Nijkamp, P (Eds): *Creativity and Sustainable Cities*: Aldershot, Ashgate

**I. Douglas** "The analysis of cities as ecosystems" in *Routledge Handbook of Urban Ecology* ed. I. Douglas, D. Goode, M. Houck, R.S. Wang, London: Routledge 2011 7-25

**I. Douglas** "Urban hydrology", in *Routledge Handbook of Urban Ecology* ed. I. Douglas, D. Goode, M. Houck, R.S. Wang, London: Routledge 2011 148-158

**I. Douglas** "Urban geomorphology" in *Routledge Handbook of Urban Ecology* ed. I. Douglas, D. Goode, M. Houck, R.S. Wang, London: Routledge 2011 159-163

**I. Douglas** “Suburban mosaic of houses, roads, gardens and mature trees” in *Routledge Handbook of Urban Ecology* ed. I. Douglas, D. Goode, M. Houck, R.S. Wang, London: Routledge 2011 264-273

**I. Douglas** “Urban habitat analysis” in *Routledge Handbook of Urban Ecology* ed. I. Douglas, D. Goode, M. Houck, R.S. Wang, London: Routledge 2011 465-477

**I. Douglas** “Invasive species and their response to climate change” in *Routledge Handbook of Urban Ecology* ed. I. Douglas, D. Goode, M. Houck, R.S. Wang, London: Routledge 2011 488-502

**I. Douglas** “The role of green infrastructure in adapting cities to climate change” in *Routledge Handbook of Urban Ecology* ed. I. Douglas, D. Goode, M. Houck, R.S. Wang, London: Routledge 2011 583-588

**I. Douglas**, D. Goode. “Urban natural histories to urban ecologies: the growth of the study of urban nature”, in *Routledge Handbook of Urban Ecology* ed. I. Douglas, D. Goode, M. Houck, R.S. Wang, London: Routledge 2011 74-83.

**I. Douglas**, J. Sadler “Urban wildlife corridors: conduits for movement or linear habitat?” in *Routledge Handbook of Urban Ecology* ed. I. Douglas, D. Goode, M. Houck, R.S. Wang, London: Routledge 2011 274-288

R.S. Wang, P. Downton and **I. Douglas** “Towards Ecopolis: new technologies, new philosophies and new developments” in *Routledge Handbook of Urban Ecology* ed. I. Douglas, D. Goode, M. Houck, R.S. Wang, London: Routledge 2011 636-651

**I. Douglas** “Human Ecology” in *Sage Encyclopaedia of Geography*. Ed B. Warf, Thousand Oaks CA, Sage Publications 2010

**I. Douglas** “Soil Degradation” in *Sage Encyclopaedia of Geography* Ed B. Warf Thousand Oaks CA, Sage Publications 2010

**Lawson, N.** 2011 Climate Change: Key Uncertainties and Robust Findings for Urban Floods in Zevenbergen, C., Cashman, A., Evelpidou, N., Pasche, E., Garvin, S. and Ashley, R. (eds) Urban Flood Management. Taylor and Francis, London.

**Kingston, R.** (2010) ‘Participatory Planning’. In Warf, B. (ed) *Encyclopaedia of Geography*. Thousand Oaks, CA: Sage.

**Kingston, R.** (2011) On-line Public Participation GIS for Spatial Planning. In Nyerges, T., Couclelis, H. & McMaster, R. *The SAGE Handbook of GIS and Society*. London, SAGE Publications, pp.361-380

## **Selected esteem and knowledge transfer**

The CURE model of integrated environmental research has also helped to influence a range of key policies, strategies and standards. CURE members have been actively engaged in disseminating outputs from their research at local, national and international scales to practitioners and others beyond the immediate fields of their research: examples include:

### **Iain White**

- White, I. and Handley, J. (2010) '*Water and the City: risk, resilience and planning for a sustainable future*' Invited Keynote: Deltas in Times of Climate Change, October, Rotterdam, Netherlands
- White, I. (2010) '*Planning and Flood Risk Management: risk, resilience and more sustainable cities*' 24th AESOP Annual Conference, July, Helsinki, Finland.
- 2010 EU FP7 Flood Resilience workshop, '*Integrating resilience*', December, Delft, Netherlands.
- 2010 EU FP7 Flood Resilience workshop, '*Integrating resilience*' November, Paris, France
- 2010 EU FP7 Flood Resilience workshop, '*Integrating resilience*' May, Ayia Napa, Cyprus.
- Appointed as one of two academic experts on the Local Authority Network on Drainage and Flood Risk Management (Landform). This is a national level strategic advisory position alongside representatives from government departments, regulators, NGOs and industry. The project aims to influence the provision of flood risk in Local Authorities across England.
- Member of the Scientific Committee of the EU FP7 Flood resilience conference, September, Athens.
- Participation in Exercise Watermark designed to test national flood preparedness. March 2011

### **Joe Ravetz**

- Ravetz, 2010: Rethinking low-carbon strategy in the regions: applications of the territorial principle in a networked landscape: In: *Regions and the Environment: Conference Proceedings of the Regional Studies Association Winter Conference*: Seaford, UK, Regional Studies Association
- Keynote speaker at the Policy Studies Institute 'Back to the Future' seminar to follow up the outturn with the Britain 2010 report, 20 years after its publication. ([WWW.PSI.ORG.UK/NEWS/PRESSRELEASE.ASP?NEWS\\_ITEM\\_ID=238](http://WWW.PSI.ORG.UK/NEWS/PRESSRELEASE.ASP?NEWS_ITEM_ID=238))

- Experimentality in the city: keynote speaker at the Future Everything Festival on digital creative cities ([WWW.FUTUREEVERYTHING.ORG](http://WWW.FUTUREEVERYTHING.ORG) )
- PLUREL (Peri-urban landuse relationships) is a large FP7 consortium project, researching the challenge of peri-urbanization across Europe. The annual general meeting was hosted in Manchester, and this included a one day intensive workshop on 'road-mapping' the future of policy for peri-urban development. ([WWW.MANCHESTER.AC.UK/PLUREL](http://WWW.MANCHESTER.AC.UK/PLUREL))
- Workshop leader for the Technology Foresight for the Low Carbon Automotive Sector, sponsored by UNIDO (United Nations Industrial Development Organization) and held in Istanbul. ([WWW.UNIDO.ORG/FORESIGHT/RWP/TECHNOLOGY-FORESIGHT](http://WWW.UNIDO.ORG/FORESIGHT/RWP/TECHNOLOGY-FORESIGHT))
- Speaker for the RTPI International Programme workshop on climate change economics [HTTP://WWW.RTPI.ORG.UK/ITEM/3312](http://WWW.RTPI.ORG.UK/ITEM/3312)
- Keynote speaker on the 'future of urban governance': for the City of Tomorrow programme for DG Regio, the objective to focus the Cohesion Funds 2014-2020 Budget Round on urban and territorial issues.
- Convenor of the Greater Manchester Environment Commission Research-Policy Exchange programme, currently focusing on climate change behavioural / economic / spatial issues. [WWW.MANCHESTER.AC.UK/POLICY-EXCHANGE](http://WWW.MANCHESTER.AC.UK/POLICY-EXCHANGE)
- Expert Advisor to the EC on 'the future of urban governance': for the 'Cities of Tomorrow' programme for DG Regio, which brings together expertise across the EU for the Cohesion Policy 2013-2020, on urban and territorial issues.
- Expert to the UK Land-use Foresight workshop on development of national landuse model.
- Keynote speaker at the international conference 'Sustainable cities – inventing a new urbanity', Paris / Marne la Vallee: for the French government MEDDTL – Commissariat Général au Développement Durable
- Expert / co-author for the EU Joint Programming Initiative on 'Urban Europe' research programme: coordination of research Foresight workshop in Brussels.
- Keynote at the 'Linking urban with rural' conference of the Sustainable Urban-Rural Fringe Interreg project.
- Expert / co-author to the "Megacities in the coastal zone" Synthesis workshop: for the Land-Ocean Interactions in the Coastal Zone (LOICZ) core project of the International Geosphere-Biosphere Programme (IGBP) / International Human Dimensions on Global Environmental Change (IHDP)
- Expert to the Royal Society / British Academy workshop on Global Tipping Points, Kavli Centre
- leading the National Research Foresight Exercise for the Republic of Mauritius, in collaboration with the Manchester Institute of Innovation Research, June-Dec 2011
- keynote to the EU Committee of the Regions workshop on "Urban Foresight as a Tool for Territorial Governance", Brussels. (with fees & expenses)

- Keynote to the Canadian conference “Celebrating CIRS / Accelerating Sustainability “ at University of British Columbia, (with fees & expenses)

### **Sarah Lindley**

- CLUVA Workshop, Dar Es Salaam, June 2011
- CLUVA Workshop, Addis Ababa, June 2011

### **Gina Cavan**

- Cavan, G. Kingston, R. Lindley, S. Kazmierczak, A. Gong, Y. (2010). Climate change and urban areas: Development of a climate change risk and vulnerability Assessment Tool. RICS Research Conference COBRA 2010, Paris-Dauphine University, 2-3 September 2010.
- Cavan, G. Kazmierczak, A. (2011). Sustainable urban design under a changing climate: Oxford Road Corridor in Manchester, UK. The 5<sup>th</sup> International Conference of the International Forum on Urbanism (IFoU), National University of Singapore, 23-26 February, 2011.
- Cavan, G. and Kazmierczak, A. (2011). Realising a green scenario: Sustainable urban design under a changing climate in Manchester, UK. City weathers: meteorology and urban design 1950-2010, Manchester, UK, 23-24 June 2011.
- Cavan, G. (2011). Visitors, climate change and upland footpath erosion: an analysis of impacts and costs. The 3<sup>rd</sup> Conference of the International Association of Tourism Economics, Bournemouth, UK, 4-7 July, 2011.
- Cavan, G. (2011). The challenge of retrofitting buildings to address climate change in Manchester, UK. EcoCity 2011 World Summit, Montréal, Canada, 22-26 August, 2011.
- Invited presentation to North West Climate Change Adaptation Group Meeting, 16 November 2010.
- Invited to UKCP09 Users Community Workshop, Birmingham, 22 November 2010.
- Invited presentation on GRaBS Assessment Tool to DEFRA National Adapting to Climate Change Partnership Board Meeting, London, 8 February.
- EcoCities/University of Catania workshop, climate change adaptation research. Catania, Sicily, 7 April 2011.
- EcoCities spatial portal workshop with stakeholders from Greater Manchester - presentation and workshop facilitation, Manchester, 31 May 2011.
- CLUVA workshop in Addis Ababa, Ethiopia, 6-10 June 2011. Ecosystem services of urban green infrastructure
- CLUVA workshop in Dar Es Salaam, Tanzania, 13-18 June 2011. Ecosystem services of urban green infrastructure

### **Clive George**

- Invited presentations to Regional Preparatory Meeting for Rio+20: Economic Policies Supporting the Transition to a Green Economy in the Arab Region, UN House, Beirut, Lebanon, 20-21 July 2011. a) Regional Review of Institutions for Sustainable Development in the Arab Region, b) International Framework for Financing the Green Economy. Associated publication: Regional Review of Institutions for Sustainable Development in the Arab Region. Beirut, UN Economic and Social Commission for Western Asia.
- Invited presentation to OECD Joint Working Party on Trade and Environment, Paris, 16-17 December, 2010. Associated publication: Environment and Regional Trade Agreements: Developments in 2010, OECD Trade and Environment Working Paper No. 2011-02. Paris, Organisation for Economic Cooperation and Development

### **Jeremy Carter**

- Presentation at the Second World Congress on Cities and Adaptation to Climate Change, Bonn, 3-5 June 2011.
- Invited to be 'theme lead' for adaptation within the process of developing the Greater Manchester Climate Change Strategy.
- Invited to review a report on land use planning and climate change adaptation for the Adaptation Sub Committee of the Committee on Climate Change.
- Member of the Northwest Climate Change Adaptation Group.
- Representing the University of Manchester on Manchester City Council's Environmental Advisory Panel.

### **Aleksandra Kazmierczak**

- Kazmierczak A, Cavan G, Carter J, Handley J, Guy S (2010) Deep Green or White Hot? The future of Oxford Road Corridor in Manchester, UK. The Construction, Building and Real Estate Research Conference of the Royal Institution of Chartered Surveyors Held at Dauphine Université, Paris, 2-3 September 2010.
- Kazmierczak A (2011) Investigating the collaborative approach to climate change adaptation in Greater Manchester, UK. 5th International Conference of the International Forum on Urbanism (IFoU) Global Visions: Risks and Opportunities for the Urban Planet, Singapore, 24-26 February 2011
- Kazmierczak A (2011) Local parks: common grounds for cohesive inner-city communities? Open Space People Space. Inclusive design for getting outdoors conference, Edinburgh, 27-29 June 2011.



- Kazmierczak A (2011) Local parks and community cohesion in Greater Manchester, UK. Synthesizing different perspectives on the value of urban ecosystem services seminar, Lodz, Poland 15-16 July 2011
- Invited to the European Environment Agency workshop "Assessing the vulnerability of Europe's cities to climate change and adaptation options" as an expert, 13 April 2011.
- Invited to participate in a panel discussion on multi-level governance for resilient cities at the ICLEI conference Resilient Cities 2011, 3-5 June 2011.
- Chairing a session at the international seminar "Synthesizing different perspectives on the value of urban ecosystem services", Lodz, 15-16 July 2011.

### **James Rothwell**

- Invited talk on arsenic mobility in wetland environments. Czech Geological Survey and Charles University, Prague. May 2011.
- Invited speaker on export of arsenic from degraded peat bogs. International Conference on Environment and Health, incorporating the 28th Environmental Geochemistry & Health Conference, Edge Hill University, April 2011.

### **Joanne Tippett**

- Tippett, J. 2011. Taking a Roundview – Informing Innovation Through a Whole Systems Framework for Sustainability. 55th Meeting of the International Society for the Systems Sciences, joining with KSS2011 International Symposium for Knowledge and Systems Sciences in Hull University Business School, Hull, UK, July 17 - 22, 2011.
- Developed Ketso as a spin-off from research. Since Ketso was launched in 2009, the Ketso team has run workshops for over 2,000 people in over 85 events.
- RoundView research: The outcomes from two Sustainable Consumption Institute funded research projects, Improving Sustainability Skills and Knowledge in the Workplace and Scaling up – training the trainers to improve sustainability skills and knowledge in the workplace, has won two prizes in the first Low Carbon and Environment Competition held at the University of Manchester. These prizes will enable Dr. Tippett to work with both University of Manchester Intellectual Property (UMIP) (£5000 worth of support) and University of Manchester Incubator Company (UMIC) to develop the RoundView and enable it to be spread further.
- Workshop: Centre for Responsible Leadership at the University of Pretoria (attended by Toyota, the City of Johannesburg and Massmart) 11/08/2010
- Workshop: Next steps for the Natural Step? - Forum for the Future (invited by Jonathan Porritt) 18/10/2010

- Workshop: Framework for Sustainability Innovation and Learning -Ellen MacArthur Foundation 15/10/2010
- Workshop: Tesco Green Champions - RoundView in relation to Climate Change interactive workshop with 60 staff from across the company and country 09/02/2011 Workshops - Engagement, outreach, skills development and enterprise promotion in a time of budget cuts; a cross-University dialogue – hosted by Beacon North East in Newcastle - July 19, 2011; Kings College London - Jan. 24, 2011, University of Manchester - Dec. 10, 2010
- Workshop – Working together for the Common Good in Brighton and Hove - hosted by the Business and Enterprise Team at the University of Sussex and Brighton and Hove Chamber of Commerce – May 29, 2011
- Workshops - Cross-University dialogue looking at how to enhance the student experience, University of Sussex - June 29, 2011; London South Bank University – May 9, 2011; University of Manchester – Feb. 21, 2011
- Workshop hosted by Glasgow Refugee, Asylum and Migration Network (GRAMNET) at the University of Glasgow. March 14, 2011
- Workshop - “Big Society” and the environment hosted by North West Environment Link - October 27, 2010
- Talk - "Creative engagement: from the mountains of Lesotho to a former landfill in Manchester" for the Creative Leadership Forum of the Merseyside NHS Trust - Jan. 18, 2011
- Workshop at the University of Salford - ELIE: EMPLOYABILITY: LEARNING THROUGH ENTREPRENUERSHIP, funded by the European Union Erasmus Scheme Lifelong Learning Programme. - Jan.13, 2011
- Public sector dialogues - 'Delivering Value in a time of Budget cuts'. London - Dec. 6, 2010; Manchester – Dec. 3, 2010
- Workshop - 'Planning for sustainability in a time of budget cuts in the South West and Wale', hosted by University of Bristol’s Centre for Public Engagement and the UK Systems Society South West and Wales (UKSS SW2) - Nov. 11, 2010
- Worksop – Engaging researchers - 'Vitae research staff conference 2010: empowering researchers through staff associations'. – Nov. 4, 2010
- Workshop - Creative engagement with stakeholders in research and knowledge exchange, University of Edinburgh supported by the Edinburgh Beltane Beacon for Public Engagement - September 21, 2010

### **Sebastian Carney**

- 70 1 day scenario workshops conducted using his climate change research with stakeholders from across many major cities

### **Graeme Sherriff**

- Juror on Smart Energy Fit4Set Funding Call, Vienna, May 2011 - selected as one of six on an international committee to review bids to 2 million Euro funding scheme.
- Founding member of newly formed Spatial Planning and Health Group (SPAHG). One of the authors of recommendations report 'Steps to Healthy Planning'.
- Workshop presentation at conference to launch network: Sherriff, G. (2011) Sustainable Transport in the SPAHG Guidelines (workshop presentation and discussion). Spatial Planning for Health. Bristol. June 2011
- Workshops on energy futures in European Regions as part of EUCO2 project.

### Ian Douglas

- Keynote Speaker, XVIIIth International Conference on Human Ecology of the Society for Human Ecology, **Lake Las Vegas, Nevada, USA – April 20-23, 2011: “*Water and Cities: their uncertain future human ecology*”**
- Invited speaker workshop and advanced course on "Climate and Public Health Risks - a challenge of this new decade" University of Porto, Portugal, November 18-20, 2010: “*Health and Environmental Justice in an urbanizing world*” and “*Techniques in Biometeorology*”
- Keynote Speaker, Symposium on peri-urban land-use planning, Council for Agriculture, Taipei, Taiwan November 2, 2010 “*Peri-urban agriculture and land use competition in the United Kingdom*”
- Keynote Speaker, UNESCO/ SCOPE/ CAS Shanghai International Symposium on Urban Futures and Human and Ecosystem Wellbeing, Shanghai, China, October 26-30, 2010: “*Interdependence of urban area and adjacent rural and natural ecosystems*”
- Keynote Speaker, 4th International Ecopolis Forum, Chengde, China, August 17-20, 2010: “*The Place of Natural and Cultural Heritage in Ecopolis Development as Illustrated by Practice in England*”
- Organiser, Symposium on “*Ecocities: guidelines and best practices: an international assessment*” XVIII<sup>th</sup> International Conference on Human Ecology of the Society for Human Ecology, Lake Las Vegas, Nevada, USA – April 20-23, 2011
- Organiser, Workshop on “*Tropical Field Stations: Initiative for a Commonwealth Interchange on Tropical Rainforest sustainable management and research*” Commonwealth Forestry Conference, Edinburgh, Scotland, June 29-30<sup>th</sup> 2010
- Convened seminar on behalf of a delegation led by the Mayor of Huaibei, China, to Wigan and Manchester to examine the regeneration of former coal mine subsidence areas and former industrial land, July 1<sup>st</sup>, 2010
- Appointed Chairman UNESCO/SCOPE Expert Group on Urban Futures April 2011
- Completed 2-year term as President, Society for Human Ecology, April 2011

- Appointed overseas advisor to the Science and Technology Committee, Shanghai Municipal Commission of Urban and Rural Construction and Transport (STC), China, March 2011
- Elected Chairman, UK UNESCO Man and Biosphere Urban Forum, September 2010
- Reconfirmed as President, International Council for Ecopolis Development, August 2010

### **Nigel Lawson**

- Association of Greater Manchester Authorities (AGMA) Flood Risk/Water Management Group. Presentation of the SMARTeST project. Manchester Town Hall February 2010
- BRE Flood Risk Management Seminar. Presentation “Pluvial Flooding in a small urban catchment: a qualitative case study of cause, effect and non-structural mitigation”. BRE Watford May 2010
- Visit of the Natural Environment White Paper Ministerial Advisory Panel to the Association of Greater Manchester Authorities (AGMA) and Trafford MBC. Participation and presentation of UNESCO UK Man and Biosphere Urban Forum response to the Natural Environment White Paper. Trafford Town Hall November 2010
- 2010 EU FP7 Flood Resilience workshop, ‘*Integrating resilience*’, December, Delft, Netherlands.
- 2010 EU FP7 Flood Resilience workshop, ‘*Integrating resilience*’ May, Ayia Napa, Cyprus.
- Participation at the workshop organised in by the Royal United Services Institute on behalf of Lloyd's. The workshop brought together representatives of organisations involved in planning for, responding to and recovering from a flood emergency with representatives of the insurance industry, to explore how closer working practices might lead to improved flood resilience for individuals, communities and the UK as a whole. Lloyds Building, London March 2011.
- Participation in Exercise Watermark designed to test national flood preparedness. March 2011

### **Richard Kingston**

- A Planning Support System for Climate Change Adaptation Action Planning. Annual conference of the Royal Geographical Society with IBG, London. (with Yi Gong).
- ‘Key Outcomes of GRaBS – I: The Risk and Vulnerabilities Assessment Tool’. GRaBS Final Conference, Regent’s College London.