Working with academic partners – Greater Manchester EcoCities project

1. SUMMARY
It is important to gain an understanding of where extreme weather events are likely to occur and who and what are most vulnerable to it. It can help to work with a local university that may have the tools and resources to contribute to the process of developing an improved understanding of issues and responses.

Between 2008 and 2012, the University of Manchester worked jointly with partners including Bruntwood (a private sector property developer) and the Association of Greater Manchester Authorities (AGMA), to deliver the EcoCities project. The project was funded via charitable donation from Bruntwood and the Oglesby Charitable Trust. EcoCities built the capacity for local actors to develop climate change adaptation strategies and responses through undertaking activities which included analysing climate change scenarios for the sub-region, identifying physical and social vulnerabilities, and proposing appropriate adaptation responses. This is all brought together on one website at www.adaptingmanchester.co.uk

Although the EcoCities website, spatial portal and other resources are based on Greater Manchester, the principles underlying its development – particularly the collaboration between the university and local authorities - are transferable to other locations.

Part of the rationale for the project was that EcoCities could inform better risk management strategies to increase the climate resilience of the city-region, which would have clear economic benefits in maintaining productivity and responding to extreme weather events.

Fig. 1: Landing Page Screenshot for the EcoCities Adaptation Blueprint for Greater Manchester.

2. ACTIVITIES
The work was a joint initiative between Bruntwood, the Association of Greater Manchester Authorities, and the University of Manchester. However, a wide range of stakeholders from local to regional levels fed into the design and development of the research. These included Climate UK, Arup, representatives from the ten Greater Manchester local authorities, researchers from Manchester Metropolitan University and the University of Salford and two community groups, the Mersey Forest and the Red Rose Forest. A Memorandum of Understanding was developed between the University of Manchester and Manchester City Council to strengthen their relationship.

Once the key stakeholders had been identified, workshops were held in order to better understand what support was required to advance adaptation in Greater Manchester. The work included mapping future climate change projections for the city-region, combined with exposure and sensitivity, the physical aspects of vulnerability (such as key transport nodes) and social vulnerability. EcoCities researchers, working in partnership with Red Rose Forest, provided support to Manchester City Council in reaching level 1 of the former UK government’s National Indicator (NI) 188, Adapting to Climate Change. Although this NI no longer exists, the work undertaken to achieve its goals provides a framework for future adaptation work at the City Council. A number of student projects were linked to EcoCities.
During training, students often need work experience on live projects, particularly if they are undertaking a professional course such as Planning. This has clear benefits for both the student and the recipient of their work.

3. OUTCOMES
The main outcome was a website that houses the outputs of the EcoCities project, including a web-based spatial portal. The researchers at EcoCities were also able to draw upon other research projects that have produced spatial data related to climate change adaptation in Greater Manchester. The portal is freely available, meaning that all partners and community members can visualise vulnerability, exposure and climate hazards within a particular location. Public access to information and data in this way can help local authorities and citizens and communities make better informed decisions and to plan and prepare for extreme weather events.

Connected to the spatial portal are the STAR tools which allow users to assess the potential effect of green infrastructure in adapting their areas to climate change. They include a surface temperature tool and a surface runoff tool. These were developed through an allied collaboration between The Mersey Forest and the University of Manchester, which was part of the GRaBS project http://www.grabs-eu.org/.

Local authorities in Greater Manchester, such as Rochdale Metropolitan Borough Council have used the spatial portal to understand flooding in their area and to inform their strategic plans. The Greater Manchester Combined Authority, on behalf of the Greater Manchester Local Economic Partnership (LEP), subsequently commissioned two EcoCities researchers to undertake a Climate Change Risk Assessment to inform and help to prioritise actions for the Greater Manchester Strategy following the publication of the UK’s Climate Change Risk Assessment and the National Adaptation Plan.

4. BARRIERS
One barrier was the difference in language between the research community and its wider user audiences. This was overcome by employing a communications agency, Creative Concern, to package the materials and design the website. There was also an overall project steering group that consisted of local authority planners, private sector stakeholders and adaptation champions who commented on the ongoing progression of the work. This was held in addition to workshops attended by key stakeholders from across the region who shaped the development of the project outputs and the spatial portal. This takes a lot of time and capacity but engaging with stakeholders and end users is a vital aspect of creating research outputs that can support adaptation planning and decision making. There are potential barriers in terms of data sharing, however, the agreed Memorandum of Understanding between the University of Manchester and Manchester City Council helped to facilitate this process.

5. GUIDING PRINCIPLES
✓ Be empathetic to the needs, resources and working practices of different organisations.
✓ Help universities understand what data you have and what is available for sharing.
✓ Involve a wide range of stakeholders to support the work.
✓ Be prepared to provide a small supervisory role to academics employed to support practice development and to give feedback on their work.
✓ Don’t expect immediate results; be prepared to allocate sufficient time for the research process.

6. LINKS & CONTACTS
• The EcoCities project webpage: www.adaptingmanchester.co.uk (Jeremy.carter@manchester.ac.uk)
• The EcoCities spatial portal: http://www.ppgis.manchester.ac.uk/ecocities/ (Richard.kingston@manchester.ac.uk)
• The STAR tools: http://maps.merseyforest.org.uk/grabs/ (susannah.gill@merseyforest.org.uk)
• Other local authorities have similarly worked with universities. For Birmingham, which had a focus on diverse communities, please visit a case study that is available on the Sustainability West Midlands site http://www.sustainabilitywestmidlands.org.uk/resources/birminghams-climate-change-risk-mapping-research-programme/