



# CLASP

Climate Change  
Local Area  
Support  
Programme

# Adaptation Resource Pack

Step-by-step guidance for  
Local Authorities with case studies  
from around the North West of England.

Climate Change Adaptation Risk Assessment in Detail  
Service Area: **Capital Assets**  
Example: Wigan Council

[www.clasp-nw.info](http://www.clasp-nw.info)

February 2011

## Capital Assets - Wigan Council

### Background

In this CLASP Climate Change Adaptation support project a consultant worked with the local authority to prepare a risk assessment workshop for the key service area. This short document details the process, key lessons and outcomes for Wigan's work on considering climate change adaptation within the context of Wigan's capital assets.

### Timeframe

- July 2010: Local authority application to CLASP for support
- August: Initial meeting with Sustainability Manager at Wigan Council to review existing work and issues and collate background documentation
- October: Follow up meeting with Sustainability Manager at Wigan Council to prepare for risk register workshop
- November: Risk assessment workshop held at Wigan Council
- December: CLASP Climate Change Adaptation regional workshop
- January 2011: Compilation of workshop risk register and lessons learned from the process to be disseminated to Wigan Council
- January: Consultation on Climate Change Strategy
- Ongoing: Sustainability group to meet to bring together issues on climate change
- Local Planning Strategy to take account of climate change and adaptation including use of Sustainability Appraisals and planner training on climate change adaptation

### Initial Questions Asked and Documents Reviewed

- *What is the aim of the process?* The aim for Wigan was to assist in developing the Council's aspiration to achieve a step change in their adaptation response (moving from NI188 Level 1 to Level 3). The aim was also to directly embed climate change adaptation into activities affecting capital assets, rather than having adaptation as an added extra to other priorities.
- *What risk assessment process is used currently?* A risk register has been developed by the Sustainability Team. The risk managers do not produce any climate change risk registers. Civil Contingencies work comes under the responsibility of the Business Continuity team. The Sustainability Manager would like them to start to incorporate climate change work. Wigan Council has so far mapped energy consumption, flooding and flood hot spots.

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- *Does an action plan exist?* An existing climate change plan contains around 30 actions – some are mitigation and some are adaptation.
- *What has been done so far to raise awareness of capital assets?* Wigan is a Capital Assets Pathfinder so these are an important issue for the Council and its partners. Meetings had already been held with the engineers and the building managers, raising the issues of adaptation with them. The approach was to illustrate that some actions they are already doing contribute to adaptation, and then to think about future activities and actions.
- Documents initially reviewed:
  - o Flood and Water Risk Management (Strategic Flood Risk Assessment)
  - o PESTLE<sup>1</sup> analysis for climate change
  - o Study of Potential for Low Carbon Energy

### The Risk Assessment Workshop

The workshop included personnel from a number of Council teams, including: sustainability, planning, asset management, conservation, highways, civil contingencies and procurement. Other teams had been invited but could not attend.

For more on the practicalities of running the workshop and conducting risk assessment see the Accelerator Pack – **Embedding Climate Change Adaptation into LA Processes.**

The workshop aimed to consider the challenges climate change presents to Wigan's Capital Assets – its buildings, highways and other capital purchases. By assessing these risks to Capital Assets, appropriate actions can be prioritised and incorporated into business planning for investment and maintenance.

Participants were split into four mixed groups to ensure a spread of officers from different service areas in each group. Each group was given a building/asset to consider. The buildings were selected to reflect different types (old heritage; old; new build etc) and different functions (admin; public access; school etc).

- Town Hall – admin building – housing the Chief Executive's Office, Library, Catering, HR, Legal, Library - Heritage Building
- Robin Park Leisure area
- Westwood – admin building - housing Education, Community Protection, Social Services - new building
- Schools – The Deanery and Rosebridge School – both comprising old buildings

The groups looked at the following risks for the building they were given:

- Insufficient capacity in drains and sewers to cope with heavy and prolonged rain (surface water flooding)
- Inability of river and open water courses to cope with increased influx of water and heavy / prolonged rainfall (river flooding)

<sup>1</sup> PESTLE: Political, Economic, Social, Technological, Legal and Environmental

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- Inability of the built environment to withstand extreme storms and high winds
- Built environment becoming affected by extreme or prolonged periods of hot weather
- Built environment becoming affected by extreme or prolonged periods of dry weather

They had to look at what might happen to the building and what impact that would have on services, who was responsible for the contingency and what possible actions could be taken. The model used for risk assessment also looked at who was responsible for managing prevention and what the contributing factors were. The groups discussed likely risks and the impacts of these on services, but did not reach a point of scoring the likelihood and impact on the assessment forms.

This model was rather complex, and a simpler approach has been outlined in the **Accelerator Pack: Embedding Climate Change Adaptation into LA Processes**. We also strongly recommend you use your local authority's own risk control form or risk assessment forms. A lesson learned was to keep it simple and ensure the whole process is not too repetitive.

Before using scenarios it is important to make sure these are realistic i.e. which buildings are in or near the flood risk areas (using knowledge of Drainage Engineers or the Flood Risk Assessment map), which are vulnerable to heat (by speaking to Facilities Managers or Heads of Service using these buildings).

Examples of some of the risks and impacts identified during the workshop include:

**Surface water flooding to Town Hall** – flooding basement and ground floor:

- Loss of Council services based at the Town Hall. Chief Exec; Legal; HR; Catering; Security monitoring & Emergency Response
- Loss of power; access denial; building closed
- Library - Stock damage; closure of library
- Closure of function rooms (registry and weddings)
- Interruption/Suspension of Committees meetings and Cabinet meetings
- Archive - damage to documents and records

The impacts caused by flooding should be covered by Emergency Planning, Disaster Recovery and Business Continuity Planning. As part of the adaptation planning process, these plans should be checked to ensure that they are adequate to handle any increased risk, and that they are reviewed in the light of new information on flood risk.

Options to reduce the risk or impact of surface water flooding in Council assets should be identified in the Surface Water Management Plan.

**Extreme/Prolonged Heat impact on Robin Park Leisure Centre** would cause:

- Increased need for irrigation of playing fields
- Problems with thermal comfort of building occupants
- Subsidence risk
- Grass fires
- Increased costs due to air-conditioning/refrigeration

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The primary impact of the above would be:

- Loss of revenue to Leisure Services
- Increased energy costs
- Possible building closure - reduced service provision

Heat impact on old school buildings would cause pupil and teacher discomfort and might result in:

- Absenteeism
- Lack of concentration, and academic attainment
- Hygiene issues - waste and kitchens

Measures that could be taken to tackle this include:

- Change in dress code
- Landscape design
- Shutters/Blinds/Brise soleil
- Change hours of curriculum/term times (in the longer term)

Some local areas, especially urban ones, are looking at the Heat Island Effect whereby built up areas super-heat in prolonged hot weather, causing very high temperatures in city centres. Extreme heat can cause power-outages and have severe health impacts on vulnerable people. The NHS has heatwave plans and Greater Manchester has been working on the heat island effect through the Scorchio Project

<http://www.sed.manchester.ac.uk/research/cure/research/scorchio/background/>

At a time of reduced budgets and constricting council operations, decisions will be made about which buildings to keep and which to get rid of. Operating costs such as energy bills are not usually a deciding factor in whether to keep a council building or not, as land values, proximity to service users etc are more important. But it is worth checking how well buildings stand up to increasingly wet, windy or hot weather in order to choose more resilient buildings over those that may cost significantly more to run or maintain in the future. New buildings must also be designed to take into account flood risk and should consider how to manage heat (without relying on high energy consuming air conditioning) and high winds.

### Options for Action

After risk assessing buildings, options for action may be limited by lack of resources. In Wigan this was a major issue for schools, where there is a multi-million pound maintenance budget and massive backlog of maintenance which needs doing. The current maintenance schedule would only pick up very obvious dangers. However, where simple low cost or free measures such as changes to dress codes or some tree planting might be carried out, these may be worth doing for buildings with high/medium risk from heat.

For more on options for action, see the **Accelerator Pack**

## Capital Assets - Wigan Council

Wigan wanted to secure more buy in to the adaptation process across the authority, to include adaptation considerations as part of everyday operational and strategic planning activity; to dispel myths about adaptation being too difficult or expensive and to improve the overall corporate approach to adaptation. Not all of this was feasible in a single workshop but important steps were taken – not the least ensuring that the issue of adaptation began to be considered by a number of different sections rather than just those with a sustainability role.

### What we learned:

Capital Assets need to be risk assessed for each asset, rather than for the assets as a whole. We would recommend:

- get the list of buildings and other capital assets (from Assets Registers)
- list the buildings and what functions they serve and what services they house
- look at the Flood Risk Assessment and check which buildings are in the flood risk areas
- talk to building users/facilities managers to check how the buildings are currently coping with heat, cold, wind
- check if any buildings are facing a major change of use or likely to be sold off or vacated
- check if there are buildings due for investment/improvement
- check what major plant and equipment is housed in particular locations and include in your risk assessment exercise
- risk assess each building (including major plant/equipment) against the expected weather events/climate change impacts to see how resilient they are; to check impacts on services and to check that emergency/business continuity and other plans are adequate to manage any risks identified
- where plans are not sufficient to reduce the risk to an acceptable level, identify actions that should be taken for each asset.

### Next Steps

The next steps following the workshop are to:

- Complete the Climate Change Strategy consultation
- Encourage planners to attend training on climate change adaptation offered through the CLASP Climate Change Skills Fund training programme
- Ensure that the Local Planning Strategy takes account of adaptation
- Bring together people from across the Council working on sustainability issues

Adaptation needs to be considered in both the short and the long term. This means that whilst current authority budget constraints may limit immediate action in some areas, the principles of 'invest to save' and ensuring you are preparing for the future, remain important. Investment now may avoid costs in the future.

## Capital Assets - Wigan Council

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## Capital Assets - Wigan Council

For more information on what to do to manage climate change adaptation please see the accompanying documents produced for the CLASP Climate Change Adaptation Support Project.



**Why bother to do Climate Change Adaptation without NI 188?**



**Getting Started on Climate Change Adaptation**



**Accelerator Pack – Embedding Climate Change Adaptation into LA Processes**

Climate Change Adaptation Risk Assessment for:



**Planning & Development**      Rossendale Borough Council



**Highways & Transport**      Cheshire West and Chester Council



**Business Continuity**      Pendle Borough Council



**Capital Assets**      Wigan Council



**Emergency Services**      Liverpool City Council