

CLIMATE CHANGE

**NORTHERN IRELAND ADAPTATION
PROGRAMME**

STAKEHOLDER CONSULTATION

SUMMARY REPORT



Climate
Northern Ireland

OCTOBER 2012



Northern Ireland Climate Change Adaptation Programme

Stakeholder Consultation Summary

The stakeholder consultation for the Northern Ireland Climate Change Adaptation Programme (CCAP) was held by Climate Northern Ireland over a period of four months, from June to October 2012. A wide range of consultation approaches was used to ensure the scope of stakeholders was extensive. Governmental, public, private and voluntary stakeholder groups were targeted. Mailing lists from Climate NI, Northern Ireland Environment Link (NIEL), Institute of Civil Engineers (ICE) and Northern Ireland Local Government Association (NILGA), amongst others, were used to invite stakeholders to the events. The use of social media, namely Twitter and Facebook, further extended event invitations to a large potential audience.

The consultation approach was based on the adaptation themes identified within the UK Climate Change Risk Assessment (CCRA):

- Health and Wellbeing,
- Natural Environment,
- Agriculture and Forestry,
- Buildings and Infrastructure,
- Business and Services, and
- Local Government.

The stakeholder events used various methods to engage the participants in discussion and obtain a high level of input including expert talks, scenario-based workshops, open meetings, and web-based surveys.

Six 'breakfast' workshops were held during June 2012, addressing the five adaptation sectors and local government, and involved a wide range of stakeholders. Attendance ranged from six to twelve at each event. A short presentation was provided to set the context for discussion and the CCRA list of threats and opportunities were available for further information. A further six meetings were held over the period of July and August with a number of key sectoral groups including business, construction, agriculture, energy, education and local government.

A web-based climate change adaptation survey was created via 'Survey Monkey' to obtain feedback from both governmental bodies and external stakeholders, over a three month period from July to September. The survey questions referred to a number of possible consequences of climate change in Northern Ireland, and each participant was requested to indicate how their organisation is or will be responding to the risks within the designated timeframes (0-5 years, 5 years +).

In partnership with NILGA, Climate NI held a 'Proactive Approach to Climate Change' conference on 4 September 2012 at Craigavon Civic Centre. The conference speakers discussed recent severe weather events and workshops addressed how Northern Ireland's

councils can prepare for similar events to ensure the future functionality of council services. Over 50 local council delegates attended from across various cities, districts and boroughs in Northern Ireland. Experts from the Met Office and Red Cross presented recent research conducted into climate change and its local impacts in Northern Ireland. The talks were followed by round table discussions examining how councils can increase their resilience in relation to a wide range of climate change impact scenarios, based on the CCRA adaptation themes. Delegates discussed how these issues could impact on their council, their constituents and their budgets.

A stakeholder conference based on the theme of ‘building resilience’ was held on 2 October 2012 in Grosvenor House Belfast. The response to the conference was very positive across all streams, with a final attendance of 70 delegates from a wide range of sectors; private, public, voluntary and governmental. Informative talks provided a base of information regarding climate change projections and implications in Northern Ireland and adaptation planning. Two workshops were held, the first provided a research based scenario to facilitate discussion on the wider impacts Northern Ireland as a whole and to allow the delegates to discuss how such issues impact upon their organisations. The second workshop focussed upon adaptation measures, with delegates ranking the risks by sector (as identified in the CCRA) and discussing whether or not their organisations were addressing any of the risks identified. Delegates further discussed how can government may help them achieve such adaptation and how in turn they might help government.

The following points were the key ones identified by stakeholders from the full range of consultation undertaken.

Key Points – ALL STAKEHOLDERS

Current views on climate change impacts and adaptation in Northern Ireland

1. Awareness of adaptation issues is low across all stakeholders, with most seeing it as not (yet) impacting on Northern Ireland.
2. Wider awareness of climate change impacts is required to encourage development of adaptation plans and proactive action.
3. Willingness to act is low, with other financial priorities seen as more ‘critical’.
4. Using more easily understood terms and concepts such as emergency response, resilience and flood prevention which are of particular relevance to specific sectors is crucial to engaging and delivering action.
5. Impacts we already experience locally (flooding, wildfires) stimulate action, but are not always linked to climate change.
6. There is widespread recognition that the wider impacts of global climate change (food prices, commodity availability, social/refugee impacts) are already having impacts in Northern Ireland and these are likely to increase.

7. Flooding is seen as the most relevant of the direct local impacts. Recently there have been two "near misses" from tidal flooding; however an emergency plan is still undeveloped.
8. Secondary impacts (wildfires, invasive species, diseases of people and agricultural plants and animals) are seen as important, but not always recognised as related to climate change.
9. Government procurement requirements and regulations/specifications (building regulations, pollution prevention, tendering requirements) are seen as critical to encouraging/enabling other sectors (business, construction) to act.
10. Long term impacts are not factored into current plans, as they are considered not to be an issue until 2050 and beyond. Very few businesses have any significant adaptation programme at present.
11. Costs are a major driver for adaptation action; monetary values must be based upon research and an established baseline.
12. The Carbon Reduction Commitment (CRC) is a strong driver for energy efficiency; however government action to date is not seen as adequate by business.
13. Information technology (ICT) is a major issue, but cannot be thought of in isolation, it is dependent upon critical infrastructure.
14. A 'one size fits all' approach is not applicable to energy efficiency, e.g. Listed buildings need a unique approach.
15. All stakeholders emphasised the need for government leadership to stimulate them to act.

Potential proactive approaches

1. Assign climate change impacts a monetary value.
2. Promote local case studies to stimulate awareness and initiate action - develop a 'Best Practice' approach/initiative across sectors.
3. Adopt and promote a 'pay now to save later' sectoral approach.
4. Integrate risks and impacts across sectors needs to be matched by a collaborative working approach.
5. Form sectoral groups with multi-agency representation to provide feedback, data and insight to government.
6. Foster community support and resilience – e.g. informal networks.
7. Promote mitigation, adaptation and sectoral agendas as parallel using a 'win-win' approach.
8. Identify vulnerable and disadvantaged groups, and provide targeted support.
9. Develop a programme of targeted research to establish evidence-based indicators.
10. Facilitate joint inter-sectoral scenario and action planning.
11. Increase public awareness at different levels (government to public), encourage engagement and implement into educational programmes.
12. Require accreditation of clients and companies through building regulations, tenders, contracts, supply chain, life cycle energy costs, adaptation assessments, etc.

13. Recognise in construction and planning policies that Northern Ireland will likely experience high levels of immigration.
14. Promote a culture change to accept/adopt new products which will address many issues.
15. Deliver public awareness campaigns to support innovative solutions to challenge preconceived ideas.
16. Provide training, advice, support and research for the agriculture sector to allow/facilitate use of new technology.
17. Integrate government action on energy: a perceived lack of strong government leadership in energy is inhibiting action – too many department involved in energy issues and policy.
18. Promote all island initiatives to widen the context of adaptation.
19. Enforce a strategic land use plan and waste management strategy for agricultural sector.
20. Embed climate change adaptation into CAP reform.
21. Provide a mechanism in legislation to ensure provision and access to relevant commercial data.
22. Adopt a risk based approach to asset management.
23. Integrate climate change adaptation into the Code for Sustainable Homes.
24. Develop a 'metering project' to assess the potential decrease in water usage - enforce billing and use capital to upgrade existing infrastructure.
25. Future-proof supply chains by ensuring local suppliers, products and energy supply - government to demand local spend on projects.

Key Points – HEALTH AND WELLBEING

Current views on climate change impacts and adaptation in Northern Ireland

1. The Health Service does not see it as a major health issue. Adaptation is low on the agenda.
2. There are significant gaps in evidence, however data does exist - increased need to access to research.
3. Issues of the disadvantaged being disproportionately impacted by climate change effects, e.g. flooding, energy needs and costs, food costs.
4. The demographic profile is an important factor, for example the elderly are particularly vulnerable.
5. In addition to the obvious public health impacts of flooding and extreme weather (e.g. cold snaps, storms) there are concerns for other health impacts such as mental wellbeing.
6. Heat related deaths are viewed as probably not a serious issue in NI.

7. Correlations between inadequate dwellings and poor health have already been established; however an integrated approach with similar housing issues (such as energy efficiency and fuel poverty) is needed.

Potential proactive approaches

1. Identify the most vulnerable groups and consider targeted support – may include particular locations and building types.
2. Health trusts could develop risk registers of vulnerable individuals and groups.
3. Must foster community support and resilience - more key messages and simple actions the community can take.
4. Support research and development of evidence baseline indicators (possible climate change research programme).
5. Mitigation, adaptation and health agendas must be promoted as parallel – promote win-wins with various agendas, e.g. exercise, open green space, obesity.
6. Create regeneration programmes – ‘transform your care’ agenda.
7. Facilitate horizon planning and joint scenario planning - provide more education for people on how to respond.
8. Form sectoral groups to provide feedback to government (e.g. climate change health group), can provide evidence/data and insight.

Key Points – NATURAL ENVIRONMENT

Current views on climate change impacts and adaptation in Northern Ireland

1. An integrated approach to catchment management is important, but current River Basin Management Plans are limited because they are not ‘action oriented’.
2. Integration of policy and action is critical for natural environment, especially water related.
3. Climate change and mismanagement will lead to disaster for natural populations. Habitat management (especially peatland) has major role in both adaptation and mitigation.
4. Prevention is key and it is not yet being effectively addressed.
5. Extraction from rivers, especially for hydro-energy but also for human use is already causing problems; these will be worsened by CC impacts.
6. Linkage between low flows and increased pollution levels and hence impacts; Precautionary Principle needs to be applied and this needs to include CC impacts.
7. Waiting for conclusive data (impacts) will be too late to avoid mature damage to natural systems.
8. There is nothing at present being done about waste water treatment pollution (mainly through emergency outflows). NIW need to change their system (tanks, longer outfalls, separating storm and foul systems).

Potential proactive approaches

1. Need a land use plan and map incorporating impacts of CC and uses of land for mitigation and adaptation, coupled with fiscal reforms to encourage delivery (CAP reform, agri-environment schemes) at wider scale (not just individual landowners).
2. Need a landscape scale/ecosystem services approach to maintain functionality and avoid local extinctions that are exacerbated by CC impacts. EU 'designation' approach not suitable in CC world.
3. Identify 'single action – multiple benefit' solutions.
4. Data/costings/case studies/ examples are required to make policy – collation of existing as well as new.
5. Need better co-ordination between stakeholders and government agency level, working with partners at various levels to create a strategic programme for systematic removal of different invasive species.
6. Improve quality of habitats at present – in current conditions they are favourable to invasive species.
7. Promote education at all levels – how, what, why demonstrations.
8. Awareness must be raised at different levels – political/government level in terms of articulating real costs of removal versus prevention.
9. Government must lead, all must participate. Integration and avoidance of unintended consequences and ill-advised action; need to use predictions of CC to plan forward, involve all stakeholders and work across sectors for awareness and action.
10. Ministerial Summit to promote action; cross-Departmental working group for officials.

Key Points – AGRICULTURE AND FORESTRY

Current views on climate change impacts and adaptation in Northern Ireland

1. Likely to be species changes in agricultural crops and woodlands in response to CC – research needed on what these are likely to be and recognise advantages/avert disadvantages.
2. Diseases of plants, animals and people – potentially huge problem, need 'emergency planning' and preparation. Need greater emphasis on disease resistance.
3. CAP reform offers opportunities to incorporate CC mitigation and adaptation, but there are many issues – including 'many small farmers' leading to piecemeal approach and results.
4. Farmers need to be more efficient to economically survive; this can lead to 'sustainable intensification' which may not be 'sustainable' in environmental terms.

5. Potential for conflict between CC and habitat protection – current emphasis on habitat and species protection may be ‘outmoded’ in a changing climate; nature is changing and we need to recognise and change policies/approaches to deal with this.
6. Major risk for marine fisheries is temperature increases leading to algal blooms, shifting migration routes, changing species and populations, etc.
7. DARD and farmers want voluntary, not legislative, solutions.
8. Tree planting to provide agricultural income relies on private sector, but payments not high enough to incentivise farmers to afforest.
9. Link of oil prices to agriculture – underpins and determines prices.
10. Increased use of fungicides and pesticides, and therefore risk of increased soil run off to rivers.

Potential proactive approaches

1. More strategic land use planning - identifying the risks and opportunities both in general and in specific areas/habitats.
2. Need an area plan for agriculture.
3. Waste management strategy for agriculture is required.
4. Embed CC adaptation into CAP reform.
5. Ensuring CC mitigation and adaptation preparedness needs to be included in procurement at all levels to ‘push it down the supply chain’ and get general action.
6. Promote a change in consumer behaviour and demands to become more sustainable - lower meat diets, use of all by-products, etc.
7. Need for more local processing as well as production and promotion of local markets.
8. Possible use of GM crops – huge range of what this is; need understanding of options by the public.
9. Possible opportunities for different crops, use of polytunnels, greenhouses (including with rainwater harvesting, hydroponics, specialist crops, etc. – but needs to be profitable, and investment may precede profitability

Key Points – BUILDINGS AND INFRASTRUCTURE

Current views on climate change impacts and adaptation in Northern Ireland

1. Need for full economic evaluation of historic and cultural buildings in NI, particularly the economic value of protection from CC impacts.
2. Evolving knowledge and techniques are changing how we deal with and think about many issues. Building Control is needed in both new build and retrofitting.
3. The energy use for much of the public estate is already too high (Belfast City Council already having to pay ~£200,000 per annum under the CRC). ‘One size fits all’ approach for energy efficiency does not work, listed buildings needs a unique approach.

4. Major risks are from flooding, water supply (amount and quality), and energy supply (loss, security, cost). More stringent flood risk criteria should be used for new developments to reduce risk of damage to property. Need to improve drainage systems.
5. Problem of establishing ‘proof’ of impacts of climate change potentially leading to delay in action.
6. The original CCRA document was based on English data and there is more information in NI than was used in the research undertaken.
7. Difficult to get Regulator to address longer term issues – focussed on current costs to customer. Therefore it is hard to introduce ‘future proofing’.
8. Current infrastructure design approaches are to a ‘recipe’ specification rather than a ‘performance’ specification. Procurement approaches are currently moving towards performance.
9. Lack of co-ordination and consistency across departments, government agencies and minister, e.g. building on a flood plain - planning service said yes, Rivers Agency said no.
10. Inner cities must be aware of secondary consequences of CC impacts – must consider issues of integrated infrastructure and effects on vulnerable people.
11. Too much emphasis is placed upon flooding resilience.
12. By 2050, 90% of existing infrastructure will still be in place. Need to invest in existing infrastructure (built in the 1960s/70s).

Potential proactive approaches

1. A considered, holistic approach is needed to address the issue of increasing energy efficiency and energy production. Consider an all island approach to energy storage.
2. Multi-functionality of solutions and cross-departmental working can bring improved outputs and value for money. Best practise examples do exist in other countries with similar climates. Need to increase educational and raise awareness to these sources of adaptation information.
3. Need to tie in building design and retrofitting with the natural environment issues.
4. Education at all levels is required (governmental, private and public) to ensure full life cycle analysis of impacts and solutions to integrate outcomes.
5. Embed adaption principles into educational curriculum and research programmes.
6. New research must be carried out on urban design and the impacts of climate change in urban areas - green roofs and walls, SUDS, benefits of green space, reducing heat effects, etc.
7. A land use strategy adopting a cross-sectoral and all Government approach is required to realise the benefits of heritage, biodiversity, ecosystem services, etc.
8. Water supply is believed to be to be a more substantial threat than acknowledged by the CCRA - some quantification is already available and could be adapted to examine future scenarios, e.g. algal growth in Lough Neagh.

9. Water charges are needed to encourage water efficiency and cover costs of supply (increased treatment, improved storage etc.).
10. Need to incorporate and increase asset management - risk based approach, life-cost analysis (delivery and performance).
11. More detailed information on flood maps is required to facilitate adaptation or amendment of an assets management approach to ensure consideration of flood risk.
12. Need improved multi-agency co-ordination, and transparency of data.

Key Points – BUSINESS AND SERVICES

Current views on climate change impacts and adaptation in Northern Ireland

1. Must rethink provision of ICT/communication in businesses, and ensure ICT infrastructure is suitably protected for extreme weather and review technology.
2. Many businesses are looking at home working as response to transport costs, infrastructure, and disruptions. Modern information technology is facilitating effective home working.
3. Major infrastructure issues for electricity provision – need to reinforce the grid for renewables and storm/ice resilience. This will provide an employment opportunity, but will cost consumer an increase of ~3% on their bill.
4. NI is not maximising renewables by not upgrading the grid – considering offshore energy and taking the opportunity for an all island collaboration.
5. 25 of NIE’s 230 large substations are at high risk; regulator has only allowed funding for refurbishment of the 5 that have previously been flooded.
6. Cold spikes and high gusty winds threaten infrastructure and power outages – the number of ‘alerts’ is increasing. Construction standards for network are changing, e.g. adopting higher wind speed gust tolerances and size of cabling to avoid breakages in ice and storms.
7. Increases in cold snaps and summer heat peaks result in markedly increased energy demand over short periods - transformers are not fit to deal with these changes in demand, and will need upgrading.
8. The current 2007 Single Electricity Market is not applicable to the EU model.
9. Big issue with supply chains – materials and energy (supply and cost) impact on timing of construction; disruption could be costly.
10. Needs to be stronger collaboration between private, public and NGO sectors.

Potential proactive approaches

1. Perform strong lobbying to both government and ICT providers - more focussed on the benefits for all organisations involved; prioritise areas of small resource but large output.

2. Proof supply chains by ensuring availability of local industries and suppliers. Government can lead by example and demand local spend for local projects.
3. Government need to utilise and promote funding programmes for businesses.
4. More local companies should 'store' energy and not rely on 'outside' sources of energy – must ensure there are more local sources of energy supply.
5. More investment provided for research and development.
6. Government needs to use incentives for good practice, through creating links between the environment sector and local businesses.
7. A strong lead by government is required – BREEAM, building regulations, CRC – to encourage clients to prioritise/include adaptation requirements in their contracts. Construction companies need to be required by government and paid for by clients to implement this.
8. Life cycle energy costs and 'adaptation assessments' need to be required in government contracts/procurement as a major driver.
9. Industry needs a strong, coordinated voice to the politicians to champion all construction and get appropriate legislative change.
10. Must set a 'Best Practice' working group, adopting business based issues (e.g. risk management, succession planning, cost reduction, contingency plans, etc.).

Key Points – LOCAL GOVERNMENT

Current views on climate change impacts and adaptation in NI

1. Longer term impacts (not only short-term) need to be addressed. For example, an increase in anti-social behaviour due to warmer weather will call for additional policing and will impact negatively on tourism.
2. Emergency planning is not a statutory function of local Councils - depends on councillors' efforts and relies heavily on a multi-agency voluntary approach.
3. Long-term economic impact of climate scenarios could lead to diminished rate base for Councils.
4. Need to balance 'preparedness' investment with dealing with event costs.
5. Council budgets will increase through additional costs of staff overtime and clean-up (with the predicted increase in frequency of extreme weather events).
6. Loss of revenue from services closed to the public due to disaster management.
7. Available council staff will be multi-tasking across roles to address wide ranging impacts, hence decreasing the time resources spent on providing essential services.
8. There will be a lack of staff resources to adequately deal with the impacts and emergency events.
9. Significant pressure will be put on other resources at very short notice and impacts on regular services and schedules maintenance.
10. Emergency planning resources will be pressured if not adequately addressed at present.

11. Councils do not have specialised equipment to contribute to other services, such as roads, water etc.

Potential proactive approaches

1. Need a joint approach and multi-agency co-ordination, with improved communication and more transparency.
2. Council could place pressure on agencies to ensure functionality and a proactive approach. Council to educate citizens and councillors as to the responsibilities of each agency relating to various infrastructure systems.
3. Ensure different levels of response, from community to government.
4. Develop communication streams by using elected members and community representatives to get feedback and communicate with individuals.
5. Provide the community with more responsibility to encourage resilience.
6. Increase public awareness through clear key messages ('Warn & Inform') - media campaigns, press releases, signage, and social media.
7. Integrated council approach, should the affected area involve a number of constituencies.
8. Lobby central government and influence local budget for funding to provide a strategy to effectively co-ordinate multi-agency participation.
9. Support and develop community resilience - promote 'citizen ownership' of problems and 'self-help'.
10. Need to monitor and review to avoid crisis.

Key Points – WEB SURVEY

Note: the survey data presented is based upon a small unrepresentative sample of 33 respondents, not all of whom answered all questions, and should only be used for reflective not statistical purposes. Lack of awareness of long-term impacts, adaptation planning and integrated approach to risks across sectors of Northern Ireland may have influenced the responses given.

- The greatest obstacles identified in taking action to prepare for the impacts of climate change were financial constraints and difficulty in costing long-term benefits. The third greatest obstacle identified was the lack of detailed evidence for risks, which is essential in assigning monetary values to long term benefits.
- Many organisations are taking practical measures at present, but not incorporating such measures into their business plans.

- A significant increase in the 'not relevant/not yet considered' response showed a lack of awareness of the secondary impacts of global climate change impacts within the sample.
- Respondents showed a greater awareness in the incorporation of adaptation measures over practical measures in the area of improved tourism and/or new business opportunities, showing a realisation of positive long term impacts in Northern Ireland.
- Many organisations were shown to be either undertaking practical measures or continuing to monitor the market for new technologies within the next five years. However, in the longer term (5+ years), the number of organisations who plan to undertake practical measures decreased.