

NI Adapts Step 5 - Monitoring and Reporting Approach for Climate Adaptation Plans

The following guidance document was requested by the Local Government Climate Action Network (LGCAN) in June 2022, to create more consistency for adaptation measurement and reporting in NI. It will also form part of the [NI Adapts](#) framework which is supporting creation of the [first adaptation plans in NI councils by 2024](#). The approach was developed through research on global best practice and discussions with adaptation experts from UK, ROI and 8 LGCAN council leads, with the aim of providing principles and indicators which all councils could commit to using, regardless of whether their eventual plan is standalone or part of an integrated mitigation and adaptation plan. **This is not a comprehensive list of principles or indicators**, but rather a shared basis on which councils can jointly seek to build adaptation monitoring and reporting. It could also be used to help guide councils on what to report as part of the new Public Reporting Duty under the Climate Change Act (NI) 2022.

Contents:

1. *Proposed approach: pages 2-5*
2. *'Next Steps' explains how councils could take this approach forward: page 5*

Alignment with the Climate Change Committee Assessment Framework

Climate NI has endeavoured to align this approach with the best practice offered by the UK Climate Change Committee, which recently measured the quality of plans and actions in Scotland using the following methodology:¹

Score	High	Medium	Low
Plan Score	<p>Good quality plan: Considers climate change, including a range of scenarios (adaptation planning for inevitable change i.e. a 2°C scenario, consideration of risks for a 4°C scenario)</p> <p>Sets out specific action – not just guidance</p> <p>SMART – specific, measurable goals with timescales</p> <p>Has effective monitoring and evaluation built in</p> <p>Can see links from the plan down to the actions</p> <p>Plans up to date</p>	<p>Medium quality plan:</p> <p>Considers climate change, though possibly vague on what scenarios are included Requires general action – not just guidance</p> <p>Some aspects of being SMART</p> <p>Some monitoring and evaluation</p> <p>Some links to action</p>	<p>Low quality plan:</p> <p>Minimal or no consideration of climate change</p> <p>No firm actions, not SMART</p> <p>No monitoring and evaluation</p> <p>No firm link through to actions</p> <p>Plans not up to date</p>
Risk Management Score	<p>Evidence that risk (vulnerability and exposure) is reducing at an appropriate rate, and/or is in line to meet goals</p> <p>Good evidence of impact of actions on risks</p>	<p>Mixed picture – some evidence of risk being managed, but other areas where progress is lacking</p> <p>Some evidence of impact of actions on risks</p>	<p>Evidence that risk is not reducing or is increasing, or lack of evidence to judge what is happening to risk</p> <p>No evidence that actions are having an impact on risk</p>

Notes: Bold criteria are considered as key to that score; other criteria are also assessed but are of lesser importance.

Fig.1 UK Climate Change Committee Assessment Framework

¹ Climate Change Committee (2022) *Is Scotland Climate Ready?* Viewed 29/09/22
<<https://www.theccc.org.uk/wp-content/uploads/2022/03/CCC-Is-Scotland-climate-ready-Final.pdf>>

How to Use this Document

The following should be considered a working document, and is split into two sections:

1. **Principles** – A series of 6 high-level standards which represent the approach to a good quality first adaptation plan for a council in NI. Regardless of how each council plan is structured, or what high-level vision and aims they choose, they should commit to these shared standards.
2. **Indicators** – The specific data, both qualitative and quantitative, which we are asking councils to agree will be measured in their first NI local council adaptation plan. These are split into two sections:
 - *Already Gathered/Easily Reported* – Those for which minimal resource is required and which our research concluded are already gathered, so will either be usable immediately or with small amendments to procedure.
 - *Priority New Indicators* – A series of 4 stretch targets which have commonly featured as some of the major information gaps across NI council vulnerability assessments. These may be simple to develop or require some resource depending on each context, but they would provide vital information on which to build future decisions.

Section 1: Shared Principles

By committing to the following shared principles, your organisation will endeavour to meet the following standards in writing and delivery of its first adaptation plan:

1. **Periodically review organisational risks and impacts to enhance understanding of both physical and non-physical climate challenges.**
2. **Aim to set SMART² actions, with clear ownership, which link to the priority risks as identified for council, and account for wider Northern Ireland risks where possible.**
3. **Measure a range of indicators (Process, Output and Outcome³) and consider a range of future scenarios where possible (e.g. a 2°C and 4°C world).⁴**
4. **Improve capacity, communications and education to promote behavioural change in officers, elected members and citizens.**
5. **Encourage and actively enable collaboration inside and outside council.**
6. **Integrate adaptation into business processes across council, including financial planning.**

Section 2: Indicators

This approach is based on shared knowledge and what is deemed to be appropriate and achievable in the current context for Northern Ireland. The following indicators provide an initial set of existing and possible data, and explains both what type of indicator it is, and what it should help you to understand. This should enable conversations around the importance of data in your organisation, and create a first attempt at a shared regional approach to creating an adaptation baseline. This is not a comprehensive list, and a range of other data will also be useful for adaptation, including information on the floor level of assets, subterranean assets, areas of hard surfaces, as well as a range of vulnerability and adaptive capacity indices over and above those listed below.

² SMART - Specific, Measurable, Achievable, Realistic and, where appropriate, Time-bound.

³ *Process* relates to governance, *output* is delivery of an action, *outcome* is measuring change/impact over time

⁴ For initial information on a range of scenarios for your area, consider <https://uk-cri.org/> [Climate Central](#)

Types of Indicators:

Process (Governance): The *delivery of an action - ensuring quality & elaborative decision making to ensure action can occur.*

Output (Delivery): Direct results from the delivery of an action.

Outcome (Impact): A measure of the change that occurs as a result of the action in the short, intermediate or long term.

The Indicators:

The following tables present the indicators, the type of indicator (process, output or outcome), and what the indicators will show/why they should be measured.

By committing to the following shared indicators, your organisation will endeavour to capture the following data for the duration of its first adaptation plan:

Already Gathered/Easily Reported

Indicator	Type	What will this show?
Governance and Structure Indicators - Relating to the Shared Principles		
Is there a plan in place by 2024 and are you reporting into NI Climate Change Adaptation Programme?	Process	<i>This group of indicators will show that your organisation has a strategic plan to identify and act on climate impacts, with proper senior ownership, and regular review and update of organisational plans and procedures.</i> <i>These will also show if your organisation is making efforts to raise awareness, utilising and driving local and regional partnerships and importantly, that actions are actually being delivered and providing tangible impact.</i>
% and range of service areas involved in adaptation planning and delivery	Process	
% of risks with actions and a responsible owner at senior level	Process	
Data on future frequency and intensity of Risks collated, considered and made accessible to staff (e.g. a 2°C and 4°C world)	Process	
% of actions with SMART Targets	Process	
Climate Risk included in Corporate Risk Register, and appropriate adaptation governance in place with senior staff and Board/Directors e.g. annual review of progress, quarterly meetings	Process	
% Staff Trained in Climate Literacy	Process	
Is the Plan clearly accessible on the Council website, preferably in a section that can be found from the homepage?	Process	
No. of external delivery partners listed in Adaptation Plan - Statutory, Academic, Community/Voluntary and Private	Process	
No. External Audiences Trained by Council Staff or resources e.g. schools, economic development	Output	
% actions delivered (or on-track if longer term)	Output	
% of actions delivered (or on-track) against highest scoring risks	Output	
No. of relevant policies and procedures which are updated or created	Output	

Operational Indicators - Emergency Response and Prevention		
No. and type of extreme weather events (Flood, Heat, Storm and Cold events with Met Office alerts and/or requiring emergency response)	Output	<i>A baseline for changes to weather events and impacts, and community assistance to understand resource needs and at-risk locations.</i>
No. of Flood Inspections (Environmental Health)	Output	
No. and value of Flood Payments	Output	
No. of Regional Community Resilience Group (RCRG) Risk assessments for communities	Output	
Staff time or Hours? used to undertake Tree Checks		
Operational Indicators - Utilities		
Water Usage	Outcome	<i>A baseline for changes in water and energy use, which can be examined against changes in weather events.</i>
Energy Usage	Outcome	

Operational Indicators - Local Development		
No. of applications submitted/granted for development in area of flood risk (e.g. fluvial, pluvial and coastal)	Outcome	<i>A baseline for how spatial planning is accounting for the adaptation requirement in the SPPS. These indicators can be used to help identify areas of vulnerability (see Met Office Heat Service) and council ambition to future-proof design. For example, overheating risk modelling can use data on types of buildings and density of developments.</i>
No. of new (approved since 2022) developments built in area of flood risk	Outcome	
No. of buildings at-risk (use Heritage 'at-risk' register and flood risk as starting point)	Outcome	
Quality (condition assessment) of designated Conservation Areas	Outcome	
No. of dwellings by type (e.g. apartments and terraced)	Outcome	
No. developments incorporating Blue and Green Infrastructure	Outcome	
Average density of approved residential developments	Outcome	
Operational Indicators - Community Planning		
Multiple Deprivation Index	Outcome	<i>A baseline for vulnerability and adaptive capacity in the local community, which informs the level of risk for certain people and places.</i>
Poverty	Outcome	
Population Age	Outcome	

Fig.2 Existing Indicators and their adaptation value

Priority New Indicators

Indicator	Type	What will this show?
Staff Overtime/staff allowances due to emergency response (e.g. develop a new code for weather extremes)	Outcome	<i>Improved understanding of the real financial and time cost of weather extremes, to inform business cases.</i>
Average number of days of service disruption – baseline criteria to include at a minimum: <ul style="list-style-type: none"> No. of estates closures and asset damages, Missed bin collections, No. of weather-related insurance claims by council. No. of Council events cancelled or postponed due to extreme weather conditions 	Outcome	<i>Improved awareness and accurate data on disruption to essential functions and services, to inform better procedures, maintenance and business cases.</i>
GBP investment in adaptation – ('adaptation' is suggested to be defined as any of the following, from a baseline year of 2023): <ul style="list-style-type: none"> Green/blue infrastructure like tree planting, flood alleviation and SuDS Community-level flood defences and sandbags Capital Flood Defences and catchment alleviation projects (including peatland restoration, upgrade of dams and reservoirs in response to risk assessment etc..) Building/facility/asset upgrade or retrofit which accounts for extremes of flood, storms or heat Cost in changes to maintenance schedules in relation to climate impacts (e.g. longer growing season, coastal erosion) Grant funding with adaptation as a criteria/reporting element Adaptation research, and resource for gathering, communication and reporting of risk or adaptation actions Cost of staff with adaptation in job description (across all departments) Staff overtime and other council costs for emergency response to weather events Education, guidance and awareness programmes on adaptation (internal and external) Redesign or development of finance (e.g. altered forms of insurance such as parametrics) 	Output	<i>Provides both a baseline for future reporting and monitoring, and also an improved understanding of what adaptation costs and investment actually look like; what gaps in adaptation spending exist within your organisation and where priorities and opportunities may exist to improve engagement, alignment and cost-effective decision-making.</i>
Feedback on change in capacity/understanding due to the plan e.g. Survey of council staff or other community groups on baseline and perceived changes due to the plan	Output/ Outcome	<i>Improved understanding of the impact and usability of the plan and its communication, to inform future campaigns.</i>

Fig.3 Priority New Indicators and their adaptation value

Next Steps

Climate NI has developed this guidance at a time when the majority of councils in NI are developing their first adaptation action plans. This is the best time to integrate the principles and indicators on pages 2-5 of this document, and should provide a more consistent basis for monitoring in councils across the region. There are significant benefits to signing up to this approach, as it makes best use of current data and resource, defines priority data gaps which act as barriers to decision-making, aligns with current best practice on adaptation reporting and will create a solid basis for more detailed future risk assessment for both councils and their wider region, as well as streamlining returns to initiatives such as the forthcoming public body reporting regulations under the Climate Change Act (NI) 2022. Councils would show a model of regional cooperation on adaptation monitoring and reporting, and make it easier to collaborate, driving towards shared objectives.

In discussion with LGCAN members, and in respect of the differing governance structures in councils, the next step for this guidance is for LGCAN representatives to get agreement and commitment from senior leaders to undertake this approach. Some of the indicators above may require additional resource to gather, and it is a discussion for each organisation to understand how best to undertake this work.

Action: LGCAN members should seek to get signoff at the appropriate level within their organisation, and provide a return by letter or email to Climate Northern Ireland indicating their intention to use the principles and indicators outlined, whether in a standalone adaptation plan or to inform adaptation as part of a joint ‘climate action’ or sustainability plan.

Acknowledgements: Climate NI would like to thank the LGCAN members who have given their time to help shape this guidance, as well as the Climate Change Committee (UK), Carbon Disclosure Project, Climate Change Advisory Council (ROI), Climate Action Regional Office (Atlantic Seaboard North - ROI), Climate Emergency UK and Adaptation Scotland for reviewing the outputs.