

Scottish Climate Change Adaptation Programme - Planning

Purpose of this briefing

This LINK briefing from the Climate Adaptation Taskforce (CATF) is intended as a resource and reference to be used by LINK colleagues for information regarding Scottish Government policies relating to adaptation of interest to specific taskforce sectors. **Please note this briefing does not include any analysis of the specific adaptation policies**, although the CATF general concerns are detailed below, alongside links to our previous consultation response. The full Adaptation Programme can be viewed here: <http://www.scotland.gov.uk/Resource/0045/00451392.pdf>

Scottish Climate Change Adaptation Programme (SAP) background

Climate change impacts are being felt now in Scotland, particularly in the natural environment. Scotland needs to act urgently to address the consequences and impacts of our changing climate. Scotland must reduce GHG emissions but also adapt how we run our economy, our society and how we look after our environment. Adaptation is the term used to describe our responses to a changing climate and its impacts – including building resilience. Adaptation is inevitable – the important thing is to plan early and to do it in the right way. With the publication of the SAP, it's essential that climate adaptation becomes a higher priority within Government - **building the resilience of Scotland's environment to climate change must be a priority at a time when our natural resource base needs to be valued as an important asset.**

The Climate Change (Scotland) Act 2009¹ requires Government to lay before the Scottish Parliament 'programmes for adaptation to climate change'. The Scottish Government has developed measures based on risks identified for Scotland in the UK Climate Change Risk Assessment (CCRA) 2012. The CCRA is however limited and does not adequately cover some impacts, such as sea-level rise or extreme weather events. Publication of the first Scottish Climate Change Adaptation Programme brings into force the adaptation requirement of the public bodies climate change duties, which requires that a public body must, in exercising its functions, act in the way best calculated to help deliver the Programme.

The programme contains an overall **Aim** – to increase the resilience of Scotland's people, environment and economy to the impacts of a changing climate. Within this are three **Themes** and relevant **Objectives** for the long-term (up to 2050), to facilitate achieving the Aim:

| Natural Environment | Buildings and Infrastructure | Society |
|---|--|--|
| <i>Outcome: productive, healthy, diverse natural environment able to adapt to change</i> | <i>Outcome: well-managed, resilient infrastructure and buildings providing access to amenities and services needed</i> | <i>Outcome: strong, healthy, resilient communities which are well informed and prepared for changing climate</i> |
| N1: understand effects of climate change and impacts on the natural environment | B1: understand effects of climate change and impacts on buildings and infrastructure | S1: understand effects of climate change and impacts on people, homes and communities |
| N2: support a healthy and diverse natural environment with capacity to adapt | B2: provide knowledge, skills and tools to manage climate change impacts on buildings and infrastructure | S2: increase awareness of impacts of climate change to enable people to future extreme weather events |
| N3: sustain and enhance the benefits, goods and services the natural environment provides | B3: increase resilience of buildings and infrastructure to sustain and enhance benefits and services | S3: support health and emergency services to respond effectively to increased CC pressures |

¹ <http://www.legislation.gov.uk/asp/2009/12/part/5/chapter/1>

LINK'S general concerns with SAP

Some of our initial main concerns that the SAP contains few *new* policies or *new* resources and funding still stand - it is predominantly a collection of existing policies collected together to address the risks highlighted by the UKCCRA. In general there are also no specific **targets** and **timescales** attached to the programme, making progress difficult to assess. The CATF principle concerns are detailed below and our consultation response can be viewed here - many of our comments still apply: <http://www.scotlink.org/files/policy/ConsultationResponses/LINKResponseDraftSCCAP13.pdf>

- **Ecosystem approach:** We welcome that the SAP recognises that the natural environment provides benefits to Scotland in terms of resilience to climate change. However, we believe an ecosystem approach of 'working with nature' should be central to the SAP to; avoid maladaptation, ensure appropriate scale of action and provide a sustainable flow of benefits from ecosystems, such as flood attenuation (LINK Consultation: Section 1a/2a)
- **Greater clarity:** We welcome the long list of policies in the SAP, however, too many are vague, lack sufficient detail, and fail to outline the actions to be taken. This makes it difficult to confidently assess whether the SAP Objectives will be met. We recommend effort to further develop the policies (LINK Consultation: Section 2b/d).
- **Implementing existing legislation:** Whilst the SAP does include existing policies to improve the natural environment, LINK wants to see the SAP emphasise the need to fully implement all existing environmental legislation. Improving our environment will increase the resilience of the natural environment, society and economy to climate change impact (LINK Consultation: Section 2c).
- **Demonstrating action:** We welcome efforts to embed adaptation across Government but it is vital that adaptation is embedded throughout wider society too. Demonstration projects and an effective communication strategy must be included in the SAP to allow wider society to understand the need for effective adaptation and ensure appropriate adaptation action (LINK Consultation: Section 5b).

Major climate impacts on planning in Scotland

The increased risk of flooding

Flooding can already have a devastating effect on those affected. With climate change likely to alter rainfall patterns and bring more heavy downpours, we expect flood risk to increase in the future. This could impact on properties and infrastructure – with serious consequences for our people, heritage, businesses and communities.

The change at our coast

Sea level rise is already having a widespread impact on parts of Scotland's coast. With this set to accelerate over the coming decades, we can expect to see more coastal flooding, erosion and coastline retreat – with consequences for our coastal communities and supporting infrastructure.

The security and efficiency of our energy supply

Climate change may influence Scotland's capacity to generate weather-dependent renewable energy. For example, varying water availability will affect hydro generation schemes. Climate change can also impact power distribution, with impacts ranging from damage caused by extreme weather events, to reduced transmission efficiency occurring as a result of temperature fluctuations.

The performance of our buildings

Climate change will have an impact on the design, construction, management and use of our buildings and surroundings. Whether retrofitting existing or building new, it is likely that there will be issues with water management (in flood and drought), weather resistance and overheating.

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Infrastructure – network connectivity and interdependencies

Our energy, transport, water, and ICT networks support services are vital to our health and wellbeing and economic prosperity. The effect of climate change on these infrastructure systems will be varied. They are likely to be impacted by an increase in disruptive events such as flooding, landslides, drought, and heatwaves. Our infrastructure is closely inter-linked and failure in any area can lead to wider disruption across these networks. Energy infrastructure is vulnerable to extreme weather events (floods, storms). Developers, including those engaged in renewables, may need to take into account in their future siting decisions the risk of climate change, not only in terms of local impacts such as weather events, flooding and subsidence, but possible impacts on global supply chains.

Planning and Green Infrastructure

The consultative draft Scottish Planning Policy of 2013 includes climate change as a Principal Policy, one which should feature in all planning activity. The draft policy aim is to strengthen resilience in relation to greater climate variability for example: ensuring new development is adapted to withstand more extreme weather, including prolonged wet or dry periods; working with natural environmental processes, for example through the development of green infrastructure and sustainable urban drainage systems to reduce flood risk; and promoting landscaping and natural shading that cool spaces in built areas during hotter periods.

Areas of the SAP relevant to the Planning Taskforce

Relevant sections of the Programme are reproduced, verbatim, below. SAP references are included and, where applicable, the LINK consultation response references.

Role of Scottish Government

It is vital that the Scottish Government provides clear leadership in promoting a sustainable approach to climate change adaptation (p24).

What's already being done

The below sets out what is already being done to achieve the natural environment objectives in relation to impacts on the planning sector:

Policy: Implement the Land Use Strategy (LUS) and associated action plan - incorporates principles for sustainable land use and includes a commitment to investigate the relationship between land use change and ecosystems processes to identify adaptation priorities.

How it will deliver: The LUS Action Plan Proposals contain a number of specific milestones such as the publication of Achieving Diversity in Scotland's Forest Landscapes which provides guidance on planning future forests in a changing climate (N2-8, p52).

Policy: Embed climate change adaptation considerations, and potential responses such as habitat networks and green networks, into wider land use planning decisions through the use of Forestry and Woodland Strategies, regional land use strategies, and Strategic and Local Development Plans and development master-plans.

How it will deliver: Habitat Network information will be used to inform land use plans so that the creation and management of woodland and other habitats can be targeted to further strengthen these networks and increase their resilience to climate impacts (N2-11, p52).

Policy: Marine Scotland will use marine research strategies and monitoring programmes to gather data on the impact climate change is having on the seas.

How it will deliver: (Planning specific) developing a better understanding of the role of blue carbon ecosystems in carbon sequestration and the role of **Marine Planning** and Marine Protected Areas in protecting these ecosystems (N1-6, p46; LINK 2b).

Policy: The **Scottish Planning Policy** includes green networks, green space, street trees and other vegetation, green roofs, wetlands and other water features, and coastal habitats in helping Scotland to mitigate and adapt to climate change.

How it will deliver: Green infrastructure can help nature to adapt to climate change by strengthening habitat networks, reducing habitat fragmentation and providing opportunities for species to migrate. It also helps people to adapt by providing other benefits like sustainable drainage, flood alleviation, coast protection, cooling in urban areas, and places for people to walk and cycle (N2-2, p50).

Policy: **Develop the ecosystem approach into a usable set of tools** for use by decision makers including through the Scottish Biodiversity Strategy 2020 Challenge, and the Land Use Strategy.

How it will deliver: The ecosystems approach promotes a holistic approach to land management which will help to build resilience to climate change and ensure that wider benefits from nature are taken into account in decisions (N2-6, p51).

Policy: **Liaise with industry on thermal generation** (generation of electricity from sources that create heat, such as coal, gas and nuclear).

How it will deliver: Ensure that climate change adaptation is fully considered in the future development of thermal generation and CCS policy in Scotland. Whilst energy policy is reserved, the Scottish Government has a role to play in developing CCS and Thermal generation due to responsibilities and duties in relation to planning, consents and environmental regulation (B2-6, p73).

Policy: **National and Regional Marine planning frameworks**

How it will deliver: National and Regional Marine Plan, which include clear policies for climate change mitigation and adaptation in relation to marine development and activity will be taken into account in decisions relating to infrastructures which incorporate marine and terrestrial elements (B2-7, p73).

Policy: **Planning Advice Notes (PAN) are being reviewed and consolidated.** Revised PANs are to be underpinned by the principles of sustainable flood risk management.

How it will deliver: The consolidated PAN on flooding, water and drainage will provide advice and guidance for applicants, developers and local authorities on the role of sustainable flood risk management. It will highlight the role of climate change adaptation with regards to flood risk and the water environment and promote the avoidance of development in medium to high flood risk areas. It will also provide guidance on sustainable drainage systems (SUDS) (B3-2, p76).

Policy: **Scottish Planning Policy (SPP) (Climate Change)** identifies that short and long term impacts of climate change should be taken into account in all decisions throughout the planning system.

How it will deliver: The SPP sets out how the planning system should help address climate change through mitigation and adaptation measures, providing relevant examples for planning authorities to consider. For example: To promote the benefits of open spaces the SPP advises that planning authorities should undertake an audit of the open space resource in their area and how well it meets the needs of the community and to use this to prepare an open space strategy which sets out the vision for new and improved open space and addresses any deficiencies identified. Planning authorities are also encouraged to integrate green infrastructure/networks into new development and regeneration proposals (B3-3, p77).

Research

The Scottish Government is funding research into the resilience of Scotland's biodiversity to climate change and land-use change. There are currently no specific research programmes investigating agricultural adaptation detailed in the SAP (p62).

Proposals - potential new policies

There are currently only 3 proposals detailed which may become policies if needed during the lifetime of the SAP, only 1 of which is relevant to this sector:

1) Establishment of a co-ordinated Energy Sector Climate Change impacts research programme which would consider the impacts of changing energy generation on biodiversity and ecosystem services. The research programme could include consideration of the impacts of changing energy generation on biodiversity and ecosystem services (N1-14, p63).

UK Climate Change Risk Assessment

There are several specific UKCCRA planning impacts not being addressed by this Programme (technical annex p105):

| Risk Not Addressed | Reason for Exclusion |
|--|--|
| Risk of restrictions in water abstraction for industry | Low risk (2020s), low confidence - too uncertain - await second UKCCRA to establish if evidence base has improved. |
| Underestimation of decommissioning liabilities and end of life costs | Too uncertain - await second UKCCRA to establish if evidence base has improved. |
| Risk of restrictions in water abstraction for energy generation | Low risk until 2080s. |

However, risks that are not considered an issue now in Scotland may become problems in the future, one reason why LINK called for the SAP to set a long-term direction (LINK Consultation² Section 2). There may also be other potential climate change risks to your sector that are not addressed on top of the above, especially those not identified in the UKCC Risk Assessment. Of those risks that are addressed in the programme, many may be inadequately dealt with.

² <http://www.scotlink.org/files/policy/ConsultationResponses/LINKResponseDraftSCCAP13.pdf>

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