



Considering Climate Change in SEA in Scotland

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Presentation

- A short summary of climate change policy in Scotland
- Details of SEPA / Scottish Govt Climate Change and SEA Guidance

Climate Change Policy

Climate Change (Scotland) Act 2009

- 80% target for reduction in ghg emissions by 2050
- 42% target for reduction in ghg emissions by 2020

Requirements of Scottish Ministers to – for example:

- Produce an adaptation programme
- Produce a land use strategy

New duties for the public sector to contribute to targets

Energy efficiency measures and zero waste

Climate Change Adaptation Framework

Focuses action in 3 areas:

- **Exposure:** understanding the consequences for Scotland of a changing climate
- **Adaptive Capacity** – equip stakeholders with tools needed to adapt to a changing climate
- **Competing Pressures** - ensuring public policy works together and does not compete to address climate change

Joint Agency Statement – SEPA, SNH, Historic Scotland and the Forestry Commission Scotland

- Sets out the roles of four key agencies in Scotland
- Sets out the approaches being taken
- Commitment to work together to raise wider awareness on climate change

Climate Change Guidance Project Steering Group

SEPA was asked to prepare guidance on behalf of Scottish Government to support its climate change initiatives

A project steering group was established to provide both SEA and climate change expert input to the guidance, including:

- SEPA
- Scottish Natural Heritage
- Historic Scotland
- Transport Scotland
- Scottish Government
- Local Authorities
- SEA Consultants

Climate Change in SEA Guidance: Basic Principles

Analysis of SEA casework showed climatic factors being considered inconsistently

Need for some simple guidance to develop greater consistency and clearer view of how climate is being considered in SEA

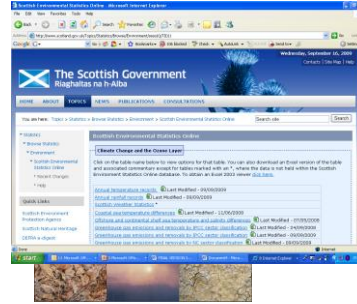
So, key principles were:

- Simple, easy to use and understand
- Links to relevant and up to date information sources
- Developing awareness of climate issues and the impacts different plan may have
- Helping Responsible Authorities to help themselves when considering climate issues
- Lead in to potential phase 2

Climate Change in SEA Guidance*

1. Introduction – Climate Change & SEA	Includes: Background to climate change, Scotland's greenhouse gas emissions, observed climate trends, summary of UKCP09 for Scotland
2. Screening	Summary of typical effects of certain plans on climate change adaptation and mitigation to help consider whether a plan will lead to significant environmental effects
3. Scoping	Includes: List of climate related plans, programmes and strategies, list of information sources to inform the baseline and advice on how to scope in and scope out climatic factors
4. Assessment	Includes: Examples of typical impacts of certain plans on climatic factors – examples of climate change objectives and advice on considering cumulative and other effects
5. Adoption and Monitoring	Provides advice on potential monitoring indicators
Appendices	Including: technical glossary, links to information sources and a full summary of potential impacts of climate change on Scotland.

* please note: draft submitted to Scottish Government may be subject to change



- **SCCIP -** www.sccip.org.uk
- **SNIFFER Handbook of Climate Trends**
- **UKCP09**
- **Scottish Government Climate Statistics**

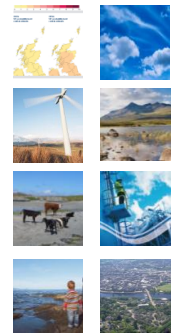
Climate Change Mitigation	Generic example: To reduce greenhouse gas emissions
	Plan specific example (eg transport): To reduce greenhouse gas emissions resulting from [insert sector]
Climate Change Adaptation	Generic example: To reduce vulnerability to the effects of climate change
	Plan specific example (eg spatial plans): To reduce vulnerability of people and property in the plan area to flooding

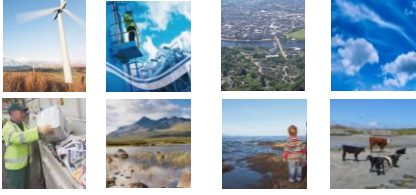
Climate Change Mitigation	Will the plan, programme or strategy...
	reduce the need for energy
	improve energy efficiency in [insert] sector
	increase the percentage of energy generated from renewable sources
Climate Change Adaptation	switch to lower carbon fuels
	reduce the amount of waste going to landfill (to reduce methane emissions)
	improve land use practices to reduce emissions
	protect natural carbon sinks such as peat soils
	encourage transport choice and promote modal shift
	consider the carbon impact in the construction phase
	consider the carbon impact of adaptation measures
	reduce overall flood risk e.g. developing in flood plain, flood protection schemes
	consider present and future climate impacts in the design of buildings and urban areas e.g. green roofs, urban greenspace, sustainable urban drainage
	consider present and future climate impacts for infrastructure e.g. transport
	provide adequate health services
	ensure adequate future water and drainage supply
	avoid actions that may close or limit future adaptation
	develop ecological resilient and varied landscapes e.g. ecological networks, drainage
consider opportunities presented from climate change impacts	

Figure 12 – Typical influences on climatic factors from land use Development Plans

Plan Type	Climate Change Adaptation							
	Resilience to all GHG emissions	Resilience to increasing sea levels	Resilience to increasing energy demand and enabling renewable energy generation	Resilience to increasing flood risk and flooding	Resilience to increasing wind, rain, storms and storminess	Resilience to increasing droughts and heat waves	Resilience to increasing erosion and landslides	Resilience to increasing coastal erosion
Space Development Plans	Promote high energy efficiency standards	Locate settlements close to existing centres on public transport routes	Encourage micro-renewables on buildings or in developments	Reduce waste in development of new buildings	Protect peat soils from loss / sealing out through new development	Avoid building in flood risk areas – carry out flood risk assessments	Consider whether existing buildings remain fit for purpose	Avoid new developments in areas at risk from erosion, including coastal erosion.
	Use solar gain through light and shade	Reuse brownfield land	Encourage Combined Heat and Power	Reuse construction waste	Protect peat soils from energy developments (eg windfarms)	Resilient buildings in flood risk areas	Greater use of green roofs	Protect and expand native woodland cover
	Smaller housing at higher density	Promote development patterns that reduce need to travel	Provide framework for new developments in appropriate locations	Enable pre-sorting of recyclable wastes in new developments	Ensure that essential infrastructure and service developments are not at flood risk	Ensure, through building standards, that new buildings are fit for purpose	Consider future water needs and availability when planning new development.	Encourage use of rainwater and greywater
	Greater use of locally sourced sustainable construction materials	Provide choices for modal shift	Support car free developments in appropriate locations	Provide framework for new waste facilities such as recycling, composting and thermal treatment	Increase resilience to floods through use of Sustainable Urban Drainage Systems	Ensure, through building standards, that new buildings are fit for purpose	Provide habitat corridors for the movement of species	
	Make most efficient use of existing infrastructure to reduce need for additional facilities when associated from planning / treatment	Use proximity principle when identifying new sites to reduce need to travel			Permeable surfaces and green space in new developments	Ensure drainage and sewerage can cope with increase in storm events		
					Protect coastal habitats from loss to development, either directly, or through indirect poor management			

- SEPA has passed a final draft to Scottish Government for approval
- Hope to publish by end of the year – will be available through the Scottish Government website
- SEPA is currently investigating potential for a "phase 2" which aims to secure greater quantification of carbon impacts through use of tools – especially in the spatial planning sector





Thank You !

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