

SHETLAND'S LOCAL PLACE PLANS

Leaflet 2 - A Climate Change Perspective

Why should we think about climate change?

Climate change affects everyone. It is the long-term shift in temperatures and weather patterns, mainly caused by human activities since the 1800s, such as burning fossil fuels. These activities produce greenhouse gases that trap heat like a blanket around the Earth, raising temperatures.

How does climate change affect land use and buildings?

The way we develop and use land and buildings can produce greenhouse gases, contributing to climate change. In turn, climate change impacts us through rising sea levels, stormier winters, and flooding.

Key concepts:

- **Mitigation:** Reducing greenhouse gas emissions to limit global warming.
 - **Adaptation:** Preparing for the impacts of a changing climate.
 - **Net Zero:** Balancing emissions with removal by 2045 (Scotland's legal target).
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What does climate change look like in Shetland?

- More extreme weather and frequent storms
 - Increased winter rainfall – warmer air can hold more moisture
 - Rising sea levels, worsened during storms
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Things to think about when planning land and buildings:

- **Mitigation:** What can you do differently to reduce emissions?
 - **Adaptation:** How can your community become more resilient to flooding, coastal erosion, and severe storms?
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Examples:

Mitigation:

- Replace oil-fired heating with heat pumps
- Reduce carbon fuel use in transport and industry
- Plant trees and restore peatland
- Improve insulation
- Use locally sourced materials where possible

Adaptation:

- Make buildings more storm-resilient
 - Consider coastal risks from rising sea levels
 - Carry out climate risk assessments
 - Identify infrastructure and land at risk from storm surge
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For information and support:

- [Adaptation Scotland](#)
- [Met Office – Sea Level Rise](#)
- [Scotland's Marine Assessment 2020](#)
- [Voluntary Action Shetland](#)
- [Highlands & Islands Climate Hub](#)
- [Community Energy Scotland](#)
- [Climate Change – Shetland Islands Council](#)