Welcome to the Future Climate: Future Environment Hub

All change

The Scottish Government has set a target of an 80% reduction in greenhouse gas emissions by 2050 in order to reduce our risk of dangerous climate change. This means our lifestyles will need to change and we will need to consider how we produce and use energy, and the choices we make in buying food, travel and the homes we live in.

The study of climate change, its impacts, how to mitigate against it and how we can best adapt to it requires an integrated approach by many scientific disciplines. In this display we detail some of the areas of our work which look at the relationships between climate change, people and the environment.
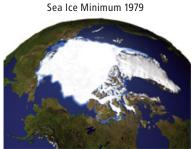
What will the weather be like in the future?

This will depend on where you are in the world. In Scotland it is likely to be warmer and wetter in the winters, especially in the west, and warmer and drier in the summers in the East. In other parts of the world, droughts, floods and other extreme events are likely to be more frequent and severe.

Sea Ice Minimum 1979

Sea Ice Minimum 2005

Do we know what's happening at the moment?

Recently, leading scientists declared that the climate is changing more rapidly than originally thought, and that the rate of greenhouse gas emissions currently exceeds what was previously felt to be the "worst case scenario".

People are the problem – people are the solution

It is not the number of people in the world that is the problem, but the lifestyles we lead and resources we use. The solutions lay in reducing consumption, achieving greater energy efficiency and importantly, greater equity in resource use.

What is the Macaulay Land Use Research Institute doing about it?

The subject of climate change requires research on a wide range of issues. We aim to provide scientific advice that provides evidence on the potential impacts of climate change and enables informed decisions to be made on reducing emissions and adaptation to change.