

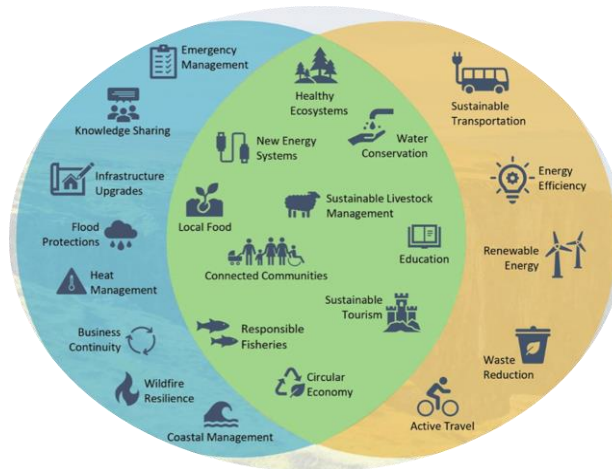
Integrating Adaptation, Mitigation and Sustainability

The breakout session explored the key climate hazards facing Scottish public bodies, the integrative adaptation and mitigation approaches which public bodies can adopt to become more resilient and an overview of Scotland's Third Climate Change Adaptation Programme (SCCAP3).

This session was facilitated by:

- **Emma Yule**, PhD Student and Tutor at the University of Edinburgh
- **Clive Mitchell**, Outcome Manager: People and Nature, Nature Scot
- **Mark Williams**, Environmental Regulation and Climate Change Manager, Scottish Water
- **Iain Thom**, Senior Policy Advisor on Adaptation, The Scottish Government

Adaptation
Reducing or managing
impacts of climate
change



Mitigation
Reducing greenhouse
gas emissions that
contribute to climate
change

Key Messages

- **Future climate trends** include 1) warmer, drier summers 2) milder, wetter winters 3) increased intense heavy rainfall events and 4) sea-level rise.
- **33%** of public bodies are taking **no adaptation action**. 67% of bodies have taken some form of action prior to or within the reporting period of 2020/2021. Just 3% of public bodies are taking advanced action.
- Global fossil fuel and land use has caused a **broken carbon cycle** and therefore climate/biodiversity crises. This linear extractive economy has altered more biodiverse, complex, connected and wetter land cover into less biodiverse, drier, less complex and more fragmented land systems.
- A **circular economy** is a solution. This considers material flows and waste, the rural biological economy, regenerative practices, more mixed woodlands, complex grasslands, mixed livestock/arable systems and intercropping for pest management.
- **Systems thinking** is key to assess the resilience of an organisation's assets and processes against the impacts of climate change.

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Next Steps

The new **Scottish Climate Change Adaptation Programme (SCCAP3)** is expected to be published in Autumn 2024 in alignment with the Climate Change (Scotland) Act 2009. This will address the 61 risks and opportunities for Scotland identified by the 2022 Climate Change Risk Assessment.

Group Discussion Key Takeaways:

Impacts of severe weather events



Storms, floods and heavy rainfall can:

- Impact tourism
- Incur significant financial costs
- Impact nature and biodiversity
- Cause water ingress and damage to assets
- Block roads, car parks, public entryways and footpaths
- Affect access to public bodies' stakeholders, especially in remote areas
- Disrupt transport and communication services, which isolates vulnerable people
- Strain vital services during and post-extreme weather events



Extreme heat and drought can:

- Lead to high water retention in soil
- Reduce water quality and availability
- Affect people's ability to learn
- Impact health and wellbeing
- Incur significant financial costs
- Increase water demand and exacerbate pressure on water resources
- Cause building damage e.g. melting roofs and physically decaying listed buildings

Impacts of long-term changes



Sea-level rise and coastal erosion can:

- Damage roads
- Cause displacement of people
- Weaken sea defenses
- Impact coastal development



Heat can:

- Damages infrastructure
- Affects health and social care
- Impacts mitigation projects
- Decays old stone buildings

Climate change impacts public sector budgets due to:

1. The high upfront investments for sustainable solutions placing additional pressure on already under-resourced budgets.
2. The higher costs associated with reactive approaches that fail to address climate change now.
3. The trade-offs that are likely to emerge e.g. Air conditioning may increase cooling costs but heating costs will lower.
4. As competition for climate investments may cause the unequitable distribution of investments across key adaptation focus areas.
5. As the costs of emerging technologies and solutions are difficult to quantify and, therefore, account for.