

Independent advice to government on building a low-carbon economy and preparing for climate change

Wednesday 19th June 2019

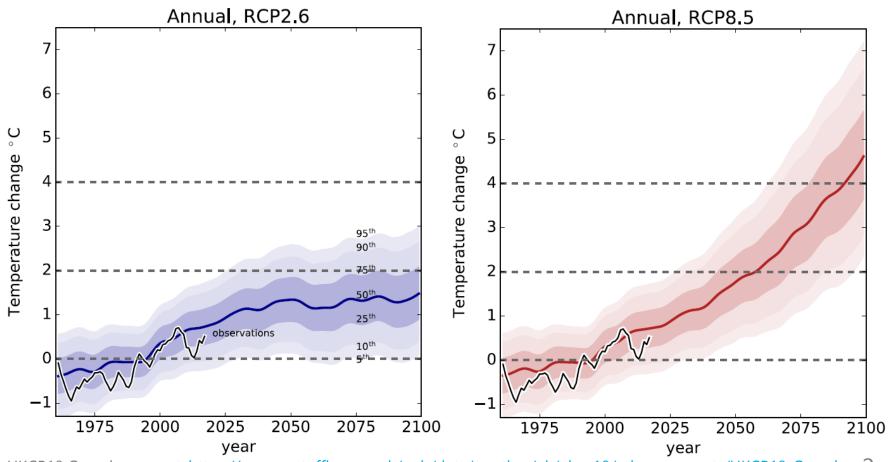
Scotland's Adaptation Programme – an Assessment

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We need to adapt as well as mitigate

UK temperature and precipitation difference from 1981-2000 average



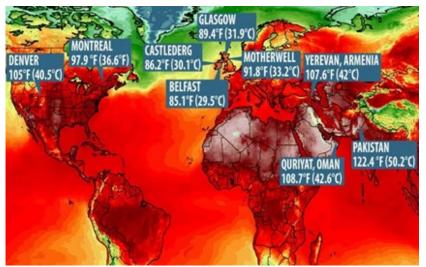
UKCP18 Overview report: https://www.metoffice.gov.uk/pub/data/weather/uk/ukcp18/science-reports/UKCP18-Overview-2 report.pdf



'Summer 2018 will be an average year by 2050'

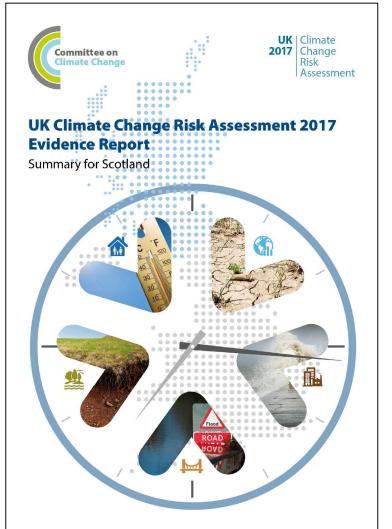
- Temperatures in Glasgow topped 31°C
- North Highlands and Moray regions were in severe water scarcity
- Farmers in Northern Scotland had to buy in additional hay as winter stocks ran out
- Heat-related deaths in Scotland projected to increase from ~40 per year today to between ~70 – 280 by 2050.





Committee on mate Change

Climate risks to Scotland set out in the CCRA



The Committee on Climate Change prepares the Evidence Report for each **UK Climate Change Risk Assessment** (CCRA – every five years).

Scottish Government can invite us to evaluate progress in addressing the risks through the Scottish Climate Change Adaptation Programme (SCCAP).

We published a final evaluation of the first SCCAP in March 2019.



National action to assess risks – Scottish Climate Change Adaptation Programme

Climate Ready Scotland: Scottish Climate Change Adaptation Programme





















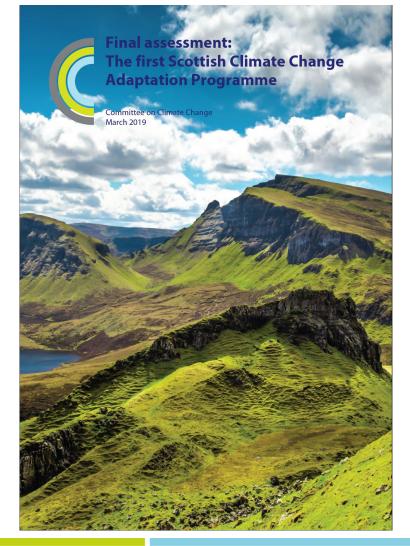


Laid before the Scottish Parliament under Section 53 of the Climate Change (Scotland) Act 2009

May 2014

SG/2014/83







How do we measure progress in adaptation?

Risk Mitigation Hazard Reduce greenhouse gases, ultimately Heat, cold, flooding, drought, fire, sea level affecting scale of climate change (but actions have a time lag of decades/ rise centuries) **Impacts** Adaptation **Exposure** Deaths, health impacts, economic damage Actions to reduce vulnerability or exposure Location, setting or benefit, loss or gain for society to hazards, or take advantage of opportunities: - Low and no regret adaptation, including capacity building Vulnerability Decisions with long lead times Decisions to avoid lock-in Age, condition, wealth, adaptive capacity

CCC (2019)



SCCAP Assessment – key messages

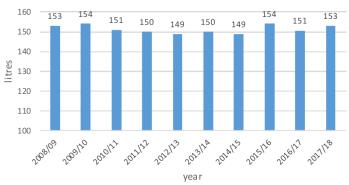
- The CCC gave 'progress scores' for a range of sectors
- Areas of most concern:
 - Tree diseases, freshwater rivers and lochs, declines in seabird populations, soil health, ICT, recovery from extreme weather
- Good progress in:
 - Road and rail, public water supply, restoring peatlands and woodlands, marine resilience, understanding of how many people live in flood risk areas, public awareness
 - Many data gaps! Business, people, natural environment

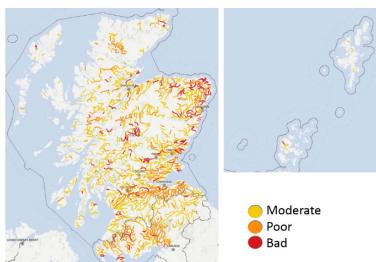
Committee on Climate Change

Some indicators of vulnerability and exposure

Water consumption

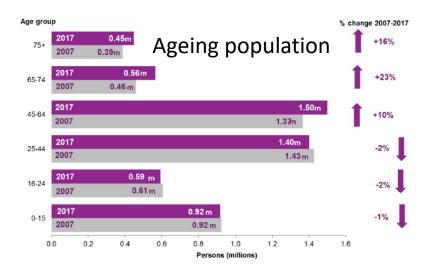
Per capita consumption in I/p/d (unmeasured)



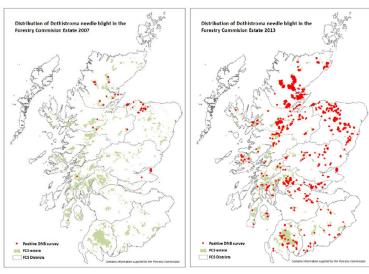


Scottish rivers in less than good overall status

Figure 7: The changing age structure of Scotland's population, mid-2007 to mid-2017



DNB spread between 2007 and 2013





Three highlights for local areas

- Sustainable Drainage Systems
 - What is the level of uptake in new and existing developments?
- Development in flood risk areas
 - Rate of development nationally and regionally is unknown
- Risks to the health and social care system
 - Very little information on how hot weather, flooding is affecting care



Recommendations – with a regional focus

RECOMMENDATION 1: Work with partners to improve the measurement of vulnerability to climate change in Scotland (flooding, overheating, soil health, infrastructure performance, action by businesses)

RECOMMENDATION 3: Commit to more ambitious actions to address current and long-term risks from both heat and cold.

RECOMMENDATION 5: Review monitoring and reporting arrangements for the uptake of Sustainable Drainage Systems. There may be an opportunity to collect information through public sector organisations.

RECOMMENDATION 6: Work with Local Authorities to identify the areas of coastline that are inhabited, at risk of erosion and/or at risk of flooding and ensure these are all covered by a Shoreline Management Plan.

RECOMMENDATION 8: Include specific actions to understand and improve resilience of health and social care services in the next iteration of the SCCAP.

RECOMMENDATION 9: Consider specific actions that can be incorporated into the next SCCAP to link adaptation to National Health and Wellbeing Outcomes.



Contact us

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