Climate action

Take urgent action to combat climate change and its impacts

Prepared by

Supported by
The UK takes its responsibilities on climate action seriously. It is a key party within the UN Framework Convention on Climate Change delivering both its own obligations and supporting others to fulfil theirs. The UK’s Climate Change Act (2008) underpins the nation’s efforts, including the devolved administrations, to reduce carbon dioxide emissions and other greenhouse gases. There is a legally binding target of net carbon reduction by 80% on 1990 levels by 2050 (34% by 2020). The Act also requires the UK to strengthen resilience against climate risks.

Disaster risk reduction seems to be non-politicised and well accounted for using the Hyogo Framework for Action. However, there are differing opinions on how to tackle food production resilience, with projects planned to evaluate the current UK food system risks and opportunities. There are also strong disagreements on how to educate future generations about the science and actions required around climate change. Scotland and Wales are leading the way in programmes that place sustainable development and education at the heart of their policies.

Internationally, the UK is vocal and visible in supporting the Green Climate Fund and enabling developing nations to build their capacity and resilience.

Performance rating

<table>
<thead>
<tr>
<th>Sustainable Development Goal Target</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</td>
<td>🟢</td>
</tr>
<tr>
<td>13.2 Integrate climate change measures into national policies, strategies and planning</td>
<td>🟢</td>
</tr>
<tr>
<td>13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning</td>
<td>🟢</td>
</tr>
<tr>
<td>13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilising jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible</td>
<td>🟢</td>
</tr>
<tr>
<td>13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities</td>
<td>🟢</td>
</tr>
</tbody>
</table>
Key findings

1. The UK reached ‘substantial’ or ‘comprehensive’ achievement for disaster risk reduction using the Hyogo Framework for Action. This framework was replaced by the Sendai Framework in 2015, which has not been adopted and so this is not currently measured.

2. Heat-related deaths and flooding are projected to increase and pose the highest direct climate change-related risks to the UK population and infrastructure, with the poorest being most vulnerable to these impacts.

3. Conflicting views exist on the potential impacts of food production risks and the resilience of UK food supply chains. The UK Food Security Assessment is urgently due for renewal.

4. The topic of climate change exists within the UK education system but it is not followed by all and is stronger in some subject areas than others.

5. The UK is mobilising developed countries to jointly contribute $100bn a year in climate finance for developing countries. The UK is leading and involved in initiatives with developing countries that build capacity for climate-related planning and management within developing countries.

Performance and progress

The Climate Change Act 2008 is the basis for the UK’s approach to tackling and responding to climate change. The Act stipulates that emissions of greenhouse gases are reduced and risks are mitigated, and establishes the framework to deliver on these. Scotland, Wales and Northern Ireland have additional policies.

1. The Act requires the UK Government to produce a UK Climate Change Risk Assessment (CCRA) to assess current and future climate change risks and opportunities. It also requires the Government to produce a National Adaptation Programme (NAP) whose purpose is to make the country resilient to a changing climate. The NAP covers England, while the devolved administrations produce their own programmes and policies.

The UK has a legal target of greenhouse gas (GHG) reduction by 80% on 1990 levels by 2050 (34% by 2020), in 2016 the reduction was 41%. While Wales has stipulated at least 80% by 2050, in June 2017 Scotland announced new reduction targets of 56% by 2020 and 90% by 2050. Northern Ireland aims to reduce its greenhouse gas emissions by at least 35% (compared with 1990 levels) by 2025. However, while there has been good progress to date, the UK Government urgently needs to publish plans setting out how it intends to deliver the fourth and fifth carbon budgets as without new policy, UK emissions will not continue to decrease.

It also needs to review the 80% target in light of the Paris Agreement.

Certain climate-related hazards and natural disasters are relatively infrequent and less hostile in the UK compared to other parts of the world. However, the country will experience a number of significant consequences of climate change connected to ocean temperature rises, ocean acidification and ocean deoxygenation. In addition, flooding will increase in both frequency and severity while both average and extreme temperatures are expected to rise. In the UK, an estimated 1.8 million people live in areas with an annual risk of flooding higher than one in every 75 years.
areas with an annual risk of flooding higher than one in every 75 years. This is projected to rise to between 2.6 – 3.3 million people by the 2050s. The UK Government needs to plan for long-term flood risks and avoid exacerbating this issue through inappropriate new development (SDG11).7

Higher average and extreme temperatures are also predicted to impact the UK population. Heat-related deaths are projected to increase by 250% by 2050, from about 2,000 a year, due to climate change and the ageing population.4 There is no policy in place at present to reduce the risk of overheating in buildings, although the proposed revision of England’s National Planning Policy Framework covers this issue.9 Indeed, since 2010, some policies designed to improve climate resilience of new homes, eg Code for Sustainable Homes, have been abolished (SDG11) and sometimes technical solutions (eg air conditioning) are put in place which create more emissions.

The UK has a recent history of prioritising resilience and adaptive capacity to climate-related hazards and natural disasters. Until 2015, disaster risk reduction was managed and measured using the Hyogo Framework for Action, with the UK reaching ‘substantial’ or ‘comprehensive’ achievement for each.10 Its successor, the Sendai Framework11, was established in 2015 and, whilst it is voluntary and there are questions around measurements, implementing this would ensure ongoing UK commitment. Some progress has been made with a review published by Public Health England (PHE) considering the Sendai Framework for Disaster Risk Reduction 2015-2030, which “identified a number of successes but also some opportunities in the work that PHE carries out”.12

One increasingly considered impact of climate-related hazards is the mental health of those affected. Experiencing extreme weather events is associated with higher incidence of depression, post-traumatic stress disorder and anxiety, particularly when there is little advance warning.13 Such events expose people to circumstances that aggravate mental health risk factors and can also disrupt the treatment of existing conditions (SDG3).14

Food supply (SDG2) is one of 13 UK Critical National Infrastructure sectors, which are designated as critical for the continued delivery of essential services by the Government. The CCRA 2017 Evidence Report concludes a need for new policy to manage the potential impacts of food production risks. However, the Government disagrees and asserts that the food supply chain is resilient and performs well under stress.15 But risks such as soil health and water supply are a concern given the UK’s heavy reliance on fertilisers, which eventually find their way into water courses, increasing the risks of eutrophication-induced hypoxia. The Department for Environment, Food and Rural Affairs is undertaking a project on global food modelling to compare existing models aimed at integrating environmental impacts with global agricultural production and international food security over the longer term.16

The UK education system includes some climate change learning, particularly within geography and science, however, there is a sense within teaching and political spheres that climate change is not sufficiently covered. There is particular concern that “omissions would undermine the core knowledge base of pupils who will experience first-hand those impacts of climate change that are now unavoidable”.17 These disagreements tend to focus on the lack of teaching about mitigation, adaptation, impact reduction and early warning elements, rather than the science of climate change. Given
that the consequences of climate change will affect us all and for generations, there
should be climate change education for all (SDG4). In Scotland there is a programme
placing sustainability (including climate change) at its heart – Vision 2030+18 and in
Wales, the Wellbeing of Future Generations (Wales) Act 2015 has an objective to develop
a skilled and well-educated population and operate a within low carbon society.

The UK is helping to deliver the collective goal of mobilising US$100 billion per year
in finance for developing countries by 202019 under the Green Climate Fund. By 2020,
the UK pledges £5.8bn and is promoting mechanisms for raising capacity for effective
climate change-related planning and management in the least developed countries,
as are Scotland in its own right (SDG17).20 To contextualise this, the UK Oil and Gas
Authority forecasts investment of £98.5bn in unsustainable UK oil and gas production
between 2015 and 2020,21 so a significant financial shift must be enabled to address
these issues.

**Synergies and coherence**

The climate is interdependent with every SDG because it impacts food, shelter, water,
business, cities and the natural world. The strongest links include generating increased
energy from renewables and greater efficiency in the production of affordable and clean
energy (SDG7) which reduces emissions, in addition to careful action on sustainable
consumption and production (SDG12). Slowing the temperature rise would protect
ecosystems and build resilience for agricultural productivity (SDGs 3, 14 and 15)
and minimise climate-related incidences and deaths (SDGs 1 and 11). Quality education
helps future generations to tackle climate change (SDG4).

**Local to international dimension**

Focusing on policy and systems on home soil is extremely important for the UK to
meet its moral and legal obligations to tackle climate change. The UK is also well placed
to support other countries to build capacity, bolster resilience and lower climate-related
threats through finance and skill sharing. This is being delivered through the Green
Climate Fund and the Government’s Department for International Development,
which commits to embedding resilience-building into its work on climate change in all
country programmes.22

The risk of climate-related international displacement of people needs a sharper focus,
as noted in the recent UK Climate Change Risk Assessment. The World Bank has recently
warned that lack of increased action to reduce greenhouse gas emissions and of far-
sighted development planning will result in mass movement of 140 million people
inside countries and across borders.23
Recommended actions

1. Re-establish a high-level dedicated body to drive progress on reducing UK emissions – this is a prerequisite for any government serious about meeting its obligations

2. Publish plans setting out how the UK Government intends to deliver the fourth and fifth carbon budgets

3. Reassess the UK Food Security Assessment which is significantly out of date.

4. Ensure that the three tiers of the education system go beyond the science of climate change to educate on mitigation, adaptation, impact reduction and early warning, weaving it though every subject

5. Establish a common methodology for stress testing acute and chronic climate risks to health services and critical infrastructure. This should enable benchmarking

6. Invest in food production research to support small scale farmers in the UK and in developing countries to support sustainable systems and implement practices that allow for adaption to climate change

7. Adopt and implement a national disaster risk reduction strategy in line with the Sendai Framework, with all local governments adopting and implementing local disaster risk reduction plans in line with this

Case Study

Climate Just – mapping climate disadvantage in the UK

SDG TARGETS: 1.5, 11.5, 13.1

Climate Just is a web-based platform designed to help public services to identify who is vulnerable to climate change and fuel poverty, and why. Climate Just was created in partnership by Climate UK, the Joseph Rowntree Foundation, the Environment Agency and the University of Manchester. The tool maps data about the likely exposure of neighbourhoods to climate related natural events, such as flooding or drought, against social vulnerability. This includes data such as economic status, age and health.

By using the tool, public service providers can identify the households most at risk of climate change, or those living in ‘climate disadvantage’. They can also identify households likely to be in, or at risk of, fuel poverty. With this information public service providers can make socially just interventions; they are better able to understand that some of those most likely to be affected by climate change in the UK may be the least able to cope with those affects.

Evidence from Climate Just also suggests that those most likely to feel the impacts of climate change are those that currently emit the least greenhouse gases. The tool demonstrates the deep connections between socio-economic inequalities and the impact of climate change.

www.climatejust.org.uk
Endnotes

1. Climate Change (Scotland) Act 2009

   Environment (Wales) Act 2016


3. DEFRA. (2013). The national adaptation programme: Making the country resilient to a changing climate.


14. www.ehp.niehs.nih.gov/ - need author to send me details as paywall on article


