

Climate change

UK poorly prepared for climate change impacts, government advisers warn

A 2,000 page report by Committee on Climate Change predicts global warming will hit UK with deadly heatwaves, more flooding and water shortages



A Cumbria road destroyed in floods during storm Desmond, which scientists found had been made more likely by climate change. Photograph: Ashley Cooper / Barcroft Media

The UK is poorly prepared for the inevitable impacts of global warming in coming decades, including deadly annual heatwaves, water shortages and difficulties in producing food, according to the government's official advisers.

Action must be taken now, according to the report from the Committee on Climate Change (CCC) published on Tuesday, with more widespread flooding and new diseases among the risks in most urgent need of addressing.

The CCC further warns that climate-stoked wars and migration around the world could have very significant consequences for the UK, through disrupted trade and more military intervention overseas.

The 2,000-page report is a comprehensive assessment of the dangers of climate change to the UK, produced over three years by 80 experts and reviewed by many more. The main analysis is based on the temperature rise expected if the global climate agreement signed in Paris in 2015 is fully delivered and also takes account of plans already in place to cope with impacts.

The worst case scenarios in the CCC report - if action to tackle climate change completely fails - foresees searing heatwaves reaching temperatures of 48C in London and the high-30s across the nation.

"We are not sufficiently prepared and we need to do more now, even for the [Paris deal] scenario of 2.7C of warming," said Lord John Krebs, chair of the CCC's adaptation sub-committee. "Many impacts are affecting us now, as climate change is already happening."

"What we now think of as an extremely hot summer, where people are dying of heat stress and it is extremely uncomfortable in homes, hospitals and much of transport, that is likely to be a typical summer by the middle of the century and would be a cool summer in the 2080s," he said.

Krebs said critical facilities, such as hospitals and care homes, are particularly at risk: "Many are not designed to be resilient in terms of overheating." Many are also in already flood prone areas, the report noted, with the risk of flooding set to rise further.

While most of the key risks are fairly well understood, the dangers posed by new diseases and pests invading the UK as the climate gets warmer requires urgent research, the CCC said.

"The impacts are potentially high for otherwise healthy people, animals and plants," the report states. "Higher temperatures will lead to an increased risk of the Asian tiger mosquito, the vector of Chikungunya virus, dengue fever and Zika virus. The current risk remains low, but may increase in the future."

There could be some benefits to the UK from climate change including exports of products and services such as flood defence expertise, the CCC said, and UK tourism may also increase. A longer growing season could boost crops, the report said, but only if the impact of climate change on water supplies and soil fertility can be overcome.

"Already 85% of the rich peat topsoils of East Anglia has disappeared," said Krebs, due to drainage and erosion. "We have lost a lot of the natural asset that allows us to grow cereals and climate change will accelerate the rate of loss. We could lose the remaining fertile soil within the next 30-60 years and that would be a huge negative impact on the food production capacity of the UK."

Food supplies will also be affected by the impact of global warming around the planet, as the UK imports 40% of its food. "But it is not an expectation that there will be supermarket shelves with nothing on," said Matthew Bell, CCC chief executive. "It is more likely that food becomes more expensive, particularly with spikes in prices as some supply chains are affected."



Hollowell reservoir in Northamptonshire, September 2014, after the driest first 10 months since 1929. Photograph: Paul Marriott/Alamy Stock Photo

The report warns of other overseas risks to the UK, including a rising need for military intervention: "There are uncertain but potentially very significant international risks arising from climate-related human [migration], and the possibility of violent inter-state conflict over scarce natural resources."

"These impacts are transported to the UK through the movement of people and capital, through international supply chains and also through the demands upon the UK in terms of overseas military effort," said Daniel Johns, the CCC's head of adaptation.

Climate change is becoming more apparent today, with temperature records being smashed amid a succession of record hot years. Amber Rudd, energy and climate change secretary, said at the end of June that global warming is "one of the most serious long-term risks to our economic and national security".

UK law requires the government to use the CCC report to develop its adaptation plan, although spending on the issue halved under the coalition government.

"The CCC report is a tour de force," said Prof Chris Rapley, a climate scientist at University College London. "It is a hugely valuable instrument for seeking to keep our government honest and true to its responsibilities of protecting the interests of UK citizens and businesses now and in the future."

Climate change increased the chance of last winter's devastating floods by 40%, noted Prof Joanna Haigh, at Imperial College London: "That is why this report is so important, as it starkly sets out the challenges we face and the urgency of addressing them. Some impacts are now inevitable."

Friends of the Earth's Guy Shrubsole said: "This is a stern warning for squabbling politicians that the biggest threat to our future is from massive climate disruption. Theresa May must make climate change a top priority."

"The CCC's analysis shows red and yellow lights flashing all over the dashboard," said Tom Viita, at Christian Aid. "The new Prime Minister [May] must chair a Climate Cobra Committee to handle these risks more effectively and with the urgency required."

Marylyn Haines Evans, at the National Federation of Women's Institutes said: "This report is worrying because it shows just how close the risks of climate change really are for all of us. We cannot leave this problem as a legacy for our children and grandchildren."



The remains of sea defences at Eastern Bavants, Southwold, Suffolk that Peter Boggis constructed. Photograph: Graham Turner for the Guardian

Five ways that climate change will affect Britain

Heatwaves

The deadly heatwave of 2003, which peaked at 38.5C in the UK, will be a normal summer by the 2040s, leading to related deaths more than tripling. There are currently no policies to ensure homes, schools, hospitals and offices remain tolerable in high heat.



Floods and coastal erosion

Flooding already causes £1bn of damage every year on average but the risks will rise yet further as climate change leads to more intense rainfall, bringing floods to places not currently in danger. The number of households at significant risk of flooding will more than double to 1.9m by 2050, if the global temperature rises by 4C.



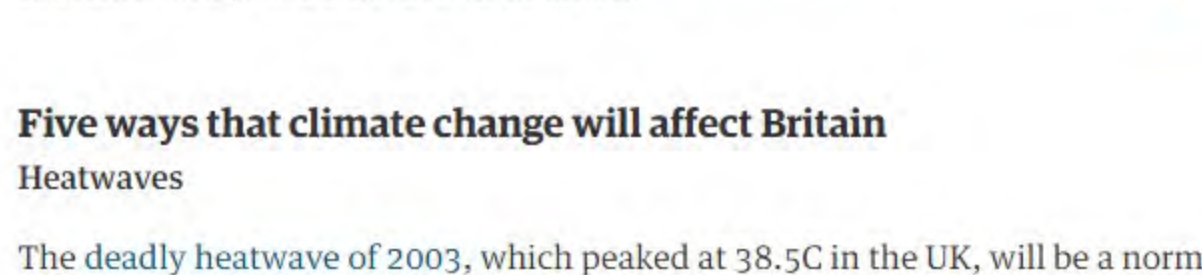
Water shortages

Severe water shortages are expected as summers get drier and, by the 2050s, will extend across the UK. If temperatures are driven up significantly, many places in the UK will have a demand for water 2.5 times greater than that available.



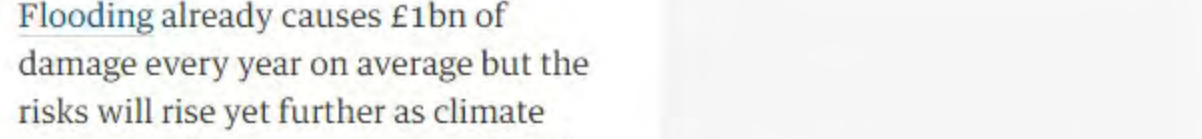
Natural environment

The proportion of prime farmland is expected to fall from 38% to 9% with significant warming and crop growing in eastern England and Scotland could be ended by degraded soil and water shortages. Warming seas are pushing key species northwards, which may affect the entire marine food chain.



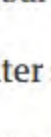
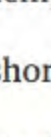
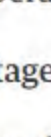
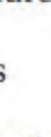
Food

Climate change is likely to drive food prices up, with extreme weather leading to lost crops and price shocks. About 40% of UK food is imported, making the UK vulnerable to droughts and floods driven by climate change around the world.



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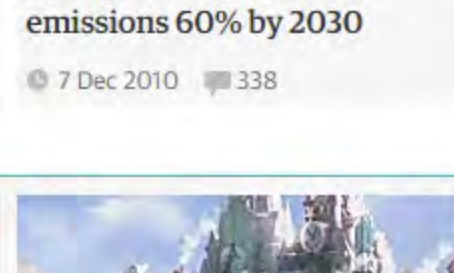
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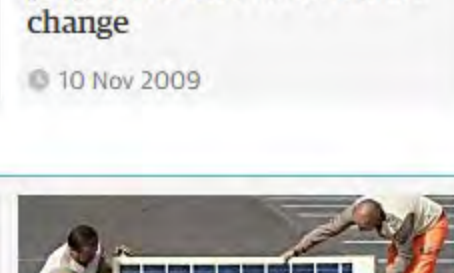
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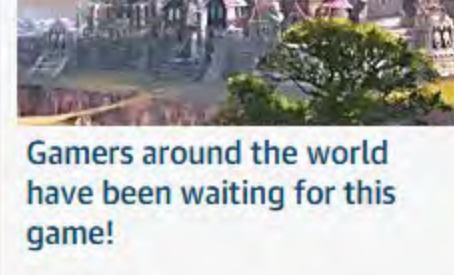
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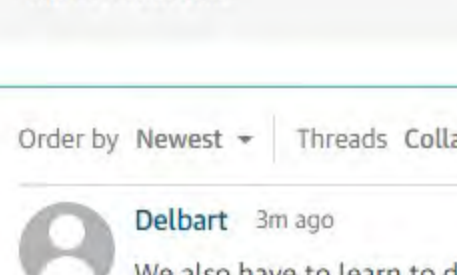
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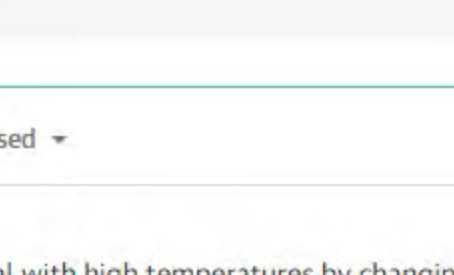
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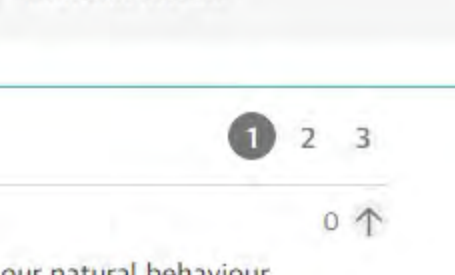
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We also have to learn to deal with high temperatures by changing our natural behaviour. Closing windows and drawing curtains in the early morning and not opening them until evening is an effective way to keep the cool indoors. This is standard practice in Southern Spain where temperatures regularly hit the 40's and most people still don't have air-conditioning.

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 fully65 5m ago 0

I could just leave this article at "Government poorly prepared". It would cover a wide range of situations currently of relevance.

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