

Climate change

UK faces sharp rise in wind storms and higher bills as world warms

Data models show UK to be at mercy of fiercer winds and insurers call for action to reinforce buildings



The Burns' Day storm on 26 January 1990, Charterhouse Square, London. The storm resulted in 47 deaths across the UK. Photograph: Glenn Copus/ANL/Rex/Shutterstock

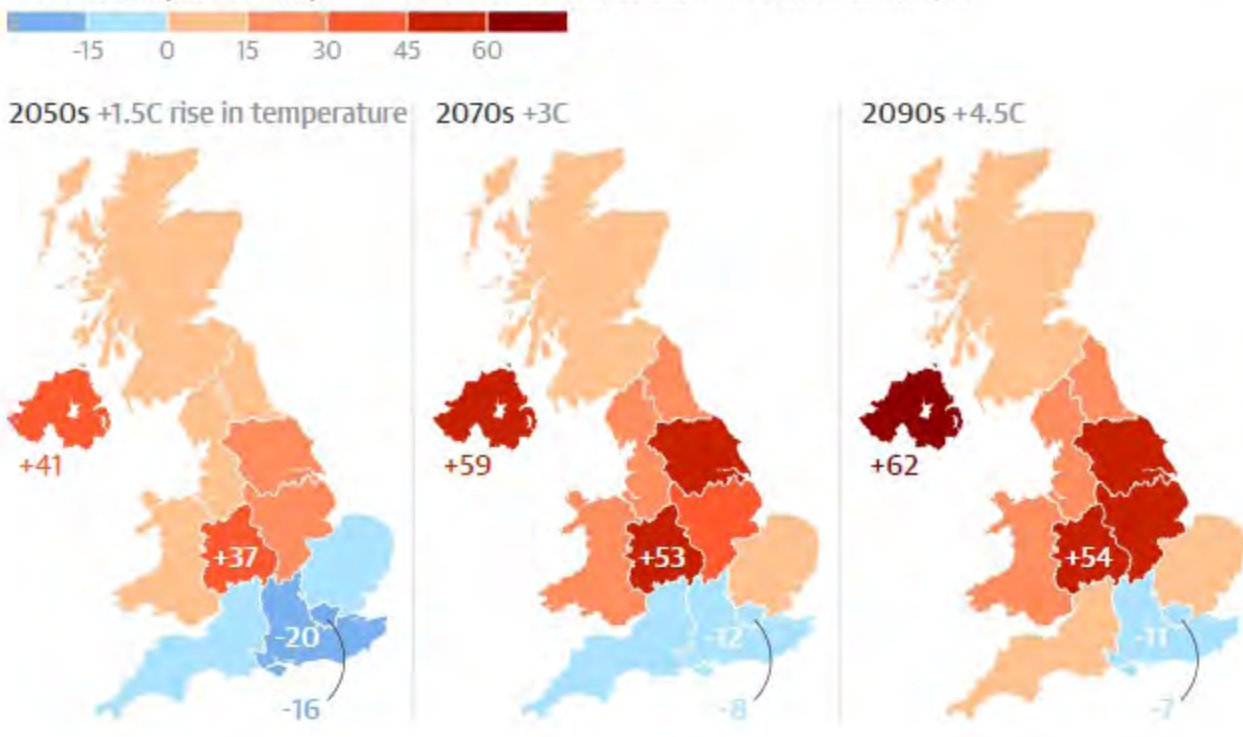
The UK is set to reap the whirlwind of climate change with the huge damage caused by wind storms expected to increase sharply, according to new analysis.

Even the minimum global warming now expected - just 1.5C - is projected to raise the cost of windstorm destruction by more than a third in parts of the country. If climate change heats the world even further, broken roofs and damaged buildings are likely to increase by over 50% across a swathe of the nation.

The research shows all of the UK is on track to see rises in high winds except the south and south-west, with the greatest impact across the Midlands, Yorkshire and Northern Ireland. This is because the main storms that barrel in off the Atlantic are expected to move their track northwards as the planet warms, a phenomenon linked to the rapid melting being seen in the Arctic.

Global warming is set to increase the destructiveness of wind storms in the UK

Predicted impact of temperature rises on insurance claims for wind storms, %



Guardian graphic | Source: Analysis for the Association of British Insurers by AIR Worldwide, Met Office

Flooding is the most high-profile impact of climate change on the UK. But the overall cost of wind storms is actually higher, as a result of a much larger number of smaller incidents, and currently runs at an average of about £1bn a year. Extreme wind storms can occur, though, and in 1990 the Burns' Day storm resulted in 47 deaths, as well as more than £2bn of insured damage and many millions more in damage to roads, power lines and uninsured properties.

The new work was commissioned by the Association of British Insurers (ABI), which is concerned by the rising impacts of climate change on its customers, and was carried out by the consultancy Air Worldwide and the UK Met Office.



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"It is absolutely a concern that we are going to be living in a world where overall there are higher wind storm losses," said Matt Cullen, the ABI's head of strategy. "That inevitably transfers through to insurers having to raise premiums and hold more capital. We want to make sure we live in a world where risk is controlled and understandable and we can offer insurance in a reliable and sensible way."

Homes and buildings have lifespans of many decades and so work done now should make them better able to withstand the buffeting of severe winds, Cullen said. He said there was a concern that, while the risks of climate change are now being included in policies, there was little to ensure the protections needed are actually implemented.

The research used sophisticated Met Office climate models to examine how wind storms are likely to change in frequency and intensity with different levels of global warming. "We will probably see an overall reduction in the number of storms, but an increase in the frequency of the most intense storms, and of course those are the ones that cause the [most] damage," said Peter Sousounis, director of meteorology at Air Worldwide.

This data was then used to calculate the changes expected in the cost of damage resulting from the stronger storms and the researchers found significant increases in most parts of the UK. This was not entirely unexpected, said Sousounis.



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"We have seen enough results from catastrophe models to really not be surprised. Small changes in wind speed can have a huge impact on losses," he said. "Losses go up almost exponentially with increasing wind speed."

Cullen said: "The likelihood of claims resulting from severe storms increasing in the future is something the insurance industry, and society, need to start preparing for now. Planners and builders should be aware of the need for more wind-resistant construction in specific areas of the country if claims are to be kept to a minimum and residents spared the distress and expense of higher levels of wind damage."

The government's official advisers, the Committee on Climate Change, warned in 2016 that UK is poorly prepared for the inevitable impacts of global warming in coming decades, including floods, deadly annual heatwaves and water shortages. It also warned: "Any increases in maximum wind speeds with climate change experienced during storms would have significant implications for many infrastructure networks," such as roads and railways and power and communication lines.

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zavaell 15m ago

...and still people bury their head in the sand.

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EGriff 2h ago

We are already being impacted by climate change, as the series of floods, storms, tidal surges and high winds since 2000 demonstrates.

We are seeing multiple 1 in 100 year flood events in a decade in some areas.

Flooding is now going to be annual in winter and summer storms.

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