

# Climate Change and Extreme Weather Events

The latest report from The Intergovernmental Panel on Climate Change, the IPCC, states: “Global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in CO<sub>2</sub> and other greenhouse gas emissions occur in the coming decades” (IPCC, 2021). Clearly, the airport expansion does not constitute a reduction in CO<sub>2</sub> emissions.

The IPCC states that as the amount of CO<sub>2</sub> we emit into the atmosphere increases, so does the global temperature. As temperatures rise, the likelihood and intensity of extreme weather events increases. As these events become more frequent and intense, they inflict suffering around the world.

It is easy to forget that climate change affects people’s lives all over the world. I want to remind everyone of the human cost of climate change. I also want to remind everyone that this airport expansion will contribute to suffering around the world.

On the 19<sup>th</sup> July of this year the UK Met Office issued its first ever extreme heat warning in the UK. It said: ‘The wider population are likely to experience some adverse health effects including sunburn or heat exhaustion – dehydration, nausea, fatigue - and other heat related illnesses’ (UK Met Office, 2021).

The IPCC report states that unless we cut our emissions significantly, heat waves that used to occur once every 50 years are predicted to occur once every 3 and half years by the end of the century (Climate Action Tracker 2021). These heat waves will also increase in intensity. This airport expansion will contribute to these changes in the climate.

Earlier this year, in Germany over 180 people died in some of the worst floods ever recorded for that region. One rescue worker describes their efforts: “We managed to get 50 people out of their houses last night. We know of 15 people who still need to be rescued ... One has to assume that, under the circumstances, some people didn’t manage to escape” (Henley 2021).

A local resident said “it looks like a bomb went off. Everything’s destroyed. There’s nothing left of the city centre”. Climate scientists estimate that the floods were made up to 9 times more likely and 19% more intense due to climate change (World Weather Attribution 2021).

The IPCC report states that unless we cut our emissions dramatically, events of heavy rainfall that used to occur once every 10 years are predicted to occur once every 4 – 6 years. These heavy rainfall events are predicted to increase in intensity by 14 to 30%. This airport expansion will contribute to the suffering connected to these events.

In Canada and the US, wildfires have spread uncontrollably, taking lives and devastating whole towns. One Canadian politician said “I’ve talked to a number of firefighters who said this year’s fires are behaving in a manner that they have never seen before. They’re just exceedingly aggressive and it’s almost impossible to get ahead of them” (Cecco 2021).

Experts have linked the wildfires to brutal heat waves and persistently dry conditions earlier in the summer. Climate scientists state these heat waves have been “virtually impossible without human-caused climate change” (World Weather Attribution 2021). They warn that these wildfires are likely to become more common in the future. This airport expansion will contribute to this and the suffering which it brings.

In Peru, climate change has substantially increased the outburst flood hazard from Lake Palcacocha, which threatens approximately 50,000 people in the city of Huaraz (F, H, and S 2021). In the event of a flood the inhabitants would have about 30 minutes to evacuate their homes, with some experts estimating that the death toll from such an outburst could be as high as 20,000 (Collins 2018).

People in the city live in limbo, fearing one day that the floods will wash away their homes. Luciano Lliuya thinks about it every day, his home needs repairs but he explains “If I said, ‘It’s a flood zone, I won’t fix the house,’ that would look crazy... But it’s also crazy to [fix the house] knowing the danger ... From both sides, it’s crazy” (Jarvis 2019).

The extra one million tonnes of Carbon emissions from airport expansion would contribute to increased risks of flooding in the future (Gibbs 2019).

In 2019, in northern Australia, at least 23,000 fruit bats died over two days as the country experienced record-breaking temperatures of more than 42 °C. That body count amounts to about a third of the species total population in Australia (Akst 2019).

One wildlife photojournalist described the scene:

“One falls, and the rest cascade on the ground, crushing and suffocating each other. Dozens if not hundreds of dead or dying bats are at the bottom of the tree,”

“You’re looking down at them and they’re looking up at you gasping. They’re smothering and heating up. Volunteers will go in and separate out bodies and find some that are still alive. But you’ve got 20 to 30 rescuers and 4,500 bats. It’s like a war zone. It’s sad and distressing and heartbreaking, and you know it will happen again and again and again” (Daly and Gimsey 2021).

And the IPCC report agrees, if we don’t change course, this is likely to happen again and again and again. Sadly some of the effects of climate change are already irreversible. But we still have a chance to stop the worst effects of climate change and stopping the airport expansion would be a step in the right direction.

Finally to Uganda, Constance Okollet, is a climate witness for the United Nations. When she learned that climate change had increased the frequency and intensity of the droughts and floods which devastated her crops and left her community with no food, she said:

“I learned that over-pollution from developed countries had caused real changes to the climate ... I felt bad because I knew that the people in developed countries are our friends. We are the same

people; we have the same blood. But these people were enjoying their life while we were suffering. I wanted to know why they were doing this to us. I wanted to know whether the people in developed countries could reduce their emissions so we could have our normal seasons back” (Robinson 2019).

So, Constance wants to know. Will we reduce our carbon emissions, so that her community can have their seasons back?

Stopping this airport expansion would be one small step in the right direction, halting the increase in our Carbon emissions. This could be a turning point in our story.

## References

Akst, Jef. 2019. “Thousands of Australian Animals Die in Unprecedented Heatwave.” The Scientist.

<https://www.the-scientist.com/>.

ARUP and Bristol City Council. 2020. “Bristol One City Climate Strategy.” *Total GHG emissions of the City of Bristol – Technical report*, (January), pp 11.

Cecco, Leyland. 2021. “Second western Canada town destroyed by ‘exceedingly aggressive’ wildfire.”

The Guardian. <https://www.theguardian.com>.

Climate Action Tracker. 2021. “Warming Projections Global Update.” (May).

Collyns, Dan. 2018. “Climate change has turned Peru's glacial lake into a deadly flood timebomb.”

*The Guardian*, June 29, 2018. <https://www.theguardian.com/>.

Daly, Natasha, and Doug Gimsey. 2021. “Flying foxes are dying en masse in Australia’s extreme heat.”

National Geographic. <https://www.nationalgeographic.co.uk/>.

F, Stuart-Smith R., Roe G. H, and Li S. 2021. “Increased outburst flood hazard from Lake Palcacocha due to human-induced glacier retreat.” *Nature Geoscience* 14 (February): 85-90.

Gibbs, Adrian. 2019. “Just Plane Wrong.” *Insomnia*. <http://www.isonomia.co.uk>.

Henley, Jon. 2021. “Death toll exceeds 180 as Germany and Belgium hit by devastating floods.” *The Guardian*, July 18, 2021. <https://www.theguardian.com>.

IPCC. 2021. “Climate Change 2021: The Physical Science Basis: Summary for Policymakers.”

Jarvis, Brooke. 2019. “Climate Change Could Destroy His Home in Peru. So He Sued an Energy Company in Germany.” *New York Times*, April 9, 2019.

Robinson, Mary. 2019. *Climate Justice: A man made problem with a feminist solution*. New York: Bloomsbury.

UK Met Office. 2021. Extreme heat warning issued for western areas. <https://www.metoffice.gov.uk>.

World Weather Attribution. 2021. "Western North American extreme heat virtually impossible without human-caused climate change." <https://www.worldweatherattribution.org>.

World Weather Attribution. 2021. "Heavy rainfall which led to severe flooding in Western Europe made more likely by climate change." <https://www.worldweatherattribution.org>.