

A dangerous summer is unfolding. Hundreds of bushfires are burning, we've broken our hottest day on record, and eastern Australia is being gripped by a prolonged and devastating drought. A state of emergency has been declared in New South Wales over Christmas.

We know it's sometimes hard to explain the link between bushfires and climate change with your family and friends. Here's a quick guide, backed by science, for how you can have a conversation about these issues.

Stay safe and remember to listen to the advice of emergency services.



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HOW ARE THESE FIRES 'NOT NORMAL'?

Already the number of lives lost is heart-breaking. The air has been so toxic that at times it is equivalent to smoking three packs of cigarettes a day. Queensland and New South Wales have both lost more homes since August 2019 than in any previous year. Almost three million hectares have burned.

This is not normal. Climate change is exacerbating the extreme drought, very dry fuels and soils, and record breaking heat that is increasing bushfire risk. The reality is, bushfire conditions are now more dangerous than in the past, and the risk to people and property has increased. It is also becoming more dangerous to fight bushfires in Australia.

HOW DOES CLIMATE CHANGE MAKE BUSHFIRE CONDITIONS WORSE?

Australia's temperature has risen by around 1°C since 1910 due to climate change. Australia has also experienced a drop-off in cool season rainfall across mainland southern Australia in recent decades, and this is linked to climate change. These trends have contributed to an increase in dangerous bushfire weather over recent decades (as measured by the McArthur Forest Fire Danger Index). In other words, climate change has made the bushfire conditions we are seeing right now worse.

For years, scientists have warned that climate change would increase the risk of extreme bushfires in Australia. This warning was accurate. Scientists expect fire weather will continue to become more frequent and severe without substantial and rapid action to reduce greenhouse gas emissions.

WHY DO SOME PEOPLE KEEP BLAMING THE 'FUEL LOADS' OR THE LACK OF HAZARD REDUCTION BURNING?

The fire season has already lengthened so substantially that it has already reduced opportunities for fuel reduction burning. This, coupled with hotter and drier conditions, mean it is harder to prepare for worsening conditions.

The costs of fighting these fires are also increasing. The government has ignored warnings about the effect of climate change on extreme weather including bushfires and we don't have adequate aerial resources to fight fires across the country at the same time.

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HOW ARE COAL AND GAS LINKED TO CLIMATE CHANGE?

Greenhouse gas emissions act like a 'blanket', trapping heat in the lower atmosphere, causing global temperatures to rise. Climate change is caused by greenhouse gas emissions released from the burning of fossil fuels: coal, oil and gas. Around 72% of greenhouse gas emissions globally are from the use of fossil fuels for energy production used in electricity, heating and transport. Agriculture and deforestation also contribute to climate change.

Australia produces more greenhouse gas pollution than over 175 other countries. If you include the emissions from our exports, we would be the 5th largest emitter in the world. All countries, including Australia, must act to urgently reduce these greenhouse gas emissions to keep people safe. As one of the sunniest and windiest countries in the world, we could be a leader in this area.

WHAT MUST OUR LEADERS DO TO ADDRESS CLIMATE CHANGE?

While politicians bicker and the Federal Government fails to adequately respond to the climate crisis and the escalating bushfire threat, Australians from all walks of life are demanding action. This includes former fire and emergency services chiefs, farmers, businesses, scientists, local mayors and students.

The government must develop an urgent plan to:

1. Prepare Australian communities and health and emergency services for escalating fire danger; and

2. Rapidly phase out the burning of coal oil and gas which is driving more dangerous fires.

You can access more information on climate change and bushfires, heat and drought risk via Climate Council's reports: This is not normal - climate change and escalating bushfire risk and Dangerous Summer: Escalating Bushfire, Heat and Drought Risk.

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