

Australian Bush Fires are yet Another Symptom of Climate Change

By Don Sutherland

The bush fires raging in parts of Australia have made international headlines to end 2019 and start 2020. Courtesy of the warmest and driest year on record, in part due to natural factors such as the strongly positive Indian Ocean Dipole pattern and in part due to the impact of anthropogenic climate change, summer 2019-2020 has seen extreme bush fire activity in Australia.

Terrible as the catastrophe has been, it was not an unforeseeable event. Moreover, increasingly severe fire seasons were long foreseen by the scientific community. The following are excerpts from an October 2009 [report](#):

By 2020, increases in VHE average 2–13% for the low emission scenarios and 10–30% for the high emission scenarios. By 2050, the range of percentage increase of occurrence of VHE days is much broader, averaging 5–23% for the low scenarios and from 20–100% for the high scenarios. The degree of change depends on the location, warming scenario and the particular global climate model used. For example, at Cobar between 64 and 100 VHE days are expected by 2050, compared to 56 at present, whereas at Melbourne Airport there would be 16 to 24 VHE days by 2050, compared with 15 at present. With respect to days of ‘extreme’ fire danger only, (FFDI > 50) modelling suggests that the number of such days increases 5-25% by 2020 for the low scenarios and 15-65% for the high scenarios. By 2050, the increases are generally 10-50% for the low scenarios and 100-300% for the high scenarios...

Taken together, these results suggest that fire seasons will start earlier and end slightly later, while being generally more intense throughout their length. This effect is most pronounced by 2050, although it should be apparent by 2020.

Penn State University climate scientist Michael Mann [explained](#):

The brown skies I observed in the Blue Mountains this week are a product of human-caused climate change. Take record heat, combine it with unprecedented drought in already dry regions and you get unprecedented bushfires like the ones engulfing the Blue Mountains and spreading across the continent. It’s not complicated.

The warming of our planet – and the changes in climate associated with it – are due to the fossil fuels we’re burning: oil, whether at midnight or any other hour of the day, natural gas, and the biggest culprit of all, coal. That’s not complicated either.

The current severe fire season cannot be undone. What can be done going forward is the adoption of far-sighted policy changes aimed at mitigating climate change. Such changes must take place on a global scale, but Australia can make a contribution, too. Phasing out coal production on a rapid basis and setting a concrete deadline by which the country

would generate all of its electricity through renewable sources, the latter of which New Zealand adopted, would be a good start.