

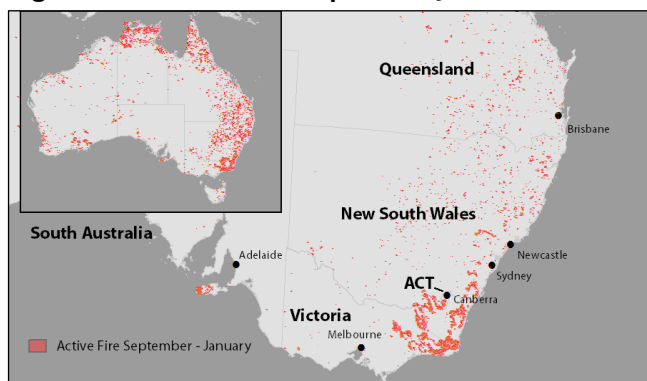
March 11, 2020

## Australia: Fires Highlight Government's Climate Challenge

### Overview

The recent devastating bush fires in Australia highlight the country's growing dilemma over climate change. Australia's economy remains heavily weighted toward extractive industries, leading to greenhouse gas (GHG) emissions linked to climate change. A growing portion of voters see climate change as a threat to Australia's vital interests. Many are pressuring Prime Minister Scott Morrison's right of center Liberal-National Party Coalition to take additional steps to reduce emissions and combat climate change.

Figure 1. Australia Fires Sept. 2019–Jan. 2020



Source: Created by CRS using data from NASA (FIRMS MODIS and/or VIIRS Fire/Hotspot) and ESRI.

### The Fires

According to the Australian government, “Australia is one of the most fire prone regions in the world.” Nonetheless, the 2019-2020 fires were extraordinary. (See **Figure 1**.) More than 27.2 million acres of vegetation, 33 people, an estimated one billion animals, and over 2,500 homes were lost to bushfires in Australia in the 2019-2020 fire season. (Fire Season normally lasts from October 1 to March 31.) The area burned is larger than South Korea and 46% larger than the area burned in the Amazon in 2019. Sydney's air quality became a health risk, and parts of the nation's capital Canberra had to be evacuated at one point. The Australian army was called to assist firefighters, and the navy evacuated people by sea from coastal communities cut off by fire. The *New York Times* reported the estimated cost to Australia's economy to be between \$3 and \$3.5 billion.

### Climate Change and Wildfires in Australia

Several researchers have found that projected climate changes show a trend towards more dangerous fire weather conditions in Australia. The year 2019 was the hottest year on record for Australia. (See **Figure 2**.) The average daytime maximum temperature in Australia was reportedly 2.7 degrees Fahrenheit above average. Australia's average

rainfall in 2019 was the lowest since records began in 1900 and was 40% less than normal. 2019 was also the first year that the hottest and driest years in Australia overlapped.

The Australian government reports that their Forest Fire Danger Index has increased at 16 of 38 sites over the period from 1973 to 2010. According to the Australian government, surface temperatures over land and surrounding seas increased by 3.2°F since the beginning of the 20<sup>th</sup> century. The frequency of very warm months has increased, as has average rainfall. More frequent extreme heat and flooding events raise risks to human health and to livestock production. Sea levels vary significantly year-to-year, mostly associated with natural variability, though the rising trend is less than the global average sea level rise. According to the Great Barrier Reef Marine Park Authority, “[c]limate change is the greatest threat to the Great Barrier Reef” due to bleaching during high temperature episodes and severe weather. Australia's Department of Agriculture, Water and the Environment has found that “Australia faces significant environmental and economic impacts from climate change across a number of sectors.”

### The Fires' Effect on Political Debate

These developments, particularly the recent fires, appear to be affecting Australians' attitudes towards climate change. According to a 2019 Lowy poll, Australians ranked climate change as the first of ten possible threats to Australia's vital interests over the next ten years, and 64% of those polled view climate change as a “critical threat.” This was an increase of six percentage points from 2018 and an 18 point rise since 2014. The Lowy poll also found that 59% of Australians polled believe the opposition Labor Party would do a better job of managing Australia's response to climate change than the Coalition.

Prime Minister Morrison appears to some analysts to have won the May 2019 election in part because he emphasized the costs of climate action rather than the threat from climate change itself. However, the fires of 2019 and 2020 may have shifted many Australians' perceptions of the relative costs. According to a Newspoll, Morrison's approval rating dropped 8 points from December 2019 to January 2020.

The fires appear to have reignited past debates within the Liberal-National Coalition on climate change policy. In December 2019, the New South Wales Young Liberals called on the government to make changes to address the “extraordinary challenges presented by human-induced climate change.” In February 2020, Morrison reportedly faced opposition from within the Coalition party room over his government's climate change policy. Several Coalition Members of Parliament (MP) reportedly argued that the

Coalition should embrace more ambitious climate change action. A Liberal MP's February 2020 proposal to establish a dedicated climate change minister was reportedly opposed by National Party members and hardline Liberals. In February 2020, two other Liberal MPs declared that the government should not support new coal-fired power stations. Others argued against adopting "reactionary" climate policies in response to the bushfire crisis.

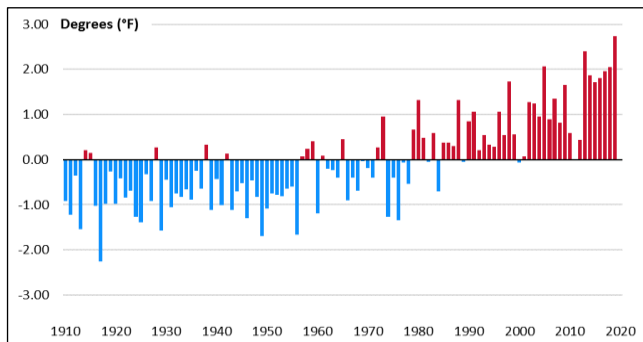
By January 2020, Morrison, who had previously appeared reluctant to discuss the link between climate change and the fires, stated that the government could evolve its policies in order to reduce emissions but without putting additional costs on Australians or risking hurting resource industries.

Current opposition Labor Party Leader Anthony Albanese has emphasized the need to create clean energy jobs while advocating for a low carbon future. The Labor Party favors more aggressive emissions reductions targets and has reaffirmed its commitment to reach zero net emissions by 2050. The Australia Greens party has called for Australia to become a leader in climate action while developing a renewable energy economy. Greens Parliamentary Leader Adam Bandt reportedly will advocate for a Green New Deal and would phase out fossil fuel extraction in Australia.

## Australia's Emissions and Paris Agreement

While Australia is responsible for an estimated 1% of global emissions as a nation, it is the second highest emitter on a per capita basis, after Saudi Arabia. Australia was also estimated to be the 15<sup>th</sup> largest emitter of carbon dioxide in 2016. While Australia has committed to reduce its emissions under the Paris Agreement by 26%-28% from 2005 levels by 2030, its emissions have reportedly increased since 2013, and the recent fires themselves also significantly increased Australia's carbon dioxide emissions over the past year. Critics of Australia's existing pledge and policies assert that they are less ambitious than what Australia could achieve and do not represent a fair share of the global effort to stabilize GHG in the atmosphere.

**Figure 2. Australia's Annual Mean Temperatures Differences from the Long-Term Average, 1910-2019**



**Source:** CRS, using data from the Australian Bureau of Meteorology.

**Notes:** Average is calculated from 1961-1990 data.

## Australian Reliance on Coal and Natural Gas

Australia is one of the world's largest producers and exporters of coal and liquefied natural gas (LNG). Coal is Australia's second largest export, reaching \$49 billion in total value in financial year 2018-2019, and is used to generate approximately two-thirds of Australia's electricity. LNG exports increased 61% in 2018-2019, and were estimated to be worth \$35 billion. Some in Australia argue that LNG exports reduce global emissions by avoiding power generation from coal. The U.S. Energy Information Administration projects that Australia is on track to export more LNG than Qatar and become the world's largest LNG exporter. A 2019 report ranked Australia third behind Russia and Saudi Arabia in its fossil fuel exports according to emissions potential.

According to some observers, economic reliance on coal and LNG has made some Australian governments reluctant to adopt climate change policies that could potentially undermine the industry. Scott Morrison's support for the Adani coal mine being developed in Queensland, Australia, for example, is credited as one of the factors that helped him win a surprise victory in the 2019 election. The mine is projected to become one of Australia's largest coal mines. Proponents of the mine have highlighted the economic importance of the mine and the employment that it will create in Queensland.

## U.S. Linkages

The increasing intensity of Australia's fire season and resulting political challenges have direct and indirect impacts on the United States. For example, the United States, Australia, and New Zealand have exchanged firefighting assistance for many years. In 2019, U.S. Department of the Interior and U.S. Forest Service wildfire personnel were sent to Australia to assist with wildfire suppression. In addition, three American firefighters working for Coulson Aviation, a private contractor, were killed when their air tanker crashed while on a fire fighting mission in Australia. In 2018, Australian and New Zealand wildfire management personnel were sent to assist with wildfire suppression in California. As fire seasons lengthen and grow in intensity, increased demand for this shared capability may strain existing capabilities.

Australia's experience with the political debate over costs of mitigation vs. risk of continued climate change may help inform Congress' deliberations over how to address the issue. While the risks and the drivers may be different, intensifying wildfire seasons also are a U.S. concern. For example, an April 2019 report from California Governor Gavin Newsom's strike force office on "Wildfires and Climate Change" found that "climate change is a core driver of heightened wildfire risk."

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