

# Who pays for climate disasters?

## *Proposal for a National Climate Disaster Levy*

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November 2020

### KEY POINTS

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- Natural disasters exacerbated by climate change such as fires, floods and heatwaves already cost Australians tens of billions of dollars per annum. This damage bill is rapidly increasing as climate change accelerates.
- Ordinary Australian households and businesses, either directly or through taxes, currently pay all the costs of climate disasters.
- Fossil fuel consumption remains the largest contributor to climate change and fossil fuel producers pay virtually none of the costs climate disasters.
- Australia is the third largest exporter of fossil fuels in the world and these exporters pay little if any local tax.
- The Australia Institute is proposing a *National Climate Disaster Levy* initially set at \$1 per tonne of embodied carbon on all fossil fuel exports from Australia.
- A \$1 levy would:
  - Raise around \$1.3 billion per annum to be used entirely to assist communities to respond to and recover from climate disasters
  - Have no effect on energy prices in Australia as the levy is only on fossil fuel exports (which make up three quarters of fossil fuel production).
  - See a net increase in employment as revenue is directed from capital-intensive coal and gas mining towards more labour intensive sectors including construction, health and social services.
- According to the Climate of the Nation 2020 report, over three out of five (65%) support a levy on fossil fuel exports to pay for climate disasters, with one out of five (21%) opposed.

# WHY WE NEED A NATIONAL CLIMATE DISASTER LEVY

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Climate change is increasing the frequency and intensity of many natural disasters. As the 2020 Royal Commission into National Natural Disaster Arrangements put it, “what was unprecedented is now our future”.<sup>1</sup>

The economic cost of disasters to Australia has been estimated at around \$18 billion per year on average, rising to \$40 billion per year by 2050, even without including the impact of future climate change. Previously the most costly climate related disasters where the Queensland floods of 2011 (\$14 billion) and Victoria’s Black Saturday bushfires in 2009 (\$7 billion).<sup>2</sup>

However, the Black Saturday bushfire catastrophe appears to represent a step change in disaster costs, with estimates of \$50-60 billion in direct costs for a single event.<sup>3</sup>

The latest CSIRO, Australian Bureau of Meteorology State of the Climate 2020 report projects Australia will have increasingly worse fires, more drought, increasing levels of extreme heat, increasing sea level rise, more intense cyclones as well as ocean heatwaves and acidification.<sup>4</sup>

These increasingly frequent and severe natural disasters will not just increase the damage bill in a linear fashion. What Australia faces is, in the words of the recent Natural Disaster Royal Commission, are cascading, concurrent and compounding natural disasters.

Relying on the public to foot the steep climate damage bill is no longer an option.

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<sup>1</sup> Royal Commission into National Natural Disaster Arrangements (October 2020) Report, P.6, <https://naturaldisaster.royalcommission.gov.au/system/files/2020-11/Royal%20Commission%20into%20National%20Natural%20Disaster%20Arrangements%20-%20Report%20-%20-%205Baccessible%5D.pdf>

<sup>2</sup> Deloitte Access Economics (2017) Building resilience to natural disasters in our states and territories, [http://australianbusinessroundtable.com.au/assets/documents/ABR\\_building-resilience-in-our-states-and-territories.pdf](http://australianbusinessroundtable.com.au/assets/documents/ABR_building-resilience-in-our-states-and-territories.pdf)

Note, this estimate assumes the same distribution of natural disasters as the previous 20 years. This includes the impact of climate change up to 2017, but the future projections do not include the further impact of climate change.

<sup>3</sup> Quiggin (2020) Economic cost of the bushfire catastrophe: some preliminary estimates. Paper presented to the Australian Agricultural Resource Economics Society, Adelaide, March 2020.

<sup>4</sup> CSIRO/BoM (2020) State of the Climate 2020, <http://www.bom.gov.au/state-of-the-climate/documents/State-of-the-Climite-2020.pdf>

# WHO CURRENTLY PAYS THE COSTS OF CLIMATE DISASTERS

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Currently, virtually all of the costs of climate disasters are paid by the Australian community.

Emergency response and relief as well as repairing and rebuilding public infrastructure is mostly funded by governments, and ultimately through taxes and rates paid by the Australian community. Sometimes an ad hoc tax is applied on the public like the Temporary Flood and Cyclone Reconstruction Levy to help cover the costs of devastating 2011 Queensland floods.

Insurance only covers some property damage, and ultimately insured losses are paid by the community through higher premiums. There are almost half a million addresses where insurance is expected to become unaffordable or unavailable within 30 years.<sup>5</sup>

Individuals absorb many of the costs of property damage, disruption to their lives and health impacts. Longer term health impacts, including mental health impacts will be absorbed by individuals and the public health system.

## WHO DOES NOT PAY

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The largest single cause of climate change is burning fossil fuels. Over half of these emissions are from fossil fuels produced by just 25 companies. 100 companies are responsible for 71% of these emissions. Many of these companies operate in Australia.<sup>6</sup>

Australian governments allow these mainly global coal, oil and gas companies to extract and export vast quantities coal and gas (and some oil) from Australia.

Not only do these companies make little if any contribution to paying the costs of the climate disasters they are fuelling, but, as shown in Table 1 below, most pay little if any company tax despite, in many cases, making billions of dollars of income from exploiting these finite Australian resources.

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<sup>5</sup> Ting, Scott, Palmer & Slezak (2019) *The rise of red zones of risk* <https://www.abc.net.au/news/2019-10-23/the-suburbs-facing-rising-insurance-costs-from-climate-risk/11624108?nw=0>

<sup>6</sup> Griffin (2017) *The Carbon Majors Database: CDP Carbon Majors Report 2017* <https://www.cdp.net/en/articles/media/new-report-shows-just-100-companies-are-source-of-over-70-of-emissions>

**Table 1: Company tax paid by fossil fuel exporters in Australia, FY 2018.**

	Total income \$ million	Taxable income \$ million	Tax payable \$ million
Woodside Petroleum Ltd	6,287,257	1,284,637	0
Sinopec Oil And Gas Australia Pty Ltd	146,794	0	0
Santos Limited	3,498,044	0	0
QGC Upstream Holdings Pty Limited	3,654,901	0	0
Petronas Australia Pty Limited	2,018,273	0	0
Origin Energy Limited	15,482,360	296,936	74,221
Kogas Australia Pty Ltd	492,006	0	0
Conocophillips Australia Gas Holdings Pty Ltd	1,083,136	102,042	0
Chevron Australia Holdings Pty Ltd	5,274,287	0	0
Exxonmobil Australia Pty Ltd	9,234,165	0	0
BG International Limited	198,912	0	0
Arrow Energy Holdings Pty Ltd	617,108	0	0
Anglo American Australia Limited	4,720,896	1,615,982	311,948
BHP Billiton Mitsui Coal Pty Ltd	1,780,712	666,371	198,020
Yancoal Australia Limited	4,206,513	8,168	0
Idemitsu Australia Resources Pty Ltd	1,682,427	394,056	116,143
New Hope Corporation Limited	1,101,724	320,024	95,686
Peabody Australia Holdco Pty Ltd	4,323,880	0	0
Qcoal Pty Ltd	453,291	120,085	34,681
Whitehaven Coal Limited	2,307,718	6	0



Source: ATO (2020) Corporate tax transparency report for the 2017–18 income year,  
<https://www.ato.gov.au/Business/Large-business/In-detail/Tax-transparency/Corporate-tax-transparency-report-for-the-2017-18-income-year/>

## NATIONAL CLIMATE DISASTER LEVY PROPOSAL

The Australia Institute is proposing a National Climate Disaster Levy of \$1 per tonne of embodied carbon on all fossil fuel exports from Australia.

All the money raised will go towards emergency response, relief and recovery from climate disasters. As shown in Table 2 below, the levy would raise around \$1.3 billion annually with exports at 2018 levels.

It would have little if any impact on jobs in fossil fuel industries, as the impact of the levy is minor compared to the sale price of coal and gas. It would however create thousands of new jobs across the economy.

**Table 2: Climate Disaster Levy revenue**

Fuel type	Exports 2018/19, physical units	Exports 2018/19 energy units	CO2	Levy	Total revenue	Levy per tonne of fuel
	Mt	PJ	Mt CO2	\$/t CO2	\$ million	\$
<b>Black coal</b>	394	11,006	1,041	1	1,041	2.6
<b>Crude oil</b>	13	586	43	1	43	3.3
<b>LNG</b>	75	4,080	229	1	229	3
<b>Total</b>		<b>18,602.9</b>			<b>1,313</b>	

Source: Australian Government (2020) *Australian Energy Update 2020*, <https://www.energy.gov.au/publications/australian-energy-update-2020>, IPCC (2006) *2006 IPCC Guidelines for National Greenhouse Gas Inventories - Volume 2 Energy Table 1.4*

## NO IMPACT ON EXISTING FOSSIL FUEL JOBS

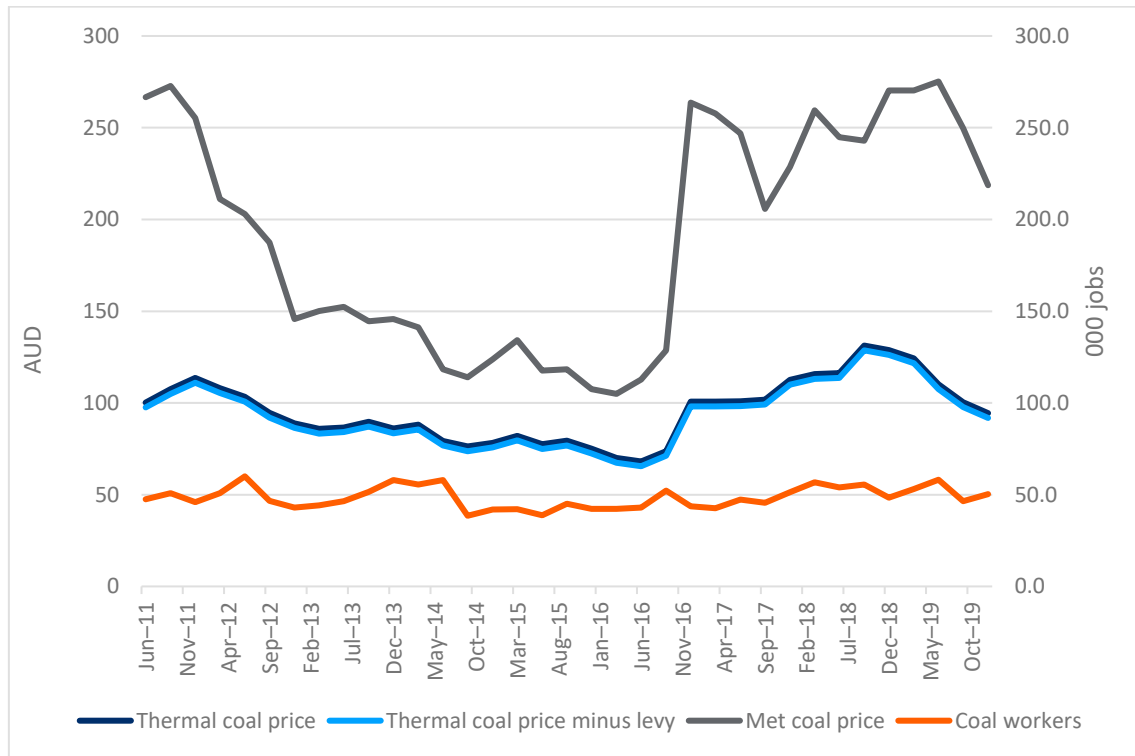
The levy will have no significant impact on fossil fuel jobs. As shown in Figure 2 below, large fluctuations in the price thermal and metallurgical coal over the last decade (grey and dark blue lines) have had little if any effect on the amount of workers employed in the coal industry (orange line).

The price of thermal coal minus the price impact of the Climate Disaster Levy (\$1 per tonne of carbon which equals \$2.64 per tonne of coal) is minor and represented in Figure 2 (light blue). This represents the effective coal price for coal exporters when the levy is deducted.

If fluctuations on the order of \$160 tonne over 6 months like in late 2016 have little effect on coal jobs, a levy of \$2.64 per tonne of coal will be inconsequential.

In fact, the expenditure of the disaster levy would be in areas such as construction, civil engineering, health and social services. These sectors are all more labour intensive than coal mining and gas extraction. The redirection of funding towards labour-intensive sectors, at the expense of capital-intensive sectors is likely to result in a net increase in employment.

**Figure 1: Climate Disaster Levy price impact on coal**



Source: Office of the Chief Economist (2020) *REQ 2020 Historic Data Table 24(2)*, ABS (2020) *Labour Force, Australia, Detailed Quarterly, Table 4*, <https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed-quarterly/latest-release>

## AUSTRALIANS SUPPORT A LEVY ON FOSSIL FUEL EXPORTS

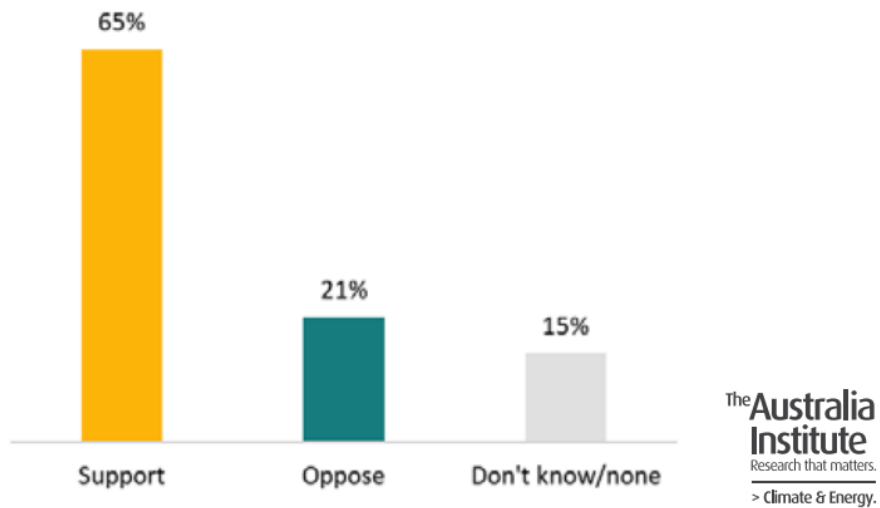
The Australia Institute’s Climate of the Nation Report is the longest running survey of Australian attitudes to climate change. In July this year 1,998 Australians were asked who should primarily pay the costs of preparing for, adapting to, and responding to global warming impacts, and half said fossil fuel producers (50%), up five percentage points from 45% in 2019. Only one in six respondents (14%) say taxpayers should pay and only one in ten (10%) say people facing climate impacts should pay.<sup>7</sup>

Note across all political parties, more people think fossil fuel producers should pay for climate disasters.

<sup>7</sup> The Australia Institute (2020) *Climate of the Nation 2020* [https://www.tai.org.au/sites/default/files/Climate%20of%20the%20Nation%202020%20cover%20\[WE%20BJ\].pdf](https://www.tai.org.au/sites/default/files/Climate%20of%20the%20Nation%202020%20cover%20[WE%20BJ].pdf)

When asked specifically about supporting a level on fossil fuel exports to pay for climate disasters, 65% of Australians supported it with only 21% opposed (Figure 3).

**Figure 2: Support for levy on fossil fuel exports to pay for climate disaster impacts**



Source: The Australia Institute (2020) Climate of the Nation 2020, [https://www.tai.org.au/sites/default/files/Climate%20of%20the%20Nation%202020%20cover%20\[WEB\].pdf](https://www.tai.org.au/sites/default/files/Climate%20of%20the%20Nation%202020%20cover%20[WEB].pdf)