Comment

The moment is now

Joëlle Gergis

is an award-winning climate scientist and writer. She is the author of *Humanity's Moment:* A Climate Scientist's Case for Hope. "The latest review of polar ice sheet sensitivity warned that even with 1.5°C of global warming, policymakers should prepare for 'several metres' of global mean sea level rise ... noting that the last time carbon dioxide levels were this high, sea level was 10-20 metres higher than it is today."

As I write, I'm listening to the sound of repairs to my home following the impacts of Tropical Cyclone Alfred, a rare category 2 system that tracked as far south as the Gold Coast in March, leaving a trail of destruction throughout northern New South Wales and south-east Queensland.

About four million people were in Alfred's erratic path, taking in Brisbane, the Gold Coast and the Northern Rivers, threatening the third-largest population centre in the country outside of Sydney and Melbourne. Unlike areas further north, homes in this region have not been built to withstand cyclones. Luckily the system weakened before making landfall, but because it was slow moving, the coast was relentlessly battered by destructive winds, waves and rain for nearly a week. While anyone who has witnessed the carnage left in Alfred's wake can see that the impacts were bad enough, scientists like me know it could have been truly catastrophic. And it's only a matter of time until it will be. As ocean temperatures continue to warm, climate models predict that cyclonic systems will continue drifting outside of historically defined cyclone zones.

Warming waters are already unleashing irreversible destruction across the planet. Record heat observed in the global ocean since 2023 has led to a mass coral bleaching event that has damaged 84 per cent of the world's coral reefs. As the brutal summer of 2024-25 came to an end, the Ningaloo Coast, a World Heritage area known for its pristine beauty, succumbed to the worst coral bleaching in its history. After witnessing the decimation of Rowley Shoals – which marine scientists considered their "hope spot" for its unexpected resilience – researcher Dr Chris Fulton emerged from his underwater surveys "bawling my eyes out".

Until the Albanese government introduces scientifically defensible nature laws that criminalise the fossil fuel industry's continued desecration of Country, we will lose more and more of our precious places. Even in the most remote, last-of-the-last refuges like Ningaloo. As Western Australia's beloved writer Tim Winton has said, the situation is "not tragic – it's shameful". Never has there been a better moment for bold action. At the National Press Club on June 10, Prime Minister Anthony Albanese celebrated his government's historic mandate to advance a golden era of "progressive patriotism" in Australian politics. He acknowledged a sense of responsibility to future generations to meet the environmental challenges of climate change, along with "the trust that the Australian people have placed in our government". He went on to say that "each and every day, we are working to prove worthy of that trust". Less than two months into Labor's

second term, it is already hard to take Albanese at his word. The first act of the newly appointed environment minister, Murray Watt, was to conditionally approve an extension of operations for Australia's largest oil and gas production area, from 2030 out to 2070. The upgrading of Woodside Energy's North West Shelf gas processing plant - not far from Ningaloo - paves the way for the development of other fossil projects off the remote Kimberley Coast. These include the Browse Basin, the nation's largest reserve of untapped gas, under the Timor Sea's fragile Scott Reef. Investing in the infrastructure needed to keep Australia's fossil fuel industry thriving in an increasingly unstable climate is not a good move for a government looking to rebrand itself as a renewable energy superpower.

Environmental groups responded with howls of protest, but should anyone honestly be surprised? Labor has now approved 27 fossil fuel projects since it was first elected in 2022. So although the government likes to claim the moral high ground on its climate credentials, talking up its commitment to renewable energy and green manufacturing, the Woodside decision is proof of Labor's allegiance to fossil fuel companies until the bitter end.

The latest greenhouse gas emission figures for the December 2024 quarter show that Australia's emissions are still increasing, despite reporting an overall decline of 27 per cent since 2005. Relying heavily on the low-integrity carbon credits that underpin the government's safeguard mechanism offset scheme, the government claims we are more than halfway to reaching the 43 per cent reduction needed by 2030. But when you remove the inflated contribution of the land sector, and just count actual emission reductions across all polluting sectors, Australia's emissions have only fallen by 2.8 per cent since 2005. The stupidity of half measures and polite incrementalism is increasingly hard to bear. Decades of wilful ignorance has led to weak climate policy that currently gives the world a 90 per cent chance of warming between 2.3-4.5°C by 2100, with a best estimate of 3.6°C. That's essentially three times the warming the planet has already experienced since the Industrial Revolution. Given how disruptive the impacts of a 1.2°C world have already been, especially in Australia, it terrifies me to imagine what higher levels of warming will bring. To avoid catastrophic levels of global warming that will consign millions to a life of misery, the Paris Agreement states that the world needs to achieve carbon neutrality by 2050. The idea that we can permanently offset the world's greenhouse gas emissions without reducing our reliance on fossil fuels might sound good in theory, but in practice

the concept of net zero has ushered in a treacherous era of greenwashing that requires some scientific literacy to unpick.

Right now, climate policies around the world rely on two things working: carbon offsets based on regenerating land to soak up excess carbon, and the materialisation of large-scale carbon capture and storage (CCS) technology to bury industrial emissions deep underground or below the sea floor. According to the International Energy Agency, in the first quarter of 2025, CCS facilities worldwide were capturing about 50 million tonnes of carbon dioxide annually. The world burned through 41.6 billion tonnes last year, meaning that carbon capture technology is able to neutralise just 0.12 per cent of total global carbon emissions. By the industry's own admission in the latest Global State of CCS Report, they still have "a long way to go to attain the gigatonnes per annum of carbon management deployment ... required to help reach net zero and avoid the most severe consequences of global temperature rise". An understatement, if ever there was one.

The operational capacity of CCS plants would need to be scaled up roughly 800 times to offset current global emissions. Promising to attach carbon capture to fossil fuel projects is clearly not a serious solution to stabilising the Earth's climate anytime soon. It's simply another way of prolonging the life of the fossil fuel industry and diverting the capital needed to overcome the bottlenecks in the deployment of clean energy. Meanwhile, every tonne of carbon - no matter where it is burned - will remain in the atmosphere for hundreds of years, locking in higher levels of global warming that will commit the world to irreversible changes and stretch the limits of adaptation. The latest review of polar ice sheet sensitivity warned that even with 1.5°C of global warming, policymakers should prepare for "several metres" of global mean sea level rise over coming centuries, noting that the last time carbon dioxide levels were this high, sea level was 10-20 metres higher than it is today. In the face of this scientific reality, governments around the world are still planning to produce more than double the amount of fossil fuels in 2030 than is consistent with limiting warming to 1.5°C, the Paris Agreement's planetary guardrail needed to minimise intolerable impacts on human societies and ecosystems. There are plans to increase global coal production until 2030 and oil and gas reserves until at least 2050, despite many major fossil fuel producers like Australia pledging net zero emissions targets by mid-century. The re-election of climate change denier Donald Trump to the White House has seen the United States withdraw yet again from the Paris Agreement and apply its "drill, baby, drill" energy policy to allow oil and gas extraction in previously

off-limits locations such as the Alaskan wilderness.

This re-emergence of defensive nationalism has led major emitters and private finance to start walking back their corporate sustainability goals. In February, British Petroleum's chief executive Murray Auchincloss announced its "reset strategy" to pivot away from renewables and back to increasing oil and gas production. Apparently, its optimism for a fast energy transition was 'misplaced", and the fossil fuel giant had gone "too far, too fast" in its plans to decarbonise. BP is cutting its investment in clean energy, instead opting to boost oil and gas production US\$10 billion (\$15.3 billion) each year to finance at least 20 new "major projects" by the end of the 2030s.

Since the world is not yet collectively on track to achieve its net zero target, then why should BP's shareholders suffer? If the social licence for the clean energy transition has buckled under the pressure of inflation and geopolitical instability, then it's easier to lower ambition instead of redoubling their resolve. So much for corporate leadership.

It's now nearly four months on from the cyclone, and we've only just received the lowball insurance payout needed to begin fixing our home. The excruciating wait for financial support left us vulnerable to further damage as a menacing succession of violent gales and downpours continued throughout the overheated autumn. And I'm one of the lucky ones: my neighbour, who had a giant gumtree crash into her roof, is still battling it out with her insurer as winter takes hold. As Australia's climate continues to warm, extreme weather events will overwhelm the resilience of more and more communities, until your number is up - one day you're comfortable, and then suddenly you're not. I've come to realise that denial is a position of the privileged: people who have their homes swallowed by floodwaters, torn apart by wind or burnt to the ground aren't afforded the luxury of turning away. The destruction that scientists have long feared has now come to pass. The Labor government has a moonshot opportunity to use its mandate to end the era of fossil fuels. They could honour the trust placed in them by the Australian people and leave a visionary environmental legacy as their greatest gift to future generations. Or they can choose betrayal. As Winton says: "the science is clear on this - the morality should be too". •