Greenhouse gas emissions

Australia is blowing its carbon budget, projections reveal

Exclusive: In less than four years the country has 'spent' almost 20% of its greenhouse gas allowance to 2050, analysis shows

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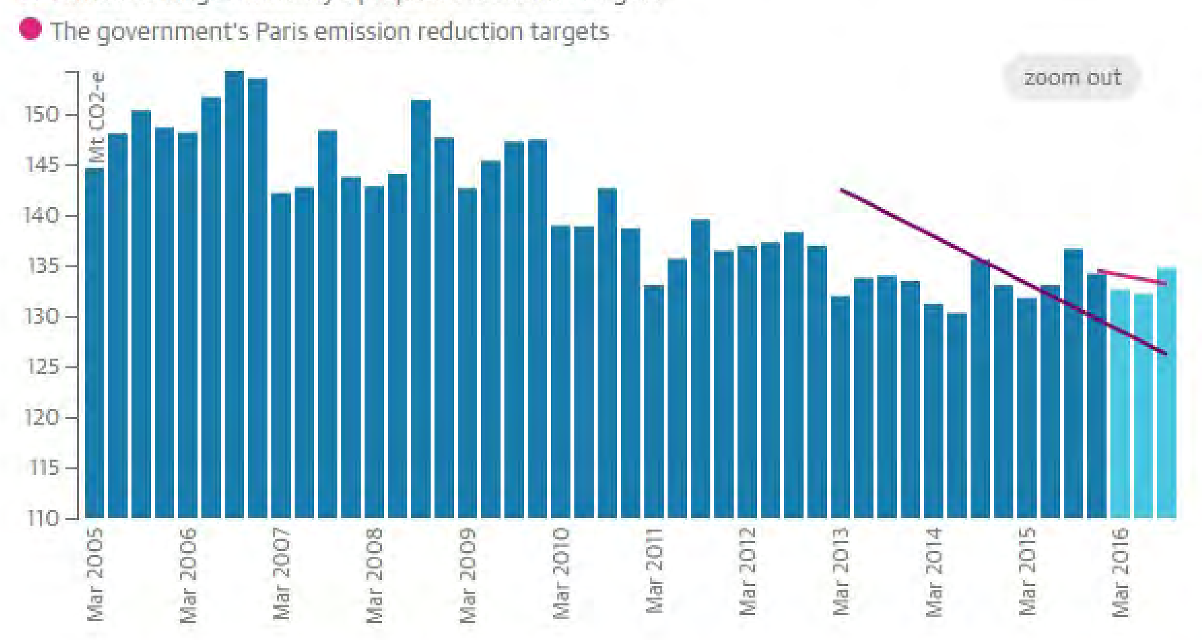
Australia has emitted about twice what is allowed by the Climate Change Authority's carbon budget since 2013. Photograph: G Mutlu/Getty Images

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Australia's greenhouse gas emissions are rising despite global reduction efforts, according to detailed projections made by the consultants NDEVR Environmental.

Australia's emissions jumped by 2.56m tonnes in the three months to September, putting them 1.55m tonnes off-track compared with commitments made in Paris, and 4.06m tonnes over levels demanded by scientifically based targets set by the government's Climate Change Authority. Emissions for the year to September are above those for the year to September 2015.

Australia's emissions: how we are tracking

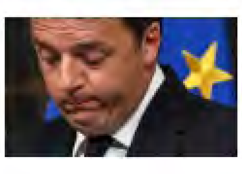


The trend line for the Government's Paris emissions reduction targets assumes a linear rate of reduction to reach the final target. | Source: NGGI, NDEVR Environmental

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The results mean Australia has emitted about twice what is allowed by the CCA's carbon budget since 2013. In the three years and nine months to September 2016, the country emitted 19.8% of its share of what the world can emit between 2013 and 2050 if it intends to maintain a good chance of keeping warming to below 2C.

If Australia continues to emit carbon pollution at the average rate of the past year, it will spend its entire carbon budget by 2031. Projected to the current second, the graphic shows how much of the carbon budget has been spent.

Carbon clock: How much of Australia's carbon budget have we spent?

7,961,105,776
Total carbon budget remaining in tons (CO2-e), if we want to do our fair share to avoid 2° warming

2,138,894,224
Total carbon budget used since 2013, in tons (CO2-e)

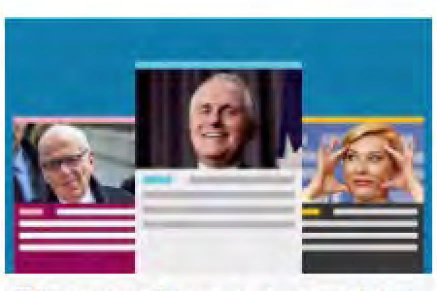
78.8% | 21.2%

10,100,000,000
The total carbon budget in tons (CO2-e) we have since 2013 to avoid 2° warming, according to the CCA

2031
The year we will exceed the CCA's carbon budget, if our emissions stay as they are now

The total carbon budget remaining, total carbon budget used, and year of exceeding the CCA target figures are calculated by taking the most recent quarterly emissions estimates from NDEVR Environmental, and then assumes a rate of emissions from this time using a rolling average of emissions from the most recent four quarters.

The government has failed to report its emissions since the quarter ending December 2015. Last year it released data on Christmas Eve, when it reported a jump in emissions.


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The analysis was produced by NDEVR Environmental, which analysed data for all of Australia's major emissions sources and compared the results with the government's commitments made in Paris and the cuts recommended by the CCA.

"The national greenhouse gas inventory, it's six to nine months behind, it doesn't compare against any targets, and it doesn't mean a whole lot to a lot of people," said Matt Drum, director of NDEVR Environmental.

"So we put our backs into it and replicated their report, updating it to the latest quarter. It was no mean feat. We wanted to show how Australia is tracking, not in real time, but as close as we can get."

The jump in the latest quarter was not unexpected, since it represents increased use of power during winter months, according to Drum. But the analysis suggests Australia's emissions have not fallen over the longer term either, with emissions over the year to September rising by 1.3m tonnes compared with the previous year.

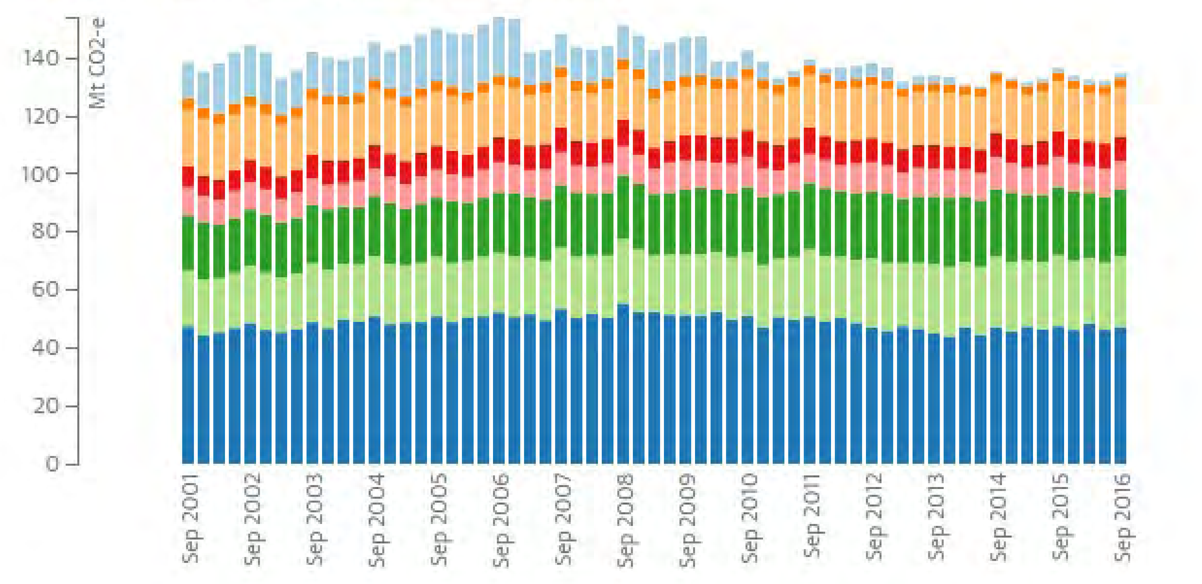
"Since the carbon pricing mechanism was repealed, slowly but surely carbon emissions have been increasing both in intensity and in volume, so it's no surprise that overall emissions have started creeping up as well," Drum said.

The government has not committed to any interim targets before 2030 but the analysis shows that Australia is not cutting its emissions at all - and certainly not at a steady rate that would meet its 2030 targets.

The carbon budget recommended by the CCA, which it described as "equitable and feasible", was never agreed to by the government, but represents the authority's view of Australia's fair share if global warming is to be kept under 2C.

Australia's emissions did drop steadily from 2005, almost entirely owing to changes in land-clearing laws in Queensland and NSW. Those changes have now been reversed in Queensland and New South Wales has also just made the clearing of land easier. This is expected to cause an increase in emissions which may not yet be reflected in the projections.

Where are Australia's emissions coming from?



Guardian graphic | Source: NGGI, NDEVR Environmental

The federal government's primary carbon reduction tool is Direct Action, under which it pays polluters to pollute less through a reverse auction - the emissions reduction fund.

There is no evidence the emissions bought through that fund reduce overall emissions, and many of the emissions the government pays to avoid are unlikely to have occurred anyway.

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About 83% of the emissions reduction fund has been spent, with the latest auction attracting relatively little interest from polluting industries, resulting in fewer reductions being offered and a higher price being demanded.

The government has committed to reviewing its climate change policies in 2017 but there have been doubts about how rigorous that review will be since the minister for energy and the environment, Josh Frydenberg, described it as merely a "sit rep" - a situation report.

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