



Submission to the Department of Climate Change, Energy, the Environment and Water

ACCU Review Discussion Paper

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Australian Parents for Climate Action represents over 17,000 parents, grandparents and carers from across Australia. We are Australia's leading organisation for parents advocating for a safe climate. Our supporters are from across the political spectrum, across all Australian electorates, and from varied socio-economic positions. We seek non-partisan responses to climate change and its impacts.

We advocate for Australian governments and businesses to take urgent action to cut Australia's carbon emissions to net zero as quickly as possible. We encourage Australia to take a leadership role on the world stage, leading by example and calling for other nations to take the necessary action to protect our children's futures.

For more information, visit www.ap4ca.org

This submission was prepared by volunteers David McEwen and has been approved by Nic Seton, Chief Executive Officer of Australian Parents for Climate Action.

Submission

While we welcome the opportunity to contribute to improving the transparency of the ACCU Scheme, Australian Parents for Climate Action remains strongly opposed to organisations' use of any form of carbon credit to "offset" their own emissions, rather than investing in genuine emissions reduction achieved by decreasing their own emissions. We argue that fossil fuels in particular can not simply be "offset" and that such a notion has no basis in sound science.

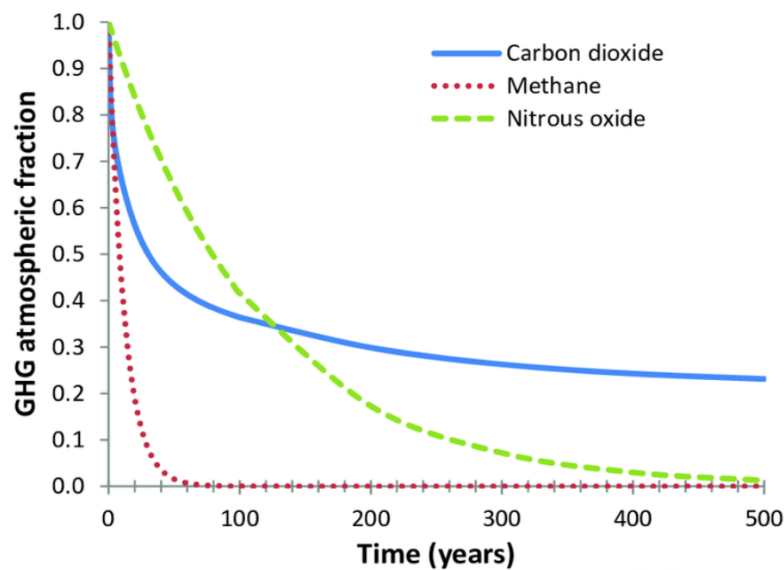
We are currently engaged in legal action against energy generator and retailer EnergyAustralia on the grounds that its "Go Neutral" energy products deceive and mislead customers by describing products as "carbon neutral" and good for the environment, even though EnergyAustralia's generation mix is predominantly fossil-fuel based. Calling fossil fuels carbon-neutral is a nonsense claim, regardless of whether a company is using avoidance or removal credits to claim its impact or products are "offset". We are encouraged to see that the European Commission has agreed, and the EU is expected to adopt a [ban on carbon neutral claims based on the use of offsets](#).

We were deeply disappointed that the Safeguard Mechanism reforms earlier this year permitted high emitting facilities, particularly fossil fuel mining/drilling and processing facilities, unlimited use of carbon credits as "offsets" to achieve the modest mandated emissions cuts on their domestic emissions.

Holding aside our fundamental concerns regarding the use of carbon credits as "offsets", we are concerned that the principles listed in section 1.1 appear to completely omit mention of the most important feature of any claimed carbon credit: its permanence/durability. We argue this is a critical factor in any carbon credit transparency approach.

Another concern we hold is the timing problem, where often there is a considerable [delay between a credit being issued and the alleged carbon removal occurring](#). A high-integrity carbon credit should only be valid once a permanent removal of carbon has been verified - not at some indefinite date in the future.

Greenhouse gases (with the notable exception of methane) are long-lived in the atmosphere, persisting for hundreds to thousands of years before being broken down. As the [graph below](#) highlights, some newly-emitted gases are broken down via their interaction with hydroxyls, or in the case of carbon dioxide are dissolved in oceans (forming carbonic acid, which increases the acidity of sea water and leads to the degradation of marine life at the bottom of the food chain) or absorbed in soils or by trees (to the extent countries stop ploughing fields and chopping down forests, both of which are re-releasing carbon dioxide that might otherwise have been locked up for useful durations).



As such, emissions are cumulative: what you emit this year gets added to much of what has been released since the start of the industrial revolution.

As parents explaining climate science to our children, we've found the simplest analogy for global heating is to imagine a year's worth of greenhouse emissions as a heat trapping cover that is placed on a bed. Each year, you're adding another bedcover. The thickness of the cover is determined by the total emissions for that year. Currently, with global emissions higher than they've ever been, it's as if we're adding a goose down, winter-weight doona.

As global annual emissions peak and reduce, we'll still be adding a cover every year, but they will change from goose down to polyfill doonas, to woollen blankets, and eventually to cotton throws. But no covers have come off yet: if you're in that bed you're getting hotter and hotter, and are probably sweating profusely.

If the world achieves genuine net zero emissions in a way that is meaningful to the physical climate system, then all those covers remain on the bed - you've just stopped adding another one each year. It's still crazy hot in the bed.

Over the following hundreds of years, covers will eventually come off and those in the bed will feel less hot (assuming you haven't triggered natural [positive feedbacks, or tipping points](#), which would continue to increase heating even if anthropogenic emissions were zero).

Potentially we can accelerate the process of removing covers through so-called "negative emissions" to undo some of the harm we have done by digging up and burning fossil fuels. However, both carbon capture and storage (CCS - at the source of a release of greenhouse gases, such as a coal or gas-fired power station) and direct air capture (DAC), require vast amounts of energy, and an infrastructure over three times larger than that of the fossil fuel industry itself, to capture and sequester the equivalent energy emissions that are currently released each year.

That's because, when you burn fossil fuels, the carbon atoms in the coal, oil or gas combine with atmospheric oxygen to form carbon dioxide (that's right, fossil fuels are oxygen thieves!). The molecular weight of an atom of carbon is 12 mols. For a molecule of carbon dioxide it is 44 mols - 3.67 times the mass of the carbon by itself. Those claiming that overshoot and drawdown strategies are viable must realise that to sustain our fossil fuel industry would require a carbon capture and storage industry several times larger.

Those who claim that "natural solutions" – such as tree planting or soil carbon sequestration – are viable offsets to justify continued fossil fuel production need a bit of a wake up call. Because when scientists add up the potential for natural sequestration they find that it would at best – if maxed out globally – absorb [about seven years' worth of emissions](#) at current levels ([54GT CO₂-e](#)), over the course of a century.¹ That sure isn't going to save us. We're going to need every scrap of viable carbon removal to maintain *genuinely* hard to abate and socially beneficial industries. Fossil fuel energy can never be considered hard to abate given the cost effective alternatives..

As we keep adding more covers to the bed, also bear in mind that we're worsening the chances of your natural solutions actually working. Yes, carbon dioxide is plant food so – other things being equal – higher concentrations of atmospheric carbon dioxide should result in greater plant growth. But [other things aren't equal](#), because many plant species don't thrive at the higher temperatures we're now seeing (which, as explained are only going to get higher); many plant species rely on precipitation patterns that are being upended by the violent seesawing we're starting to see between scorching drought (and bushfires) and record floods that effectively "drown" plants; the same floods also wash away precious topsoil, again making it harder for plants to thrive.

Australian Parents for Climate Action is very supportive of an end to deforestation and the rewilding of as much land as possible (including through reducing livestock herd sizes, which frees pasture land and vast amounts of land used to grow food for farm animals). These endeavours are critical to protecting and supporting biodiversity.

But let's not kid ourselves that this would in any way compensate for our use of fossil fuels and other emissions intensive energy products. If the principles don't even mention permanence, let alone achieve the centuries-plus durability that the climate system would respond to, then ACCUs may well be damaging. And if those carbon credits are also used in offset claims, then they could become the greatest and most tragic trick ever to have been perpetuated against humanity.

¹ We would strongly encourage the Department to read the linked paper in detail. Note that its estimate is 103 giga tonnes of Carbon over a century, which converts to 378 Gt CO₂-e. There are several other studies that have reached similar conclusions.