
Future Gas Strategy: consultation paper

Climate and Health Alliance Submission

November 2023

About the Climate and Health Alliance

The Climate and Health Alliance (CAHA) is a national health promotion charity and the peak body on climate change and health in Australia. CAHA is an alliance of organisations within the health sector working together to raise awareness about the health risks of climate change and the health benefits of emissions reductions. The membership of CAHA includes a broad cross-section of health sector stakeholders with over 100 member organisations (Appendix 1), representing healthcare professionals from a range of disciplines, as well as healthcare service providers, institutions, academics, researchers, and consumers.

Acknowledgements

The Climate and Health Alliance recognises Aboriginal and Torres Strait Islander People as the traditional custodians of the land on which we live and work, and acknowledge that sovereignty of the land we call Australia has never been ceded. We commit to listening to and learning from Aboriginal and Torres Strait Islander people about how we can better reflect Indigenous ways of being and knowing in our work.

Introduction

The Climate and Health Alliance (CAHA) welcomes the opportunity to submit a response to the consultation for the Future Gas Strategy (the Strategy) to the Commonwealth Department of Industry, Science and Resources (the Department).

As the peak body on climate change and health in Australia, CAHA is acutely aware of the ways in which the climate crisis is intrinsically linked to negative health outcomes. Climate change [directly impacts human health](#), and increases both demand for health services and the stress on the people and institutions providing those services. As such, it is crucial the Future Gas Strategy adopts a precautionary, [health in all policies](#) approach, to fully assess health and climate impacts of gas use and expansion.

Evidence clearly shows that oil and gas developments are detrimental to human health and wellbeing. They put local communities at [increased risk of vulnerability](#) and put strain on already overburdened health systems. In addition to long-term impacts on climate and health, there are substantial immediate adverse effects to the environment and health of communities that are local to invasive [gas developments](#). However, extraction accounts for only one way gas is harmful to human health. Domestic gas use exposes people to indoor pollution, which has been [linked to adverse health outcomes](#) that are especially prevalent in children.

Australia's international obligations

In order to fulfil the pledge of the [Paris Agreement](#), to rapidly reduce greenhouse gas emissions and reach net zero emissions by 2050, the Intergovernmental Panel on Climate Change (IPCC) has stated there must be an [immediate halt](#) to all new fossil fuel infrastructure. Despite this, [116 new coal and gas projects](#) are expected to begin production in Australia before 2030.

Australia has placed a bid to host the 31st United Nations Framework Convention on Climate Change Conference of the Parties (COP31) with neighbouring Pacific Island nations. However, Australia's current Nationally Determined Contribution of a 43% reduction in emissions by 2030 is not consistent with the Paris Agreement as its [support for fossil fuel expansion](#) continues. To host COP31 in light of this would be an attempt to greenwash the climate reputation of Australia, a [point already noted by Australia's Pacific neighbours](#): *'Australia can only be a credible partner if it truly demonstrates that it is supporting the priorities of the Pacific on climate change'*. Through the continued expansion of gas in Australia's energy transition we are telling the world that we are not serious about our emissions goals, and risk our credibility on the world stage.

A transparent, evidence-based approach

CAHA supports comprehensive, transparent processes that support the development of evidence-based decarbonisation strategies.

The narrative framework of the discussion paper highlights that the Strategy addresses a '[wicked problem](#)' and wicked problems in public policy seldom result in '[evidence-based policy](#)'. The consultation process undertaken for the Strategy will involve a range of stakeholders with competing interests, each presenting evidence that supports their view. However, it is important to recognise achieving an outcome that progresses each of the stated key objectives of the Strategy will be difficult and ultimately require tradeoffs. We believe a transparent approach provides the best chance for this Strategy to achieve its very ambitious objectives.

Competing interests will naturally need to be prioritised and this should be done transparently with accompanying rationale. Vested interests should be disclosed and actively considered through the process and evidence presented should undergo a quality assessment and be weighted accordingly.

We also consider it important to acknowledge the role Australia plays in fossil fuel exports in relation to the stated desire of being 'a responsible climate actor'. Australia's carbon accounting does not include the emissions arising from other countries burning the fossil fuels we export to them. We cannot shirk from our contribution to global carbon emissions via exporting fossil fuels. In dealing with a 'wicked problem', it is only when all interests and influences are laid out bare and examined, can there be a policy decision that is truly informed by evidence.

CAHA is pleased to contribute to the development of the Strategy by providing recommendations on how to strengthen the Strategy; evidence on the links between climate, health and gas; and, evidence to consultation questions aligned with our expertise.

We look forward to ongoing engagement with the Department on this important Strategy.

Recommendations

CAHA supports emissions reductions policies and targets that will reduce risks to health and wellbeing as quickly as possible. It is recommended the Future Gas Strategy support this with a commitment to a 75% reduction in greenhouse gas emissions below 2005 levels by 2030 and [net zero greenhouse gas emissions by 2035](#), in line with [best-evidence](#) from the Intergovernmental Panel on Climate Change. It is also recommended the Future Gas Strategy consider the climate and health impacts of gas production and expansion.

To strengthen the Strategy, CAHA makes the following recommendations:

1. Imbed health impacts within the decarbonisation policies and targets undertaken via the Strategy and ongoing stakeholder consultations.
2. Include a focus on the measurable short-term health co-benefits of transitioning away from domestic gas use.
3. Ensure health is incorporated into economic analyses that quantify avoided health expenditure and related productivity improvements of the various decarbonisation strategies.
4. Conduct meaningful consultation with community members and experts on the impacts of gas use and expansion.
5. Adopt a transparent approach that openly acknowledges the tensions and trade-offs involved in designing a gas strategy.
6. Conduct a 'quality assessment' to inform the weight given to evidence in forming the Strategy.
7. Acknowledge the role our fossil fuel exports play in global greenhouse gas emissions, and commit to reducing the harms of this industry.

The health impacts of residential gas

When considering the future of gas in Australia, it is essential to realise the impacts of gas on human health and climate change. The consultation as it stands has not addressed the real concern that gas use poses on human health. As experts in climate and health, we are aware of the extensive evidence that links exposure to domestic gas to adverse health outcomes.

Domestic gas use in Victoria and NSW make a significant contribution to the overall gas use in Australia. The current cost of living crisis has many households grappling with rising interest rates and cost of living pressures, which is impacting the way they respond to the very real threat of carbon emissions trajectories.

When gas is used for cooking, [toxic air pollutants](#) including nitrogen dioxide (NO₂), fine particulate matter (PM_{2.5}), formaldehyde and benzene are released. Most range hoods are not externally vented and therefore the toxic gases are [re-circulated throughout the indoor environment of homes](#). Exposure to NO₂ from [domestic gas use is associated with](#) asthma, allergy exacerbations, respiratory infections and is also linked to both cardiovascular and cognitive effects. Children are the most vulnerable to these impacts due to their immature defence systems, higher respiratory rate and higher lung surface area compared to total body mass.

Australia has [one of the highest prevalence rates of asthma](#) and it is the leading cause of total disease burden in Australian children (five - 14 years). It is estimated that for a child with current asthma who lives in a home with a gas stove, [30% of their asthma risk](#) may be attributable to the stove. Given the high prevalence of childhood asthma (over 10% of Australian children), and that the use of gas for domestic cooking and heating predominantly occurs in the two most populous states (NSW and Victoria), it is crucial the Strategy focuses on rapidly electrifying domestic energy.

Asthma and the broader respiratory impacts are the most commonly researched health impacts of domestic gas use, however recent emerging evidence indicates a wider range of health impacts than previously envisaged. Combustion particles released from gas stove tops are the smallest fraction of fine particulate matter (PM_{2.5}), known as 'ultrafine particles' (UFP). These tiny invisible particles are less than one micron in diameter, which means when they reach the bottom of the lungs (alveoli) they can then cross into the bloodstream and travel throughout the body, potentially affecting all organs, including the brain. This is why cooking over gas stove tops has recently been linked to the development of neurodegenerative diseases [such as Alzheimer's disease](#). While this more recent evidence is still emerging, there is a strong trend of a widening range of health impacts, and the precautionary principle should be adopted when considering the number of Australians regularly exposed to domestic gas.

Nearly a decade ago, asthma was estimated to cost the Australian economy [\\$24.7 billion per annum](#). We are yet to see these economic impacts incorporated into the econometrics used to guide government decisions for projects with significant ramifications to the national incidence and prevalence of asthma (such as this gas strategy). For the health and wellbeing

of our future generations, we ask the Department to include quantitative consideration of the health co-benefits, including avoided health expenditure and the improved productivity that will be associated with the various transition scenarios away from domestic gas use. To appropriately account for children, this assessment should include age-stratified risks and consider the life long impacts of reduced lung capacity due to childhood insults.

Any future strategy for Australia should be a healthy one, for the people and the climate. As established, there are barriers the Australian public face to realising the severity of the risk domestic gas poses. This is a public health issue, and as such the development of the Strategy should carefully consider climate and health impacts. If these impacts are not taken into consideration, we can expect the burden to fall upon our public health system, the economy and future generations of children, who are most vulnerable to the associated health consequences.

Consultation Questions

Based on expertise and areas of focus, CAHA will focus on providing evidence to consultation questions 10, 11, 25, 26 and 27.

(10) If your home or small business gas appliances (stove, heating, or hot water system) stop working, would you prefer to keep using gas or switch to an electric appliance? If you are unsure, what would help you decide? What factors influence your willingness to switch to electric appliances?

CAHA strongly prefers the adoption of electric appliances based on three factors:

1. The health benefits (both personal and for our families) arising from reduced exposure to the harmful pollutants from gas appliances;
2. The contribution this would make to reducing overall carbon emissions; and,
3. The potential savings that may apply due to the generally better improved efficiency profile of comparable electric appliances, and the enabling of renewable energy use via solar panels and batteries (either immediately or in the future) to power these appliances.

(11) How can governments, industry and households work together to manage impacts for homes?

The evidence that gas is bad for health is clear. While it is important to inform the public of this risk, we cannot wait for public support to build before acting in the interest of public health. The Commonwealth Government must act as a leader in the transition away from gas, to protect the health of Australians, as well as those overseas who are impacted by our export trade. The Victorian Government has taken steps towards transition by [banning gas connections](#) in all new builds from 2024. While this is an important initiative, coordination on a Commonwealth level to ensure a national transition is crucial.

Government funded schemes assisting households to transition to electricity are an integral part of ensuring a just and equitable transition.

(25) How can the Australian Government better communicate and provide more transparency to local communities regarding gas projects?

CAHA wishes to emphasise that transparency is key when it comes to informing the community about the damage gas projects cause to human and environmental health. We know that the evidence says that gas use and developments are harmful to our health and cause environmental damage, however there is little public awareness about this. The government plays a crucial role in delivering this message to the public and ensuring communities are well informed about the risks posed by gas. Part of the Government's responsibility involves ensuring there is not only awareness, but public engagement on this issue. Therefore, they should seek to ensure communications targeted at the broader community use accessible language and avoid jargon to remove unnecessary barriers to understanding.

Communities should be involved from the outset, prior to the terms of reference being drafted. This would ensure the terms of reference credibly consider the wider social determinants of health that are considered relevant by the community, for the community. A range of experts should be selected in collaboration with the community, government and institutions across multiple Australian universities. Various multi-disciplinary university institutions could appoint experts from across different disciplines whilst other participating universities could appoint experts to blind peer review the Environmental Effects Statement (EES) process.

This provides the community with some assurance of independent expertise and transparency. The range of experts should include someone with specific skills in science communication, to help liaise and report between the community and government.

(26) What opportunities exist to improve engagement and consultation processes with industry?

The Strategy offers an opportunity to operate with transparency and respect to the larger community. By implementing more thorough, genuine consultation with local community groups on whose land projects are taking place, some harm can be mitigated.

Cross-disciplinary collaborations situated within universities are an untapped resource of the relevant expertise and experience to assist engagement with both communities and industry. As an example, Melbourne Climate Futures at the University of Melbourne includes experts in economics, climate, health, international relations, policy, risk assessment and all facets of energy (exports, domestic supply/demand and the barriers and enablers for transition to renewables).

We understand industry requires as much certainty and clarity as possible in terms of future energy supply and costs. This would be facilitated through transparent governance and facilitating more collaborations between a transdisciplinary range of relevant experts in academia and independent think tanks.

(27) How can all levels of governments better support the industry to engage with First Nations people and community groups?

First Nations communities have been [outspoken about the risks](#) to their [livelihood, culture, and the environment](#) that come with new gas projects. While all gas developments pose a risk to First Nations communities, particular harm is done when projects are approved without proper consultation with Traditional Owners and Custodians first.

First Nations people are a key identified 'vulnerable group' for air pollution health impacts in Australia. The same exposure quantum in this group is associated with [significantly higher risk estimates](#) for a range of cardio-respiratory health endpoints.

Connection to Country and Sea Country is an important aspect of [First Nation's health and mental health](#). After repeatedly being deceived in the past, [communities are distrusting of gas corporations](#) and feel they are not respected in the decision making process. As was found in the [Scientific Inquiry into Hydraulic Fracturing in the Northern Territory](#), impacts

should be genuinely explained prior to the development's approval, and plans should be made with community consultation to mitigate these impacts.

The best way to protect First Nations people and communities from the harm caused by exposure to gas in the home and by gas developments on traditional lands is to transition away from gas dependency. During this transition, proper consultation with Traditional Land Owners is essential in promoting the health and wellbeing of First Nations communities.

For more information, please contact:

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Appendix: Climate and Health Alliance Members

CAHA membership as of November 2023.

