To: the Hon Chris Bowen MP
Australian Minister for Climate Change

Dear Minister Bowen,

As Australian healthcare workers and health organisations, we request that you act immediately to curtail Australia's fossil fuel methane emissions to reduce the risk of catastrophic climate change and its extremely detrimental health impacts.

Methane is an 80 times more potent greenhouse gas than carbon dioxide within a 20-year timeframe[1] and is responsible for roughly 30% of global warming.[2] It is emitted predominantly from coal and gas mining, agriculture and waste management. The Intergovernmental Panel on Climate Change's 6th Assessment Report urges reducing global methane emissions by at least a third before 2030 to maximise chances of limiting global warming to 1.5 degrees above pre-industrial levels in keeping with the Paris Climate Agreement.[3]

Reducing methane emissions is crucial to protecting people's health from climate change's severe health impacts, including heat-related illnesses and injuries from extreme weather events[4,5], the spread of infectious disease[6], drought[7], crop failure[8,9], displacement[10] and mental ill health[11]. The health consequences of methane emissions not only threaten individual well-being but also add further strain on an already overburdened healthcare system in Australia.

Methane also contributes to the formation of noxious ground-level ozone, which exacerbates asthma and other respiratory conditions.[12] The International Energy Agency has estimated that limiting ground-level ozone through adequate methane abatement could avoid one million premature deaths by 2050.[13] Without methane abatement, ground-level ozone could also reduce the yield of some crops by 6-10%, potentially further risking the livelihoods of rural Australians.[14]

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[1]Environment Defenders Fund (2023) Methane: a crucial opportunity in the climate fight
[2]International Energy Agency (2023) The Imperative of Cutting Methane From Fossil Fuels Report
[3]Intergovernmental Panel on Climate Change (IPCC) (Ed.). (2023). Climate Change 2022 - Mitigation of Climate Change: Working Group III Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press
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[5]Deschenes, O., & Moretti, E. (2009). Extreme weather events, mortality, and migration. *The Review of Economics and Statistics*, *91*(4), 659-681
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[8]Gitz, V, Meybeck, L. Lipper, C. De Young, and S. Braatz (2016) "Climate change and food security: risks and responses." *Food and Agriculture Organization of the United Nations (FAO) Report* 110, no. 2
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[11]Palinkas, L. A., & Wong, M. (2020). Global climate change and mental health. *Current opinion in psychology*, *32*, 12-16
[12]United Nations Environment Programme and Climate and Clean Air Coalition, (2021) The Global Methane Assessment
[13]International Energy Agency (2023) The Imperative of Cutting Methane From Fossil Fuels Report
[14] Shindell, D. (2016). Crop yield changes induced by emissions of individual climate-altering pollutants. Earth's Future 4: 373–380.

Reducing fugitive methane emissions from fossil fuel extraction is the most urgent and practicable way to reduce Australian methane emissions.[15,16] The International Energy Agency has recommended reducing methane emissions from fossil fuel extraction by 75% globally by 2030.[17] Currently, these emissions are rising in Australia[18], and a large percentage are due to leaking equipment and procedures that fall short of international best practices, resulting in flaring and venting out of methane instead of capturing it.[19] Fugitive emissions are underreported by fossil fuel companies and are likely significantly underestimated in government statistics.[20] New legislation must require methane emitters to monitor and report methane emissions accurately as well as reduce emissions.

Therefore, as an urgent measure to protect health from pollution and climate change, we request that you develop a national plan by 2025 to accurately monitor and reduce fossil fuel methane, including:

- **A fossil fuel methane emissions reduction pathway aligned with limiting global warming to 1.5 degrees above pre-industrial levels, including a 75% reduction in fossil fuel methane emissions by 2030 as outlined by the International Energy Agency's Net Zero Roadmap[21].**
- **Mechanisms for methane emissions measurement, reporting, verification and mitigation in keeping with international best practice.[22] [23]**
- **Mandating methane leak detection and repair programs.[24]**

In addition, we implore the Federal Government to continue investing in clean energy technologies and energy efficiency programs to reduce reliance on fossil fuels.

We look forward to your response.

Sincerely,

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[15] Ember, 2022, Tackling Australia's Coal Mine Methane Problem
[16] Nisbet, E. G., Fisher, R. E., Lowry, D., France, J. L., Allen, G., Bakkaloglu, S., & Zazzeri, G. (2020). Methane mitigation: methods to reduce emissions, on the path to the Paris agreement. *Reviews of Geophysics*, *58*(1)
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[22] US State Department (2022) Joint Declaration from Energy Importers and Exporters on Reducing Greenhouse Gas Emissions from Fossil Fuels
[23] International Energy Agency (2023) Methane Abatement
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