

Health Effects of Fossil Fuels

Policy Position Statement

Key messages: There is a clear link between fossil fuel exploration, extraction, transportation and burning, and adverse health impacts from the local to global scale. Rapid transition to reduced, more efficient energy use and renewable energy sources are urgently needed.

Key policy positions:

1. Promote healthy and ecologically sustainable energy and transport options for future development.
2. Raise awareness about the potentially serious and poorly assessed threats to human wellbeing, health and the environment from fossil fuel extraction and use.
3. Advocate for protection of human wellbeing, health and the environment from existing fossil fuel exploration, extraction, transportation and burning.
4. Undertake research, education and advocacy for the protection of ecosystems, food production, human wellbeing, health and society from the detrimental effects of fossil fuels
5. Work with government and other organisations to achieve these ends.

Audience: Federal, State and Territory Governments, policy makers and the general public.

Responsibility: PHAA Environment and Ecology Special Interest Group

Date adopted: 26 September 2018 (NB: this version includes new paragraph 20 inserted as part of the [Unhealthy Political Influence](#) policy position statement adopted in September 2021)

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Policy position statement

(Note: see also the [policy position statements](#) on Safe Climate, Preparing for Peak Oil, Outdoor Air, and Nuclear Energy as a response to Global Warming Policies)

PHAA affirms the following principles:

1. Future energy and transport policy must protect human wellbeing, health and the environment from the deleterious effects of fossil fuel developments.
2. Assessment of health harms and co-benefits should be included in analysis of all energy and transport proposals.
3. Pollution standards for Australian vehicles and industry should be at least equivalent to those in comparable wealthy countries.
4. Government has a responsibility to drive the transition away from fossil fuel use through all means at its disposal, and to avoid perverse incentives that artificially sustain fossil fuel use.

PHAA notes the following evidence:

5. Fossil fuels have been the essential energy resource for enabling modern complex industrial society. As such, their use is embedded in government energy policy and practice. Further, industry has invested heavily in extraction, distribution and use infrastructures. Both Government and industry see Australia's coal and gas reserves as an ongoing energy source for Australia and a source of export revenue for the future.¹⁻³
6. Fossil fuels use however has large scale detrimental effects by generating greenhouse gases (GHG) which are amplifying the greenhouse effect on our planet and causing global warming.⁴ The detrimental effects of global warming upon human health are already apparent.⁵
7. The mining, transport and combustion of fossil fuels, are detrimental to human health through local and regional pollution by particulates, volatile chemical exposures, and heavy metal dispersion, such as mercury.⁶⁻⁸ The largest health impacts are from burning coal for electricity and from burning petroleum products for road transport.
8. The use of natural gas has been put forward as a temporary, transitional, low GHG fuel, but the expanding use of unconventional gas (coal seam, shale and tight gas) bring health and environmental impacts that offset its potential benefits.⁹ These effects include air, water and soil contamination from chemicals used in drilling and hydraulic fracturing, large quantities of salts from waste fluids, and volatile gases. These potentially affect humans and livestock, and can compromise agriculture.¹⁰ Further, many of the chemicals used are known to have adverse health effects and most have not been fully assessed for use by the National Industrial Chemicals Notification and Assessment Scheme.¹¹

9. Unconventional gas is mostly methane - a potent GHG. While energy from burning methane is less carbon intensive than burning coal, this benefit is lost if fugitive losses amount to only 3% of gas used. Fugitive losses escape from pipes, wells and processing plants as well as directly from disturbed geological formations. Total fugitive losses are currently unknown, and make the use of unconventional gas a high risk strategy.¹²
10. Known fossil fuel reserves, if exploited, are sufficient to exceed the remaining global carbon budget five times over, so to limit global warming to 2 degrees, 80% of known reserves must remain undisturbed.¹³
11. The Australian coal fired power industry has not kept pace with technological improvements in other countries, lacking modern pollution control equipment. There is currently no financial or regulatory incentive for power station owners to move to cleaner use.
12. The 20 remaining coal fired power stations in Australia are not all equally polluting. Emissions of SO₂ per GWh generated vary by a factor of 5 from the cleanest to the dirtiest power station, and emissions of PM2.5 vary by a factor of 28 from the cleanest to the dirtiest power station.^{14, 15} All 20 will need to close in the next decades as they become uneconomic, and these closures will bring immediate health benefits.
13. The air pollution from burning fossil fuels in road vehicles is especially damaging to human health as it is concentrated along urban roadways where many people are exposed.¹⁶

PHAA seeks the following actions:

14. Australia should not approve any further exploration for new reserves of coal, oil and gas.
15. Hydraulic fracturing should be suspended until the full extent of fugitive gas release is understood and can be reliably estimated.
16. The adverse health effects of coal fired air pollution should be a primary concern in the closure order of fossil fuel power stations.
17. A load based pollution license fee should be established across the electricity sector based on the NSW model, with fees that reflect the value of health and environmental damage. These pollution fees establish the business case for cleaner production in continuing plants, or early closure for the dirtiest plants.
18. Income tax arrangements that favour personal ownership of internal combustion vehicles should be removed.
19. Australia should adopt fuel standards for private and commercial vehicles at least equivalent to those in Europe so that Australia can benefit from pollution control technology as it becomes available.
20. Consistent with PHAA's [Unhealthy Political Influence policy position statement](#) (2021), donations from the fossil fuel mining and energy sectors to political parties should be prohibited. [NB: this para inserted in September 2021]

PHAA resolves to:

21. Advocate for the above steps to be taken based on the principles in this position statement.
22. The Ecology and Environment Special Interest Group will work with PHAA National Office, other SIGs and State and Territory Branches to:
 - Advocate for energy and transport policy in line with the above principles and policy proposals.
 - Raise awareness about the potentially serious and poorly assessed threats to human wellbeing and health and to the environment from fossil fuel extraction and use.
 - Work with governments and other organisations in achieving these ends.
 - Minimise air and land transport for undertaken by PHAA staff and members for PHAA work, as well as for professional and personal travel.

(First adopted at the 2012 Annual General Meeting; Revised 2015 and 2018)

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