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# Tackling Darebin's wood smoke pollution essential to tackling the Climate Emergency

## Petition fact sheet

### Key points

- Darebin Council has declared a climate emergency and is implementing energy saving actions to reduce emissions. However, Council's Climate Emergency 2017-2022 Plan fails to directly address the contribution of wood heaters to speeding up global warming and harming our health, as explained in this New Scientist Report and Video: [log-burning stoves are harming our health and speeding up global warming \(Feb 2017\)](#)
- Air pollution is a major contributor to global warming and is driving climate change - short-lived climate-forcing pollutants (SLCPs) including black carbon and methane are among the top contributors to [global warming after CO2](#).
- Air pollution is also a critical health issue. The World Health Organization has announced that air pollution is the [world's largest environmental health risk](#), noting that air pollution kills an estimated seven million people worldwide every year.
- The UN Environment Program/World Meteorological Organization (UNEP/WMO) recommended [phasing out log-burning heaters](#) in developed countries to reduce global warming as well as improve health.
- To address air pollution the Darebin community need to be informed about how they can reduce their own contribution and understand the major sources of air pollution (such as wood smoke) in Darebin.
- Recommendation 13 of the 2013 Australian Government Senate Inquiry into 'The impacts on health of air quality in Australia' recommended:
  - 6.44 That local councils continue to manage the use of wood heaters in their own jurisdictions through the use of bans, buy-backs, minimum efficiency standards, and other mechanisms as appropriate to protect the health of their local communities.

### Wood smoke is a major source of air pollution

- According to the Victorian EPA, 60% of the smog over Melbourne in winter is attributable to wood smoke.
- The air in Darebin is polluted with wood smoke, particularly in the winter months. Any Darebin resident can confirm this by simply walking around their neighbourhood in the early evenings.
- The NSW EPA estimates that the [average new wood heater emits](#) about 20 grams of PM 2.5<sup>1</sup> in 2 hours, as much as the average car emits in an entire year.
- According to the [ABS \(2008\)](#) one in ten Australian households use a wood heater as their main source of heating.
- Based on this at least 5000 Darebin residents use wood heaters as their main source of heating, with many more using them to supplement regular heating source.
- And yet in Darebin we have widespread, affordable access to cleaner heating alternatives.
- Burning wood is not a renewable or clean energy alternative. Wood burning emits high levels of harmful particulate pollution, toxins, short-lived climate pollutants and other compounds. Burning wood releases [more CO2 than gas, oil and even coal](#) for the same amount of heat. Even though wood is a natural substance, burning it is neither healthy nor good for the environment.

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<sup>1</sup> PM2.5 stands for particulate matter which is less than 2.5 micrometers in diameter, which is about 3% the diameter of a human hair. PM is capable of penetrating deep into lung passageways and entering the bloodstream causing cardiovascular, cerebrovascular and respiratory impacts. In 2013, it was classified as a cause of lung cancer by WHO's International Agency for Research on Cancer (IARC).

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## Health hazards of wood smoke

- There is extensive evidence that wood smoke exposure, even at low levels, causes lung disease, strokes, heart attacks, cancers, dementia and neurological disorders. In [Victoria](#) alone wood smoke will cost [\\$8 billion in health costs](#) over the next 10 years.
- Children are highly affected by air pollution; children breathe at a faster rate, have developing respiratory systems and do more outdoor exercise than the rest of the population. Air pollution can cause respiratory diseases, cancers and cognitive impairment in infants and children. Early exposure has long term, irreversible negative impacts on [children's lung function](#)
- Dr Ben Ewald, GP and Senior Lecturer in Epidemiology, Newcastle University, told a 2013 [Senate Inquiry](#) into air pollution and health that exposure at the current National PM2.5 Standard has equivalent mortality risks to actively smoking three cigarettes a day.
- The U.S. EPA study concluded that the cancer risk from lifetime exposure to wood smoke estimated to be twelve times greater than that from equal amounts of tobacco smoke.
- The *Growing up in New Zealand* study found that for every additional modern wood stove per hectare [increased by 7%](#) the risk children under 3 would need emergency hospital treatment.

## Why does air pollution matter in Darebin?

- Darebin has one of the largest populations in the State. Growth is forecast to reach 173,980 people by 2031, a 21.6% increase overall. This increased urban density means more sources of air pollution including more wood heaters, cars and industry.
- Darebin has 3 times the rate of people cycling compared to other municipalities, meaning more people outdoors breathing in particle pollution.
- Darebin has high rates of chronic illness.
- The wood heater industry is marketing their products as [environmentally friendly](#) in promotional materials and placement in glossy, urban lifestyle and design magazines.
- There is anecdotal evidence that more people in Darebin are installing wood heaters in the mistaken belief that they are a renewable, healthy heating alternative.

## What is being done about air pollution in other areas?

- Other jurisdictions have taken action to reduce air pollution including placing tougher restrictions on wood heaters – this includes:
  - [New Zealand](#) and [Canadian cities](#) are introducing far tighter restrictions
  - The City of London is taking bold steps to address toxic air including proposing to [ban wood heaters](#) by 2025.
  - Some [suburbs in the ACT](#) have banned them all together
  - [Launceston's \\$2.08 million](#) wood smoke program reduced deaths in winter from respiratory disease by 28% and cardiovascular disease by 20%.
  - The San Francisco ['Spare the Air, Cool the Climate'](#) multipollutant" plan to reduce emissions across the board.

## Further information

New Scientist Report and Video: [log-burning stoves are harming our health and speeding up global warming \(Feb 2017\)](#): <https://www.facebook.com/watch/?v=10155097669589589>

<https://www.abc.net.au/radionational/programs/healthreport/bushfires-air-quality-and-hospital-admissions/11755840>

[https://www.who.int/health-topics/air-pollution#tab=tab\\_1](https://www.who.int/health-topics/air-pollution#tab=tab_1)

<https://www.envirojustice.org.au/clearing-the-air-why-australia-urgently-needs-effective-national-air-pollution-laws/>

<http://www.ccacoalition.org/en/initiatives/household-energy>

<https://theconversation.com/everyone-loves-a-wood-burning-heater-but-is-the-harm-worth-it-13536>

<https://www.theage.com.au/national/victoria/like-having-a-smoker-in-the-house-why-wood-heaters-in-winter-are-bad-for-us-20180705-p4zpq6.html>

<https://samharris.org/the-fireplace-delusion/>

<https://woodsmokepollution.org/>