

Attn: Environment and Planning Standing Committee – Legislative Council  
Parliament House, Spring Street  
EAST MELBOURNE VIC 3002

Dear Committee members,

### Submission to the Victorian Parliamentary Inquiry into the Health Impacts of Air Pollution

I am a senior rural generalist doctor, currently serving as President of Rural Doctors Association Victoria, with a strong interest in air quality.

Over the past 4 years, I have been actively advocating for an effective Victorian Clean Air Strategy, which has been significantly delayed.

This year, I was involved in the [EJA Peoples' Clean Air Action Plan for Victoria](#), and was one of the keynote speakers at its launch in the Latrobe Valley.

The major sources of air pollution we identified for Gippsland were coal fired power and biomass smoke - from bushfires, planned burns, and notably domestic wood burning.

**Domestic solid fuel burning** is one of the most significant preventable cause of air pollution across much of southern Australia, including rural Victoria, and **I would like to focus on this specific issue** in my submission, as I feel that it has been particularly inadequately addressed.

We know from EPA Victoria's own data that domestic wood burning was responsible for 27% of PM2.5 fine particulate pollution in the Port Phillip Air Quality Control Region, covering most of suburban Melbourne.

This data has yet to be formally released, which is extremely disappointing, and has contributed to the long delay in response to the data.

PM2.5 is one of the most harmful air pollutants, as I will discuss below.

I note also that Victoria has no air pollutant inventory, and that air quality monitoring in Victoria remains below standard. This lack of comprehensive data represents a significant barrier to action.

### **Estimated sources of PM2.5 in the Port Phillip Air Quality Control Region (includes Melbourne and outer Melbourne area), 2016.**

Source	Annual emissions (tonne)	% of total
Industry	3477	34
Domestic wood heating	2744	27
Road transport	1547	15
Non road Transport	290	3

Commercial	153	1
Natural sources (sea salt)	405	4
Bushfires	1645	16

Information from Paul Torre, Senior Applied Scientist - Air & Odour, Air, Odour & Noise Sciences, EPA Victoria.

This data can be compared with [UK government findings](#) that domestic combustion (of solid fuels such as wood) is the largest source (accounting for 43%) of PM2.5 emissions in the UK.

Of particular note: **the proportion of PM2.5 emissions from domestic wood burning is growing in Australia**, as it is in the UK, as people install wood heaters, fire pits etc. and other emission sources (e.g. road transport) drop.

Last spring, I discussed wood burning in a piece I wrote for the AMA Victoria magazine entitled '[Wood heaters: the cosy killers](#)'.

Many households in East Gippsland use wood heaters for heating, and many fires are also lit for recreational use. It's considered part of the culture, and many people are very protective of their wood heaters.

Unfortunately, it is also a well established fact that domestic wood burning harms our health, and in particular the health of our most vulnerable community members - pregnant women, the very young, the very old, and people with other health problems.

The bushfires of 2020/21, which resulted in an estimated 400+ deaths in south eastern Australia, drew more attention to the hazardous effects of wood smoke.

Whilst bushfires and planned burns also generate woodsmoke, the smoke from domestic wood burning is generated where we live, creating 'hot spots'. It has a more concentrated impact on health. Most importantly, it's preventable.

Breathing in wood smoke is comparable to passive smoking. It contains fine particles called PM2.5 which are 40 times smaller than a grain of sand, and invisible to the human eye. They are so small that they can be inhaled deep into the respiratory system, cross into the bloodstream and move around the body, affecting every organ.

Breathing in wood smoke and PM2.5 can worsen asthma and chronic obstructive pulmonary disease (COPD), and is associated with heart attacks, strokes, dementia, diabetes, and premature death. [The damage caused by the fine particulate pollution of wood smoke starts at very low levels](#). Every year, the evidence base on this topic grows.

[A study in Tasmania in 2020](#) found that domestic wood heaters cause 65 deaths every year.

Wood heaters are not a cheap source of heating for rural Victorians - in terms of health costs alone, each wood heater costs an estimated \$4000 a year to run.

Despite the above, domestic wood burning is effectively unregulated in Victoria and Australia.

Smoking tobacco is now banned in public places because the health effects are unacceptable, yet we do nothing to restrict wood burning.

In East Gippsland, where I live, domestic wood burning has the biggest impact in built up towns such as Orbost and Bairnsdale, and much less impact on big properties where the nearest neighbours live several kilometres away.

The Victorian State government/DELWP, EPA Victoria, and local councils share responsibilities for protecting communities from environmental health hazards. At present, none of these are taking effective action to protect residents from harmful air pollution, especially from wood burning. There is minimal air quality monitoring available in rural Victoria.

**I ask that the Committee consider the following actions:**

- DELWP and EPA Victoria must finalise a Victorian Clean Air Strategy as a matter of urgency.
- The development of an environmental health information campaign about the risk to health posed by woodsmoke and domestic wood burning. This should not focus on 'how to burn wood safely', but must suggest alternatives.
- Victoria must develop a comprehensive air pollution inventory.
- EPA Victoria must urgently improve its air quality monitoring as per previous recommendations, and should collaborate with citizen scientists.
- Victorian State Government must liaise with rural councils to ensure that low income households in rural Victoria can access their [recently announced energy saving initiatives](#) and any other subsidy programs. Households with wood heaters should be allowed priority access to these subsidies.
- Small businesses that offer employment related to wood burning (including firewood supplies) must be supported in their transition to providing clean, sustainable heating sources.
- DELWP must design a phase out program in collaboration with local councils and EPA VIC: through planning regulations, prevent the installation of new wood burning heaters in built up residential areas of towns in Victoria, and mandate the removal of wood heaters/fireplaces upon the sale of a house in built up residential areas.

I hope we can work together to reduce the damage wood burning does to our community's health.

I am very happy to answer any questions you might have, and to provide further details and evidence.

Yours sincerely,

Dr Rob Phair

President, Rural Doctors Association Victoria

Bairnsdale

