



# Sydney Development Control Plan Amendment 8A - Indoor air quality City of Sydney

**Asthma Australia Feedback, February 2025**

## **ABOUT ASTHMA AUSTRALIA**

Asthma is a chronic respiratory condition affecting nearly 2.8 million Australians (11%), with children being the most impacted. It can severely restrict breathing, disrupt daily life, and, in extreme cases, lead to life-threatening complications, including respiratory failure. In 2022-23, more than 31,000 people were hospitalised due to asthma - 43% of them children.<sup>1</sup> At least one Australian loses their life to asthma every day.<sup>2</sup>

Asthma Australia is the peak body representing people with asthma. Our goal is to halve preventable hospitalisations by 2030. According to the Australian Institute of Health and Welfare (AIHW), 80% of asthma-related hospital admissions could be prevented through quality primary health care and effective community-based prevention.<sup>3</sup>

To achieve this, we deliver education and support services for people with asthma, their carers, teachers, and health professionals to improve asthma management and quality of life. We advocate for health reforms that improve access to care, optimise treatment, reduce health inequities, and address environmental triggers like poor air quality. We also raise funds and drive groundbreaking research to one day cure asthma.

Our work is grounded in evidence and shaped by the voices and lived experiences of those affected by asthma. For more, visit [asthma.org.au](https://asthma.org.au)

## OUR FEEDBACK

Asthma Australia strongly supports the electrification of homes as it contributes to a healthy indoor environment by removing sources of indoor air pollution, including gas cooktops, gas heaters, and wood heaters, that contribute to asthma. Home electrification can also reduce consumer energy costs and contribute to climate change mitigation, particularly when coupled with connection to renewable energy sources. Proposed changes to the Sydney Development Control Plan include Amendment 8A, which would improve indoor air quality in new residential developments by prohibiting the installation of indoor gas appliances. Below, Asthma Australia sets out why we strongly support Amendment 8A. We provide additional recommendations the City of Sydney should consider to further improve air quality inside homes in the Local Government Area (LGA) and protect residents' health.

### HEALTH BENEFITS

Asthma Australia's research has found many people are exposed to asthma and allergy triggers in their homes and almost one-third of people with asthma or allergies report experiencing worse symptoms after spending time in their homes.<sup>4</sup> Removing air pollution emitted by gas appliances in homes is a critical step towards supporting health at home, particularly as climate change is increasing exposure to air pollution inside homes from other sources, such as bushfire smoke and mould. As the consultation's 'Policy and housekeeping - Overview and explanation' document recognises, the health harms of air pollution associated with the use of gas appliances are well-evidenced.<sup>5</sup>

Gas cooktops and heaters are a significant source of household air pollution. They produce a variety of air pollutants, including fine particulate matter, nitrogen dioxide, carbon monoxide, and formaldehyde. There is no safe limit of exposure to fine particulate matter and even low levels of air pollution can cause significant health problems.<sup>6</sup> Exposure to the pollutants produced by gas cooktops and heaters can trigger asthma flare-ups and contribute to the development of asthma.<sup>7</sup> Of notable concern, research indicates that up to 12 per cent of childhood asthma in Australia is attributable to gas cooking.<sup>8</sup>

City of Sydney states Amendment 8A is a direct response to these negative health impacts and Asthma Australia strongly welcomes this proposed change for these reasons. However, while supporting its implementation, we ask the City of Sydney to consider and act on similarly compelling evidence in relation to the health risks of wood heaters. Wood heaters are an inefficient and, for most users, expensive form of heating.<sup>9</sup> Similarly to gas appliances, wood heaters emit harmful pollutants including fine particulate matter and known carcinogens, with smoke polluting both indoor air and air outside in the local neighbourhood.<sup>10</sup> Wood heater smoke can trigger asthma symptoms and flare-ups<sup>11</sup> and is also a risk factor for other respiratory illnesses, certain cancers, cardiovascular disease, premature birth and premature death.<sup>12</sup> Given this significant body of evidence demonstrating the health risks of wood heaters, Asthma Australia urges the City of Sydney to prohibit the installation of wood heaters in all new dwellings.

**RECOMMENDATION 1: Implement Amendment 8A and prohibit the installation of indoor gas appliances in all new dwellings.**

**RECOMMENDATION 2: Prohibit the installation of wood heaters in all new dwellings.**

## REDUCTION IN GREENHOUSE GAS EMISSIONS

Gas appliances have been found to consume more energy than electric alternatives, including by several research projects recently undertaken in Australia.<sup>13</sup> The City of Sydney's prohibition of gas appliances in new dwellings will therefore result in fewer greenhouse gas emissions. This is particularly important for people with asthma and others with increased sensitivity to climate health risks.<sup>14</sup> For example, climate change is increasing the frequency, duration, and levels of outdoor airborne hazards that adversely affect asthma such as bushfire smoke, dust storms, thunderstorm asthma, pollen, and ground level ozone.<sup>15</sup>

Reducing greenhouse gas emissions through electrification is also important to meeting net zero emissions targets. For example, the transition away from residential gas in Victoria is seen by the Victorian Government as a key part to meeting its 2045 net zero emissions target.<sup>16</sup> The City of Sydney has a more ambitious plan to reach net zero emissions by 2035 and hence Amendment 8A will help to meet this target.<sup>17</sup> However, while eliminating gas appliances in new dwellings is important, more than half of Australian households use gas.<sup>18</sup> There is therefore significant scope for the City of Sydney to be more ambitious in its plan to transition away from residential gas appliance use by including existing homes into its plan. Doing so would enhance equity by ensuring all Sydneysiders are protected from harmful gas emissions in their homes. It would provide City of Sydney with the best chance of meeting its climate change commitments, and thereby limit the detrimental health effects of climate change on the local community.

**RECOMMENDATION 3: Widen the scope of amendment 8A so that it applies to all new and existing dwellings.**

## REDUCTION IN CONSUMER ENERGY COSTS

Transitioning away from gas to electric energy and appliances has been found to reduce consumer energy costs.<sup>19</sup> For example, the following potential energy bill savings have been detailed in Victoria's current 'Building for electrification. Regulatory Impact Statement':<sup>20</sup>

- 'Residents of a typical new, all-electric detached home (without solar) will save around \$880 per year, with these savings increasing to approximately \$1,820 per year with solar installed.'
- Residents 'converting an existing dual-fuel home without solar panels to mostly-electric (fossil gas for cooking only) can save around \$1,340 a year on energy bills. If solar panels are installed, these savings will increase up to \$1,650 per year, and if the gas cooktop is also replaced with an induction cooktop, then the savings can increase even more to \$2,020.'

In addition to electricity bill savings, home electrification helps to reduce consumer energy costs by enabling residents to disconnect from gas, removing cost of maintaining a gas connection. While Amendment 8A will assist many households through these cost savings, there is significant scope for many more Sydneysiders to benefit from a reduction to energy costs. Therefore, Asthma Australia again urges the City of Sydney to prohibit gas appliances in both new and existing dwellings.

## REFERENCES

- <sup>1</sup> Australian Institute of Health and Welfare (AIHW). 2024. Principal diagnosis data cubes. Separation statistics by principle diagnosis, Australia 2022-23. Canberra.
- <sup>2</sup> Australian Bureau of Statistics (ABS). Causes of Death, Australia, 2023, 2022, 2021, 2019, 2018. Canberra.
- <sup>3</sup> AIHW. 2024. Potentially preventable hospitalisations in Australia by small geographic areas, 2020–21 to 2021–22. Web Report. Last updated 13 Aug 2024. Available from: <https://www.aihw.gov.au/reports/primary-health-care/potentially-preventable-hospitalisations-2020-22/contents/summary>
- <sup>4</sup> Asthma Australia. 2022. Homes, Health and Asthma in Australia. n=5,041. [https://asthma.org.au/wp-content/uploads/2022/11/AA2022\\_Housing-Survey-Report\\_full\\_v4.pdf](https://asthma.org.au/wp-content/uploads/2022/11/AA2022_Housing-Survey-Report_full_v4.pdf)
- <sup>5</sup> City of Sydney. 2023. Sydney Development Control Plan 2012. Policy and housekeeping. Overview and explanation. Available from: [Your say on updates to planning controls related to greening, amenity, parking and design excellence - City of Sydney](https://www.cityofsydney.nsw.gov.au/updates-to-planning-controls-related-to-greening-amenity-parking-and-design-excellence-city-of-sydney)
- <sup>6</sup> World Health Organization (WHO). 2013. Review of evidence on health aspects of air pollution—REVIHAAP Project: Technical Report. Copenhagen, Denmark: WHO.
- <sup>7</sup> Knibbs, W., Marks, C. 2018. Damp housing, gas stoves and the burden of childhood asthma in Australia. MJA.208(7):299–302. Solar Victoria. 2024. From cutting costs to carbon emissions: 5 powerful reasons to electrify your home. Available from: <https://www.solar.vic.gov.au/reasons-to-electrify-your-home>; Lin, W., Brunekreef, B., Gehring, U. 2013. Meta-analysis of the effects of indoor nitrogen dioxide and gas cooking on asthma and wheeze in children. Int J Epidemiol. 2013 Dec;42(6):1724-37. Epub 2013 Aug 20.
- <sup>8</sup> Knibbs, W., Marks, C. 2018.
- <sup>9</sup> CHOICE. 2023. How wood fires compare to other forms of heating. Available from: <https://www.choice.com.au/home-and-living/heating/home-heating/articles/should-you-switch-from-a-wood-fired-heater>; CHOICE (2023). What's the cheapest way to heat your home this winter? Available from: <https://www.choice.com.au/home-and-living/heating/home-heating/articles/what-is-the-cheapest-way-to-heat-your-home-this-winter>
- <sup>10</sup> Australian Department of Climate Change, Energy, the Environment and Water. 2023. Wood heaters and woodsmoke. Available from: <https://www.dcceew.gov.au/environment/protection/air-quality/woodheaters-and-woodsmoke#:~:text=Woodsmoke%20contains%20a%20range%20of,particulates%20and%20formaldehyde%2C%20are%20carcinogenic.>
- <sup>11</sup> Australian Government Department of Health. 2018. National Asthma Strategy 2018. Available from: <https://www.health.gov.au/resources/publications/national-asthma-strategy-2018>.
- <sup>12</sup> Australian Government Department of Agriculture, Water and the Environment. 2005. Wood heaters and Woodsmoke. [Internet] Available from: <https://www.environment.gov.au/resource/woodheaters-and-woodsmoke>; Borchers-Arriagada N et al. 2020. Health Impacts of Ambient Biomass Smoke in Tasmania, Australia. International Journal of Environmental Research and Public Health. 17(9): 3264. Bothwell, J.E., Mcmanus, L., Crawford, V. L. S., Burns, G. Stewart, M.C., Shields, M.D. 2003. Home heating and respiratory symptoms among children in Belfast, Northern Ireland, Archives of Environmental Health: An International Journal, 58:9, 549- 553; Naeher, L. et al. 2007. Woodsmoke Health Effects: A Review, Inhalation Toxicology, 19:1, 67-106.
- <sup>13</sup> Victorian Department of Transport and Planning. 2024. Building Electrification. Regulatory Impact Statement. Available from: [Building Electrification – Regulatory Impact Statement | Engage Victoria](https://www.victoria.gov.au/transport-and-planning/building-electrification-regulatory-impact-statement)
- <sup>14</sup> WHO. 2021. Climate change and health vulnerability and adaptation assessment. <https://www.paho.org/en/documents/climate-change-and-health-vulnerability-and-adaptation-assessment>
- <sup>15</sup> D’Amato et al. 2014. Climate change and respiratory diseases. Eur Respir Rev, 23, 161–169.
- <sup>16</sup> Victorian Department of Transport and Planning. 2024.
- <sup>17</sup> City of Sydney. 2021. Environmental Strategy 2021-2025. Available from: <https://www.cityofsydney.nsw.gov.au/environmental-action/energy-and-climate-change>
- <sup>18</sup> Energy Consumers Australia. 2025. Consumer Energy Report Card: How households use gas and their attitudes towards electrification. Available from: <https://energyconsumersaustralia.com.au/news/media-release-more-australian-households-turning-all-electric-new-survey-shows>
- <sup>19</sup> Victorian Department of Transport and Planning. 2024.
- <sup>20</sup> Victorian Department of Transport and Planning. 2024.