

Climate Council of Australia

Submission to:	City of Sydney consultation on electrification of new development
Addressed to:	City of Sydney - Strategic Planning and Urban Design
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5 May 2025

About the Climate Council

The Climate Council is Australia's own independent, evidence-based organisation on climate science, impacts and solutions.

We connect decision-makers, the public and the media to catalyse action at scale, elevate climate stories in the news and shape the conversation on climate consequences and action, at home and abroad.

We advocate for climate policies and solutions that can rapidly drive down emissions, based on the most up-to-date climate science and information.

We do this in partnership with our incredible community: thousands of generous, passionate supporters and donors, who have backed us every step of the way since they crowd-funded our beginning as a non-profit organisation in 2013.

To find out more about the Climate Council's work, visit <u>www.climatecouncil.org.au</u>.

Introduction

The Climate Council welcomes the opportunity to contribute to the City of Sydney's shift to all-electric homes and businesses. As an independent, evidence-based organisation, we strongly support measures that align with the latest science and maximise benefits for communities, the economy and environment. The delivery of all-electric new homes and commercial buildings is a key opportunity identified in our *Seize the Decade* plan to slash Australia's climate pollution by 75% on 2005 levels by 2030, and to net zero by 2035 (Climate Council 2024a).

We commend the City of Sydney for its commitment to action on climate change including a target of net zero climate pollution by 2035 to ensure that Sydney plays its part in slashing climate pollution rapidly and avoiding the worst impacts of climate change. With gas accounting for nearly a quarter of the City of Sydney's energy use, electrification will be critical to meeting the City's emissions reduction target. The benefits of electrification will grow as more renewable power enters the grid over the coming years, and the City of Sydney can take hold of this opportunity to slash climate pollution, reduce energy bills and support improved health outcomes for its residents. As one of Australia's largest cities, Sydney's actions to address climate change can make a significant contribution to the country's total emissions and set an important example for other cities to follow.

Recommendations

Planning controls

The Climate Council recommends that the City of Sydney proceeds with all options presented in the discussion paper:

- 1. Continue with controls to address indoor gas appliances in new residential development
- 2. Expand controls to domestic hot water systems in new residential development
- 3. Implement controls for new non-residential development
- 4. Expand to major alterations and additions
- 5. Provide flexibility in specific circumstances

We also encourage the City of Sydney to show leadership in considering mechanisms to require and/or incentivise the conversion of centralised gas hot water systems in apartment buildings.

Timing

These changes should all be implemented as soon as possible - ideally from 2026. The electric alternatives to most gas uses in residential and non-residential buildings are well established, and every day that new builds are permitted to install gas locks in years of additional, unnecessary climate pollution and infrastructure that will become stranded in the future - costing Sydneysiders and our planet.

We recognise that some flexibility will be needed for some commercial and industrial gas users. However, with appropriate transition arrangements in place, the majority of new developments in Sydney can be all-electric from 2026, and all new builds - both residential and non-residential - can be electric-ready.

Key considerations

The benefits of switching off gas

The Climate Council agrees with the benefits of switching off gas outlined in the discussion paper. Requiring all-electric new builds is a practical action the City of Sydney can take to cut climate pollution, save Sydneysiders on their energy bills, reduce future costs and reduce the negative health impacts of gas.

The use of gas for heating and cooking indoors carries many health risks, and cooking with gas is estimated to be responsible for up to 12% of the burden of childhood asthma in Australia. A child living with gas cooking in the home faces a comparable risk of asthma to a child living with household cigarette smoke (Climate Council 2024b).

Analysis by the Institute for Energy Economics and Financial Analysis (IEEFA 2024) shows that households in NSW are being disproportionately impacted by rising energy prices compared to the rest of the country. More and more households in the state are struggling to pay energy bills, with many at risk of disconnection. Switching from gas to electric appliances is a key way to address this. Electrification both reduces overall energy use, as electric appliances are generally more efficient than gas appliances, and also reduces reliance on expensive, polluting gas that is vulnerable to price spikes driven by international markets. As noted in the discussion paper, it has been estimated that for electric buildings in the City of Sydney:

- Each new household could save an average of \$626 annually on energy bills. This equates to \$8,109 in today's dollars over 40 years total savings of \$371 million for all new homes in the City of Sydney over the same period.
- The commercial sector would save a total of \$173 million over 40 years.

Electrification will also help avoid costly new gas supply infrastructure and protect consumers from the costs associated with stranded assets in future, as gas assets built today are unlikely to remain in use for their full expected lifetime (IEEFA 2024).

Overcoming challenges and barriers

As stated in the discussion paper, the challenges to electrification can all be overcome, including:

- **Capital costs:** Although electric appliances can have higher upfront capital costs than gas alternatives, evidence indicates that as demand grows and markets expand, these electric appliances are becoming more affordable. In addition, the ongoing energy bill savings quickly overweigh any additional upfront costs.
- **Network capacity**: We note that Ausgrid has found that the forecast increased demand for electricity associated with the proposed changes aligns with available distribution network capacity.
- **Renewable gas alternatives:** There is a large body of evidence that alternative gases, including hydrogen, are unlikely to be economical, scalable or technically feasible to deliver to homes (IEEFA 2024). The transition to all-electric new homes must not be delayed based on claims by fossil fuel distribution companies that they intend to transition to renewable alternatives, while taking little action

to support these claims. Delaying electrification will only increase the growth of stranded assets.

• **Cooking preferences:** Induction cooktops can deliver most cooking needs, and flexibility can be built into the controls to allow for transitional solutions like bottled gas for commercial users who can demonstrate a need, while ensuring buildings have the capacity to be fully electric.

Barriers for commercial gas users are discussed further below.

Application to residential and non-residential new builds

Residential development accounts for a disproportionately large amount of gas use in Sydney (45%, despite only accounting for a quarter of total energy usage). All key residential gas uses - water heating, space heating and cooking - have cost-effective, readily available electric alternatives. As noted in the discussion paper, as a significant portion of new developments in Sydney each year are residential, this is an important opportunity for reducing climate pollution. The time to act is now: four years ago, our report *Path to zero: How NSW can kick the gas habit* (Climate Council 2021) found that NSW could phase out new gas connections in all residential and apartment developments by 2025.

While the non-residential sector is more complex, many of these buildings, including shops, offices, and accommodation, have similar gas uses to the residential sector. Planning controls should therefore also apply to new commercial buildings, as electric alternatives are available in most instances. However, we recognise that for some commercial and industrial users (noting industrial gas use makes up only a very small proportion of gas use in the City of Sydney), there may not be feasible electric or bottled gas alternatives to some gas uses. Where it can be demonstrated that there are no feasible alternatives, a building may be exempted from the controls. These buildings should still be required to be electric-ready to ensure that as technologies develop or building occupancies change, it is as quick and easy as possible to make the switch.

Application to alterations and additions

As suggested in the discussion paper, for consistency with existing state requirements, all renovations exceeding the thresholds for the Sustainable Buildings State Environmental Planning Policies (SEPP) should be required to be all-electric. This would apply to all renovations with a construction cost of \$50,000 or more.

Given Sydney's high proportion of high density dwellings, the City of Sydney has an opportunity to be a leader in the conversion of centralised gas hot water systems in apartment buildings. The technology for electric centralised water heating is commercially available, however, there are currently few examples of retrofits. The City of Sydney should consider mechanisms to require and/or incentivise these upgrades. Some upgrades have been completed successfully in Sydney already - for example, a complex in Woolloomooloo containing 35 apartments took the opportunity to replace a leaking gas hot water system with an efficient heat pump system, enabling the full disconnection of gas from the premises. The \$60,000 upfront cost of the system is expected to be paid back within 4 years, with energy bill savings of \$15,000 every year for residents (Wattblock 2024).

Conclusion

The City of Sydney has the opportunity to cement its place as a leader in climate action, slashing climate pollution while also improving social and economic outcomes for Sydneysiders. We commend the City of Sydney for taking proactive steps toward a safer, healthier, and more sustainable future, and we encourage it to take ambitious action and ensure that all new residential and commercial builds are fully-electric as soon as possible.

While local governments across New South Wales are playing their part in the transition away from gas, stronger leadership and coordination is needed at a state level to build on this work and make electric, efficient buildings - both new and existing - the standard state-wide. We look forward to contributing to the development of the <u>New</u> <u>South Wales Gas Decarbonisation Roadmap</u>, due to be released for public consultation in 2025.

References

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