

Future Gas Strategy

Consultation: consultation paper

27 November 2023

About ACOSS

The Australian Council of Social Service (ACOSS) is a national voice in support of people affected by poverty, disadvantage and inequality and the peak body for the community services and civil society sector.

ACOSS consists of a network of approximately 4000 organisations and individuals across Australia in metro, regional and remote areas.

Our vision is an end to poverty in all its forms; economies that are fair, sustainable and resilient; and communities that are just, peaceful and inclusive.

Climate change disproportionately impacts people who face disadvantage including people on low incomes, people with disability, people with chronic health issues and Aboriginal and Torres Strait Islander peoples.

A rapid transition to net zero emissions, consistent with limiting global warming to 1.5 degrees C, is therefore critical to reducing the impact on people facing disadvantage. This will require Australia prioritising emission reductions this decade and aiming for net zero emissions by 2035.

However, to achieve benefits for everybody, the transition to net zero emissions must be fair and inclusive. Putting people with the least at the centre of policy design means we can rapidly reduce emissions, poverty and inequality in Australia.

Summary

ACOSS welcomes the opportunity to make a submission to the [Future Gas Strategy Consultation](#).

The Future Gas Strategy consultation paper aims to develop a medium and long-term strategy for gas in Australia to “support decarbonisation and maintain our international reputation as a trusted trade and investment partner.” The paper considers the case for further expansion of gas production and supply domestically in order to respond to concerns that gas supply **could** reduce faster than reduction in demand for gas, and **could** result in supply disruptions and increase prices, impacting those who can least afford it, and worsening poverty and inequality.

ACOSS believes that the opposite is true, that an expansion of gas will lead to increased prices and worsening poverty and inequality and other negative economic and social consequences.

ACOSS believes the expansion of gas is not consistent with Australia’s commitment to pursue limiting warming to 1.5 degrees and will leave us with costly stranded assets as we make the transition to renewable energies. It will slow the energy transition, leaving Australia behind in securing supply chains for renewable infrastructure and delay our development of clean economy industries and workforce. Gas has negative health impacts as a result of extraction and use in the home. Expansion will negatively impact First Nations communities, water supply and degrade the environment. It will also increase costs to consumers, particularly those on low-income and/or renting who have no choice or ability to electrify.

The benefits of a fast transition away from gas are many, including:

- Accelerating emissions reductions goals
- Reducing energy bills for all
- Improving health outcomes
- Preserving First Nations sovereignty, culture and environment
- Avoiding adverse impacts on water
- Reducing poverty and inequality

A greater focus on demand management and reduction, including via residential electrification and energy efficiency are “no regrets” measures. Whereas delaying the transition away from gas would lock in higher energy costs for consumers and delay decarbonization.

ACOSS believes the Future Gas Strategy should include timelines to phase out gas, reduce energy demand, and accelerate energy efficiency, electrification and access to small-scale renewables in homes, with targeted policies and support for people on low-incomes and renters.

The following section expands on the issues above, responds to some key consultation paper questions, and concludes with recommendations.

Further detail, analysis and policy recommendations on residential electrification can be found in the [ACOSS submission to Senate Inquiry on Electrification](#).

Discussion

Amend the future gas strategy objectives to include equity and health

The consultation paper proposes the following key objectives to guide the development of the Future Gas Strategy:

- support decarbonisation of the Australian economy
- promote Australia's energy security and affordability
- enhance Australia's reputation as an attractive trade and investment destination
- help our trade partners on their own paths to net zero.

ACOSS recommends the following additions in italics:

- support decarbonisation of the Australian economy *in line with limiting warming to 1.5 degrees C.*
- *ensure the strategy and decarbonisation is fair, equitable and inclusive.*
- *reduce health impacts of gas and climate change.*

Further gas development and expansion is inconsistent with climate change goals

People and communities experiencing financial and social disadvantage are impacted by climate change first, worst and longest, limiting further global warming is therefore imperative to prevent further poverty and inequality. The goal of the Paris Agreement on climate change is to reduce global warming to well below 2 degrees and pursue a limit of 1.5 degrees C above pre-industrial levels.¹

The Intergovernmental Panel on Climate Change (IPCC) argues that limiting global warming to 1.5 degrees C compared to 2 degrees C could significantly reduce the number of people both exposed to climate risk and susceptible to poverty.²

However, the most recent synthesis report from the [Intergovernmental Panel on Climate Change](#) (IPCC) warns that without swift, dramatic global action to reduce greenhouse emissions, we are likely to pass the Paris Agreement's target to limit global warming to 1.5°C in the next decade.

Experts argue the Australian Government targets of 43% by 2030 and net zero by 2050, are not consistent with limiting warming to 2 degrees let alone 1.5 degrees.

¹ Paris Agreement

² <https://www.ipcc.ch/sr15/chapter/spm/>

Based on current scientific advice Australia will need to adjust its targets to be more ambitious requiring phase out of gas sooner than 2050.

Further, the stationary energy sector will need to transition faster than the economy wide target, to compensate for the slower pace of other harder to abate sectors. In fact, the International Energy Agency 1.5 degree emission reduction scenario advocates that by 2021 no new oil and gas fields should be approved for development and no new coal mines or extensions.³

About 28% of Australia's land mass is currently subject to gas exploration or applications from gas companies. This includes a whopping 70% of the Northern Territory, 59% of South Australia, 14% of Western Australia and 13% of Queensland. Most of the proposed new gas projects are unconventional gas like coal seam gas, shale gas and tight gas.⁴

Further there are no cost-effective or verifiable fossil fuel Carbon Capture and Storage (CCS) projects in Australia and there is no prospect for any within the timeframes required for meaningful emissions reduction. An analysis of 13 international projects by IEEFA found that more had either failed or underperformed than succeeded.⁵ There are more cost effective and clean alternatives to gas with CCS, that are available now.

A focus on demand management and reduction and new renewable generation and storage is the only viable pathway.

Gas developments impact on First Nations Communities, water, community health and the environment.

In the report *How Gas is Harming our Health*,⁶ the Climate Council notes that all gas extraction poses some risk to communities living nearby, but the risks are larger for unconventional gas. Gas extraction and processing involves many hazardous substances including those that cause cancer, interfere with hormones, and trigger asthma. People are exposed to these chemicals via wastewater, soil contamination or as air-borne pollutants, which are produced at most stages of gas production.

Extraction of coal seam gas requires extracting water first, to lower the pressure so the gas can flow out of the coal. According to the Department of Climate Change Energy and Water, "*Groundwater extraction may affect the quality and reduce the quantity of groundwater in adjacent aquifers that may be used for town water supply, irrigation, or by springs and other ecosystems. Environmental impacts may also occur from the storage and disposal of extracted groundwater*

³ <https://www.carbonbrief.org/iea-renewables-should-overtake-coal-within-five-years-to-secure-1-5c-goal/>

⁴ <https://www.climatecouncil.org.au/resources/australia-existing-proposed-gas-projects/>

⁵ IEEFA. [The carbon capture crux: Lessons learned](#). 1 September 2022

⁶ <https://www.climatecouncil.org.au/resources/gas-harming-our-health-what-you-need-know/>

and the effects of chemicals used in drilling and hydraulic fracturing.”⁷ Growing populations, agriculture and climate change are also impacting on water resources. Expanding gas extraction puts unnecessary pressure on our already scarce water resources.

Many of the areas where gas is being explored and proposed for development are in culturally and environmentally significant areas to Australia’s First Nations peoples. Opening new gas fields threaten First Nations people’s connection to country in many ways, risking the land, water and cultures that they have relied on for countless generations.

The First Nations Clean Energy Network has published Best Practice Principles for Clean Energy Projects.⁸ These principles can help to inform how governments and industry can engage with First Nations people and groups that will be impacted by the decommissioning of gas projects.

Gas is also harmful in the home

Gas is also harmful in the home. Gas is poisonous, and the use of gas appliances in homes reduces indoor air quality, both when gas is burned and through leakage. For example, cooking with gas has been estimated to be responsible for up to 12% of the burden of childhood asthma in Australia.⁹

According to research by the Climate Council children and households experiencing poverty are at greater risk.¹⁰

Better ventilation, including modern extraction fans over stoves, flues for gas heaters and other safety measures like ensuring appliances are properly serviced or opening windows can reduce but not eliminate these risks. People on low-incomes and/or living in rental properties are less likely to be able to make these changes.

Alternate fuels are costly and divert alternate fuels for hard to decarbonize sectors

Residential use of hydrogen or biogases as potential ‘alternatives’ to the methane gas in residential network is not efficient or effective. They either fail to contribute to emissions reduction and improved household health or involve substantial unnecessary cost and risk to households.

Existing gas infrastructure would either have to be replaced or modified to hold hydrogen gas. Estimates for upgrading infrastructure to accept 100% supplies of

⁷ <https://www.dceew.gov.au/water/coal-and-coal-seam-gas/about>

⁸ First Nations Clean Energy Network 2022 Aboriginal and Torres Strait Islander Best Practice Principles for Clean Energy Projects

⁹ <https://www.climatecouncil.org.au/wp-content/uploads/2021/05/Kicking-the-Gas-Habit-How-Gas-is-Harming-our-Health.pdf>

¹⁰ <https://www.climatecouncil.org.au/resources/gas-harming-our-health-what-you-need-know/>

hydrogen vary from 28% of the cost of an entirely new network, to more than 100% of the cost.¹¹

At the household level existing appliances would need to be replaced to accommodate hydrogen, many of these appliances are not yet available. Collective cost to upgrade appliances to accept hydrogen for Victorian and South Australian customers has been estimated at \$585 million.¹²

Biomethane could be more readily accepted by existing infrastructure and appliances. However, it is heavily supply-constrained and is better served in other hard to abate areas such as a chemical feedstock in some manufacturing processes, and in the refining of some metals.¹³

Use of either to replace existing methane in gas networks would represent an inefficient waste of resources, would be better utilised in harder to abate areas, especially where there are more efficient, effective and lower emissions options in residential sector.

Gas is expensive. Electrification provides significant Bills savings

While gas has historically been marketed as a cheap energy option, that is no longer true. Gas is expensive, with gas prices rising faster than electricity and the rate of inflation since 2012.¹⁴

Gas-consuming households are more exposed to energy price inflation than all-electric homes, which generally have lower energy bills.¹⁵

Climate Council analysis shows electrifying a home's cooking, heating and hot water can save a household between \$336 and \$1,311 a year; with households in Hobart, Melbourne, Canberra and Brisbane saving the most.¹⁶

Combining energy efficiency and solar with electrification can further reduce demand on the grid, the need for gas and lead to further energy bills savings.

For example, upgrading the thermal efficiency of a home (by putting in insulation and finding and fixing draughts) can provide additional savings between \$354 and \$1,561 each year.¹⁷

¹¹ IEEFA (2023) Submission to Future Gas Strategy Consultation.

¹² Australian Hydrogen Centre. [Summary report – for renewable hydrogen in existing Victorian and South Australian gas networks](#). November 2023. Page 18.

¹³ <https://www.climatecouncil.org.au/resources/biogas-green-gas-renewable-gas/>

¹⁴ https://www.monash.edu/_data/assets/pdf_file/0005/3433550/Switching-On_Benefits-of-household-electrification-in-Australia_report.pdf

¹⁵ ECA?

¹⁶ https://www.climatecouncil.org.au/wp-content/uploads/2023/04/CC_MVSA0353-CC-Report-Two-for-One-Home-Energy-Efficiency_V5.2-FA-Screen-Single.pdf

¹⁷ https://www.climatecouncil.org.au/wp-content/uploads/2023/04/CC_MVSA0353-CC-Report-Two-for-One-Home-Energy-Efficiency_V5.2-FA-Screen-Single.pdf

The average bill reduction for a family of four, using 15kW of energy per day, with a 6.5 kW solar system would be between \$1,134 a year in Victoria up to \$1822 in South Australia.¹⁸

Maintaining two networks is costly and wasteful

Connection to a separate gas network creates additional and unnecessary costs to households . Having both electricity and gas in the home requires households to pay two lots of network costs.

Monash University estimates that Australian households spend \$1.3 billion per annum before even a single molecule of gas is consumed (see table 1).¹⁹

	Annual supply charge	Homes connected to gas ('000)	Annual cost (\$)
ACT	\$252	153	\$38.6M
NSW	\$229	1,491	\$341.4M
NT*	N/A	N/A	N/A
QLD	\$254	211	\$53.6M
SA	\$215	450	\$96.8M
TAS	\$215	13	\$2.8M
VIC	\$326	2,089	\$681.0M
WA	\$98	757	\$74.2M
		TOTAL	\$1.3B

Given a portion of network costs are fixed, people on low-incomes, who pay disproportionately more of their income on household energy, cannot minimise these costs. People on low-income would significantly benefit from only paying for one network.

Some have argued that phasing out the gas network will increase the load and cost of electricity networks and consumers would therefore not be better off. However, CSIRO analysis for Energy Consumers Australia found that electrification of households would increase electricity network utilisation of existing infrastructure and would reduce costs for all consumers²⁰

¹⁸ <https://www.9news.com.au/national/power-price-rises-forging-the-way-for-renewables/93965306-680f-4b9f-a909-7bc26201af9e> based on analysis by the Australian Photovoltaic Institute.

¹⁹ https://www.monash.edu/_data/assets/pdf_file/0005/3433550/Switching-On_Benefits-of-household-electrification-in-Australia_report.pdf

²⁰ CSIRO. [Consumer impacts of the energy transition: modelling report](#). July 2023. Page 19.

Existing gas production in Australia can meet domestic need

The consultation paper expresses concern that supply will not meet demand, even if efforts -such as electrification -are made to reduce demand.

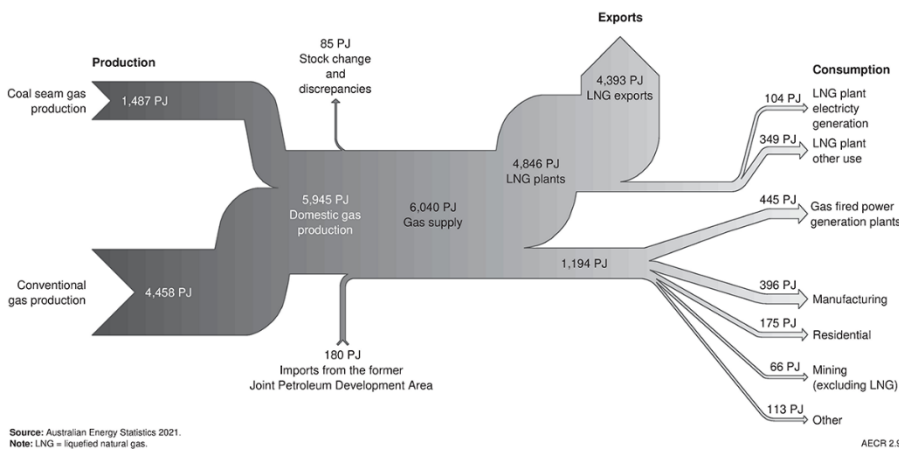
However, gas demand is predicted to decline significantly. For example, the Victorian Gas Substitution Roadmap projected a decline in household demand of over 50 per cent by 2030. AEMO’s 2021 Gas Statement of Opportunities step change, forecasted residential and commercial demand in 2030 would be 208PJ (slightly higher than current levels), while the 2022 Step change scenario forecasts it to be 122PJ, or a 42 per cent decline.²¹

Further and as shown in figure 1, the vast majority (75%) of gas produced in Australia goes to export markets. A domestic gas reserve on the eastern seaboard, would be an effective way to guarantee greater domestic supply to meet short-term demand as electrification is underway.

This would emulate the successful domestic gas reserve in Western Australia which forces LNG exporters to reserve 15% of their gas for the domestic market. These laws have kept the WA market relatively immune to the wild rises of the globally disrupted market.

Requiring gas suppliers to allocate gas domestically as contracts expire, fold or projects in train come online is a better way of ensuring domestic gas supply can meet demand than opening new fields.

Figure 1 Australia’s gas flow 2019-2020²²



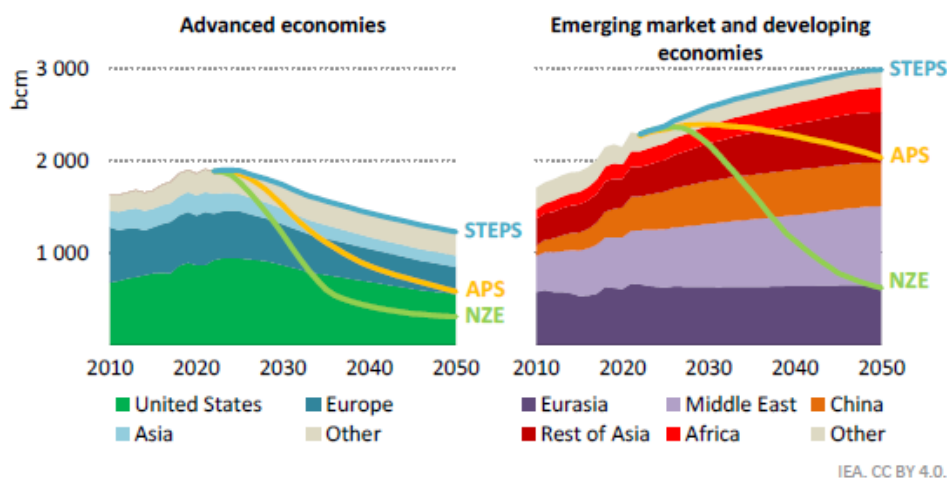
²¹ /https://energyconsumersaustralia.com.au/wp-content/uploads/230109_Report_Risks-to-gas-consumers-of-declining-gas-demand_final.pdf

²² <https://www.ga.gov.au/digital-publication/aecr2022/gas>

Australia should help trade partners decarbonize not rely on polluting gas

The paper expresses concern about the impact on trade partners of reducing gas supply.

Because of the need to decarbonize and changes in technology our trading partners will have plans in place to reduce their reliance on gas. The IEAs 2023 World Energy Outlook report shows that under several emissions scenarios' gas use will decline significantly amongst Australia's trading partners (see figure 2).²³ Recent research by IEEFA indicates a down-turn is already happening amongst some trade partners with demand in South Asia for gas decreasing by 16% in 2022.²⁴



Natural gas demand declines in advanced economies in each scenario; in emerging market and developing economies the difference between scenario outcomes is larger

Further, the IEA's World Economic Outlook 2023 is predicting an LNG supply glut by around 2025. This would make projects under construction and any new projects non-viable.²⁵

Australia should be looking at ways to help its trading partners decarbonize, to meet theirs and the global goal of limiting global warming. This can be done through financing, knowledge, skills and technology sharing.

Stranded assets will cost consumers and the economy

With prediction of LNG supply gluts, Australia faces costs relating to stranded assets of existing and under-construction gas infrastructure, let alone investing in new gas infrastructure.

²³ IEA. [World Energy Outlook 2023](#). October 2023. Page 137

²⁴ IEEFA. [Global LNG Outlook 2023-27](#). February 2023. Page 4.

²⁵ IEA. [World Energy Outlook 2023](#). October 2023.

In 2021, the AER said it was not in consumers' interests to allow further growth in gas networks, because of the risk to stranded assets, which would push up prices for consumers and industry.²⁶

A report by Global Energy Monitor reported that expansion of gas pipelines under the Morrison Governments 2021 plans for a 'gas led recovery' would result in stranded assets of US\$18.6 billion.²⁷

Households are already shifting away from gas, increasing costs for those who don't have choice

The twin desires to contribute to reducing emissions and to save money are driving people to use less gas and eventually leave the gas network. This will be problematic for those left on the gas network who will face progressively higher costs and risk gas supply being withdrawn.

Not everyone has choice: regulation and targeted support is necessary

There are approximately 5 million existing homes with gas connections and gas appliances. The current new building standards require homes to be built at 7 energy efficiency star rating but does not ban gas appliances. New homes being built by developers are often built with gas connections and gas appliances.

While some people will be able to electrify at their own expense more easily, others face barriers and don't have the 'choice' to shift away from gas, including public and private renters, people on low incomes, and apartment dwellers.

The imperative to decarbonize and lack of viable gas substitute requires Australia to phase out gas and gas appliances. This should not be a choice but a requirement, supported by regulation and targeted support for people facing barriers .

Regulation

The ACT Government has banned new gas connections for homes and small businesses which will come into effect from November 2023.

The Victorian Government is implementing a gas substitution roadmap, and recently announced that starting January 1, 2024, there will be a phase out of new

²⁶ <https://www.aer.gov.au/system/files/AER%20Information%20Paper%20-%20Regulating%20gas%20pipelines%20under%20uncertainty%20-%2015%20November%202021.pdf>

²⁷ <https://climatenewsaustralia.com/australias-natural-gas-investments-risk-billions-in-stranded-assets-ext-visuals/>

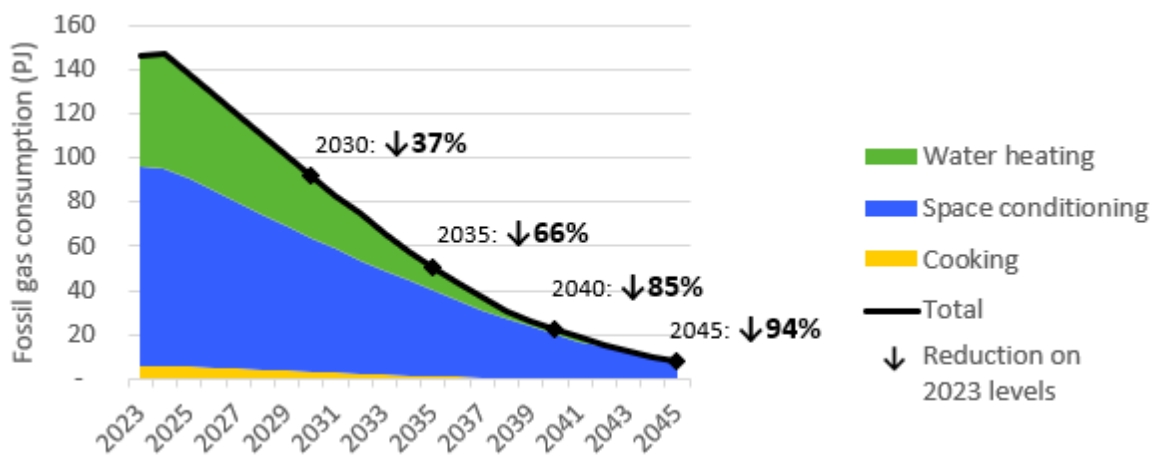
gas connections for new dwellings, apartment buildings, and residential subdivisions requiring planning permits.²⁸

Other states should follow the ACT and Victoria’s lead.

Ten councils across NSW have or are in the process of effectively stopping gas in new homes either through requiring new residential developments to include all electric appliances or prohibiting the installation of gas appliances.²⁹

However further regulation will be needed to support electrification in existing homes.

Recent analysis by IEEFA found that ending the sale of gas appliances as early as 2025, requiring people to purchase electric alternatives to replace their hot water, cooking and space heating appliances, would reduce gas demand by 94% by 2045.³⁰



Further, minimum standards in rental properties should be implemented requiring electrification (along with efficiency and where viable solar) by a specified date (we would suggest not later than 2035), which would reduce gas demand sooner. Changes to tax law to require replacement appliances in rental properties to be electric and efficient should also be implemented.

Incentives and support

In addition to regulation, incentives and targeted supports will be needed to electrify social housing, First Nations controlled housing, and low-income owner-occupier housing.

²⁸ <https://www.planning.vic.gov.au/guides-and-resources/strategies-and-initiatives/victorias-gas-substitution-roadmap#:~:text=buildings%20by%202025,-Phasing%20out%20new%20residential%20gas%20connections,Provisions%20and%20all%20planning%20schemes>

²⁹ <https://350.org.au/electrify-your-council-council-tracker/>

³⁰ IEEFA. [Managing the transition to all-electric homes](#). 2 November 2023.

Recommendations

Recommendation 1: Add the following italicised text to the Future Gas Strategies key objectives:

- support decarbonisation of the Australian economy *in line with limiting warming to 1.5 degrees C.*
- *ensure decarbonisation is fair, equitable and inclusive.*
- *reduce health impacts of gas and climate change.*

Recommendation 2: Put in place a strategy, with timelines, to phase out gas and support electrification.

Recommendation 3: The Federal government should work with state and territory jurisdictions to end gas connections to new builds.

Recommendation 4: Investigate a phase out of the sale of gas appliances. Complementary measures will be needed to support people on low incomes to electrify, see recommendation 7 for examples.

Recommendation 5: Eliminate inefficient appliances sold in Australia by tightening requirements and expanding eligible appliances via the Greenhouse and Energy Minimum Standards (GEMS).

Recommendation 6: Remove high costs and disincentives to disconnect from gas networks.

Recommendation 7: Put in place targeted policies to help people on low-incomes and renters electrify (in addition to energy efficiency improvements and access to solar), including:

- Federal Government support for **new** social housing development to meet at least 7.5 plus star rating, with all properties electric and renewable-powered, including through providing access to additional funding if needed.
- Mandating minimum energy efficiency performance standards for rental properties, as part of broader standards for what constitutes healthy and habitable rental housing, with the aim to improve efficiency, electrify and install solar. The minimum energy efficiency performance standards are aligned with the [Community Sector Blueprint](#) for energy efficiency rental standards.³¹
- Amend the property repairs, maintenance and capital expenditure tax rebate to require appliance replacement with energy efficient, electric appliances.
- To support minimum energy performance rental standards, provide financial support to landlords either through Environmental Upgrade Financing via

³¹ <https://www.healthyhomes.org.au/news/community-sector-blueprint>

local councils (which provides long-term finance that stays with the property and is recovered through council rates) or provide access to no-interest loans and potential subsidies. A cap on rent rises above CPI, should be implemented if subsidies are provided.

- Implement a 7-year program to provide financial support to low-income owner occupiers to retrofit their homes (efficiency, electrification and solar) either through Environmental Upgrade Financing via local councils (which provides long-term finance that stays with the property and is recovered through council rates) plus subsidies or by providing access to no-interest loans and subsidies along the lines (with modifications) of the ACT [Sustainable Household Scheme](#).
- Implement a 7-year program to fund retrofits (efficiency, electrification and solar) for social housing (public and community housing) and First Nations Controlled housing before 2030 (Prioritising First Nations housing). Governments need to budget for upgrades or replacement of stock (where it's not cost effective to upgrade) through additional funding to ensure there is not a reduction in present or future stock.

Recommendation 8: Work with jurisdictional governments to investigate whether reform of relevant strata laws and/or new governance options is required to improve energy efficiency and performance in existing apartments. This may include, for example, limiting or prohibiting the ability of strata schemes to prevent or restrict upgrades or retrofits in individual strata lots that may be required to meet new mandated energy efficiency standards

Recommendation 9: Culturally and linguistically appropriate education campaign on the benefits of electrification and the renewable transition.

Recommendation 10: Partner with building industry peak bodies, unions and trades associations to educate retailers, tradespeople and installers about great all-electric alternatives to gas appliances. There is an opportunity to train workers in the building and servicing of all-electric homes so tradespeople and installers know about all-electric alternatives. This could be facilitated through the New Energy Apprenticeships Initiative, as well as being directed by peak bodies, unions and trade associations. In particular, courses should be provided by education providers to upskill workers on how to shift away from gas and micro-credentials offered through the National Skills Agreement.

Recommendation 11: Commonwealth, state and territory governments require that the Integrated System Plan gives greater weighting to electrification, energy efficiency and demand management opportunities in future plans. This activity could be supported by resourcing the development of an annual Energy Performance Statement of Opportunities.

Recommendation 12: Ban new gas production or expansion of gas production.

Recommendation 13: Establish a domestic gas reserve to guarantee domestic supply, emulating the successful domestic gas reserve in Western Australia. This is a better way of ensuring domestic gas supply can meet demand than opening new fields.

Recommendation 14: Implement a 10% royalty on offshore gas production. The recent reforms to the Petroleum Resource Rent Tax will only raise an additional \$2.4 billion over four years and have been criticized by former ACCC chair Rod Sims as not going far enough.³² Also applying a 10% royalty on offshore gas production to mirror royalties applying to onshore gas production would ensure tax is paid upfront and not subject to loopholes and manipulation. Gas companies are making eye-watering profits off public resources while people on the lowest incomes are struggling to afford their energy bills and going into energy debt. Funds can support electrification for low-income households.

Recommendation 15: Model the co-benefits, including economic, health, household savings, job creation of accelerating residential energy efficiency and electrification.

Recommendation 16: Model the economic and consumer costs of keeping gas in the system to 2050 versus accelerating investment in demand reduction, energy efficiency and electrification.

Acknowledgements

This submission was prepared in consultation with the ACOSS Climate and Energy Policy Network.

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³² <https://www.theguardian.com/commentisfree/2023/may/09/labor-could-and-should-have-gone-stronger-on-the-petroleum-resource-rent-tax>