

20 NOVEMBER 2023

Submission to Future Gas Strategy

We can't gaslight ourselves to net zero!

Recommendations:

- Recommendation 1:** Add an explicit objective to the strategy to rapidly phase out gas, starting with a ban on new gas project extensions and approvals.
- Recommendation 2:** Add an explicit decarbonisation objective to maintain alignment with a 1.5 degree warming in line with the updated National Energy Objectives and our responsibilities and goals under the Paris Agreement.
- Recommendation 3:** The department updates its assumptions and bases the Future Gas Strategy on the updated 2023 NZE 2050 1.5 aligned scenario modelling.
- Recommendation 4:** Commission modelling to qualify and quantify the energy performance opportunity to reduce gas demand, including through demand response.
- Recommendation 5:** Remove “ensuring we remain a reliable and trusted supplier of **Liquefied Natural Gas (LNG)** to our region” as an explicit objective of the strategy, instead including “support the decarbonisation of the region by building our reputation as a reliable and trusted supplier of **renewable energy, manufactured products and value-added critical minerals** to our region”.
- Recommendation 6:** The Australian government negotiates with major LNG importing nations to rapidly phase out the LNG seaborne trade with Australia and provide trading partners with a clear timeline for Australia rapidly phasing out gas.
- Recommendation 7:** Include actions in the strategy to prioritise electrification, particularly in buildings, over green hydrogen.
- Recommendation 8:** The Federal Government exclude Carbon Capture and Storage from the Future Gas Strategy.
- Recommendation 9:** Consider the broader employment opportunities, including in regional Australia, of energy performance, renewable industry and manufacturing and electrification when compared to fossil gas, taking the Jobs and Skills Australia report on Workforce needs for a net zero economy as the starting point.
- Recommendation 10:** The Federal Government include a significant demand reduction program before investing in new supply as part of the Future Gas Strategy to improve energy security.
- Recommendation 11:** The Federal Government implement a domestic gas reserve for eastern gas markets.



- Recommendation 12:** The Federal Government work with states and local governments to develop a program and timeline to rapidly transition away from gas, including announcements in the May 2024 budget as part of the A\$10 billion a year Australian Renewable Industry Package.
- Recommendation 13:** The Federal Government prioritise a reduction in gas production for export, instead prioritising products made from renewable energy and processed critical minerals for export.
- Recommendation 14:** Exclude hydrogen of all types from the reticulated gas supply for residential and commercial customers, reserving green hydrogen for hard to abate sectors.
- Recommendation 15:** The Federal Government task the Climate Change Authority with developing a Methane Action Plan to implement the Global Methane Pledge to reduce methane by 30% by 2030, with immediate priority on the energy sector, and update progress through the annual Climate Change Statement.
- Recommendation 16:** Undertake a second phase of community consultation after the publication of the six draft Sector Decarbonisation Plans.
- Recommendation 17:** Publish a consultation report, responding to positions and recommendations of all stakeholders.
- Recommendation 18:** Ensure Free, Prior and Informed Consent by embedding a process for industry best practice engagement of First Nations in the Future Gas Strategy for the development of all fossil gas extraction and generation projects.
- Recommendation 19:** Align the Future Gas Strategy with existing Federal Government strategies to link climate action and improve energy affordability through renewable energy and improved energy performance, and prioritise this before increasing fossil gas supply.
- Recommendation 20:** In consulting on the Future Gas Strategy, include a process to inform the strategy through the development of the Sector Decarbonisation Plans (SDPs), and ensure both the FGS and SDPs aim to keep warming below 1.5 degrees in alignment with the Paris Agreement and the science of climate change.
- Recommendation 21:** The Federal Government work with states and territories to harmonise industry support for electrification and decarbonisation, including prioritising industry transition away from gas through the Net Zero Economy Taskforce, the National Energy Performance Strategy, the Safeguard Mechanism, the National Reconstruction Fund, the Sectoral Plans, and the Australian Renewable Industry Package.
- Recommendation 22:** Inform and integrate the Future Gas Strategy with the National Energy Performance Strategy, National Construction Code, and Trajectory for Low Energy Buildings.
- Recommendation 23:** The Federal Government should establish a dedicated Energy Performance Agency, including a plan for all households to rapidly transition away from gas, and a strategy to support renters and rental providers to electrify (including minimum standards for energy efficiency and improved tenure security).
- Recommendation 24:** Work with states fast-track an effective nationally consistent framework for energy efficiency minimum standards (National Framework for Minimum Energy Efficiency Requirements for Rental Properties (the National Framework), and mandatory disclosure for rental properties, using features- or performance-based standards, facilitating assessor training, and developing a standardised certification website. The framework should be based on the Community Sector Blueprint on the National Framework for Mandatory Minimum Energy Efficiency Rental Standards, including following best practice, and adhering to the principles of the Blueprint in federally owned public housing.



Recommendation 25: *The Federal Government work with states and territories to co-fund electrification and appliance upgrades, including grants for extremely low-income households, and no- and low-interest loans for low- and medium-income households.*

Recommendation 26: *The federal and state governments should investigate options to replicate the Victorian Gas Substitution Roadmap nationally.*

Recommendation 27: *Integrate an education component into electrification policy, ensuring service providers, tradespeople and households understand the full benefits and opportunities for electrification, and the problems of using gas.*

Recommendation 28: *Integrate energy literacy programs with other assistance measures, such as rebates, finance and upgrade and auditing programs, and ensure energy advice and support programs are maintained at the decadal scale.*

Recommendation 29: *Establish a nation-wide professional development campaign to support electricians and plumbers to upgrade their skills and understanding of opportunities to provide accurate information and continue supporting households as trusted advisers.*

Introduction

The Australian Conservation Foundation (ACF) welcomes the opportunity to comment on the Future Gas Strategy (FGS). Over 5 million households are connected to gas¹, mostly for heating and cooking, as well as commercial and industrial customers. If Australia is to get to net zero, we need to rapidly transition away from fossil fuels completely.

ACF is Australia's national environment organisation. We are over 500,000 people who speak out for the air we breathe, the water we drink, and the places and wildlife we love. We are proudly independent, non-partisan and funded by donations from our community. ACF understands Australia and the world face an unprecedented climate and mass extinction crisis caused first and foremost by digging up and burning fossil fuels like coal, oil, and gas. We also note that poor development practice means unnecessary damage to nature, and the loss of trust with landholders and communities. While we need a significant build of new clean and renewable energy, and the transmission to allow it, this can and should be done without damaging natural areas. We do, however, acknowledge that this also a race against time to ensure we have security of supply in place well ahead of the announced closure dates for significant coal-fired assets.

Methane has no role in Australia's future energy system. Australia needs to rapidly transition away from gas! There are 149 countries around the world that have committed to reach net zero, including Australia. This accounts for around 90% of global emissions, and represents 92% of global GDP and 89 %

¹ <https://www.energynetworks.com.au/resources/fact-sheets/reliable-and-clean-gas-for-australian-homes-2/>



of the global population (Net Zero Tracker 2023). Gas and other fossil fuels have no role in our net zero future. In the 18 months since Labor took office, the Federal Government has been working hard to introduce decarbonisation and renewable energy targets, as well as renewable energy policies. Unfortunately at the same time the government has been approving fossil fuel projects, spending billions of taxpayers' dollars on fossil fuel subsidies, and failing the Australian public and future generations, not to mention the rights of nature.

A first observation in reading the consultation paper is that there are several unrealistic assumptions, allowing poor policy development to occur from there. The consultation questions take the current snapshot of gas's role in the Australian economy as a reference point, yet this is a poor indicator of its future role. The paper ignores that fossil gas is not needed for transition or peak demand. Energy performance, including electrification, along with appropriate tariffs and policies to access technologies to enable demand response and flexibility, will reduce demand including peak demand. Those same technologies will allow Australian consumers to be resilient to price spikes caused by fossil gas and international markets. The Future Gas Strategy needs to be more tightly informed by other processes and agencies, such as the National Energy Performance Strategy, Sector Decarbonisation Plans, and the National Energy Transformation Partnership for example.

Developing the Strategy that Australia Needs

The Federal Government has a real opportunity to develop a future gas strategy that Australia, our region and the world need to combat climate change and support the Australian economy to decarbonise and maintain our economic position. Focusing on increasing gas supply before decreasing demand is putting the cart before the horse. Looking at this through the lens of transition and transformation of the energy system and economy, however, will allow the government to evolve a strategy to plan Australia's rapid exit from gas.

The current direction of the FGS as laid out in the consultation paper does not align with Australia's emission reduction targets, our responsibilities under the Paris Agreement, the science of climate change, or the International Energy Agency (IEA) and the Intergovernmental Panel on Climate Change (IPCC) calls to rapidly phase out fossil fuels. In addition, the Australian government's current approach to gas (and other fossil fuels), is a barrier to Australia's 82% renewable energy target.

Demand reduction is a component of the consultation paper, but is not clear if it is a key objective, nor how the strategy helps Australia transition and future proof a clean economy. What is clear is that the strategy as mooted in the consultation paper will increase fossil gas demand, not rapidly transition away from gas.



Strategy Objectives

Rapid exit from gas

Recommendation 1: *Add an explicit objective to the strategy to rapidly phase out gas, starting with a ban on new gas project extensions and approvals.*

This strategy should be about getting to where we need to be (net zero by 2035), not about reflecting current practice and trends. As noted throughout our submission, Australia's starting point needs to be how to we rapidly phase out gas. Changing the name and intent of the strategy will also send a strong message to investors and trading partners.

We note that replacing fossil fuels with low-emissions electricity is one of the most important drivers of emissions reductions in the IEA's NZE scenario (see following discussion). To be serious about its climate targets, the Australian government needs to completely remove fossil fuels from both the domestic and export economies.

This will not happen if the government does not develop key plans to rapidly phase out gas across the economy, including for efficient electrification run on renewables for improved energy performance. (see sections on Efficient Electrification and Sector Decarbonisation Plans).

New fossil fuel developments are incompatible with a safe climate.

Recommendation 2: *Add an explicit decarbonisation objective to maintain alignment with a 1.5 degree warming in line with the updated National Energy Objectives and our responsibilities and goals under the Paris Agreement.*

Despite its name, natural gas is a fossil fuel, that when burnt, releases greenhouse gases. A safe climate means maintaining warming below 1.5 degrees. Climate impacts from the burning of fossil fuels like fossil gas are causing the social, environmental, and economic impacts that governments need to address through all of their plans, policies and strategies. The costs of inaction also need to be factored in, with disasters being estimated to have led to global economic losses of A\$272 billion in 2020, according to Munich Re research, with one estimate putting global economic losses of failing to act at A\$24.1 trillion per year by 2100, or A\$129 billion per year for Australia (Climate Council 2021).

This means all of Australia's energy planning needs to be predicated on 1.5 degree aligned emission pathways. Both the IEA's NZE by 2050 roadmap (IEA 2021), and latest Intergovernmental Panel on Climate Change Report (Sixth Assessment Report 2023) state there can be no new fossil fuel development and exploration if we are to remain within 1.5C above pre-industrial levels. The science is very clear on this, there is no role for new gas in Australia's energy future. None! The strategy needs to



aggressively phase out fossil gas. Future gas supply should only be short term to satisfy the planned and phased reduction of fossil gas demand.

We note the consultation paper indicates that the FGS is based on the IEAs 2050 Scenarios. It is unclear from the discussion paper which scenario (stated policies (STEPS), stated policies (APS) or Net Zero Emissions by 2050 (NZE2050)), but ACF notes that only the NZE2050 is 1.5 degree aligned and will allow Australia to reach its Paris agreement commitments, and recommends that DISER base the strategy on that scenario.

The National Gas Objective

The National Gas Objective has recently been updated to require regulators to consider greenhouse gas emissions. All existing and proposed energy regulations or energy rules will need to satisfy this requirement, as stated in the National Gas Law (NGL):

“to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to:

- a) price, quality, safety, reliability and security of supply of natural gas; and
- b) the achievement of targets set by a participating jurisdiction —
 - for reducing Australia's greenhouse gas emissions; or
 - that are likely to contribute to reducing Australia's greenhouse gas emissions.”

It is likely that there will be rule change proposals to increase electrification. This would further put future gas supplies at risk if decarbonisation and affordability, and a realistic appraisal of energy security, are not prioritised in the evolution of the Future Gas Strategy.

Recommendation 3: *The department updates its assumptions and bases the Future Gas Strategy on the updated 2023 NZE 2050 1.5 aligned scenario modelling.*

We also note that the IEA has updated its NZE by 2050 1.5 aligned scenario model (IEA 2023) since DISER published the consultation paper. The 2023 model update includes deploying a wide portfolio of clean energy technologies, without offsets from land-use measures, and rapid deployment of clean energy technologies and energy efficiency is at the core of this transition. As such, ACF recommends the department, if not already, updates its assumptions to reflect the updated model.

Recommendation 4: *Commission modelling to qualify and quantify the energy performance opportunity to reduce gas demand, including through demand response.*

Further, new scenarios recently modelled by ClimateWorks and the CSIRO (ClimateWorks 2023) demonstrate the opportunity of alternatives to fossil gas, including efficient electrification run on



renewable energy. The modelling does not however include increased load shifting and demand flexibility through electrification, which would make use of daytime solar, further reduce emissions, and is cheaper, while further negating the need for fossil gas in the transition. Further opportunities for this would be identified through an Energy Performance Statement of Opportunities for integration into the Integrated System Plan (ISP).

Supporting Neighbours and Trading Partners

Recommendation 5: Remove “ensuring we remain a reliable and trusted supplier of **Liquefied Natural Gas (LNG)** to our region” as an explicit objective of the strategy, instead including “support the decarbonisation of the region by building our reputation as a reliable and trusted supplier of **renewable energy, manufactured products and value-added critical minerals** to our region”.

If Australia was to produce a Future Gas Strategy with the current objectives and using the current assumptions and actions, we will be undermining the regions’ ability to get to net zero. In particular, it undermines the demands of the Pacific as per the Port Vila Call² (a fossil free Pacific / Fossil Fuel Non-Proliferation Treaty).³ ACF recently joined other representatives of the Australian climate movement to request the Australian Governments full and unequivocal support for the Port Vila Call to Action for a Just Transition to a Fossil Fuel Free Pacific at the upcoming Pacific Islands Forum leaders meeting.⁴ Furthermore, Australia cannot expect our neighbours and trading partners to listen to us if we are not being genuine regarding the decarbonisation of our own economy, nor exporting climate emissions through our Scope 3 exports.

In its most recent World Energy Outlook, the IEA points out it expects there to be a glut of from the mid-2020s under NZE scenario, with natural gas demand peaking in all WEO scenarios by 2030, and that there is little headroom remaining for either pipeline or LNG trade to grow beyond then (IEA 2023b). Even under STEPS, LNG markets look amply supplied until at least 2040. Even under-construction projects may not be needed under APS and NZE scenarios. The IEA says this includes existing projects yet to recover their investment capital. Closer to home and using similar scenarios, the Investor Group on Climate Change (IGCC 2023) found that Australia’s net export of LNG declines slightly to 2030, then

² <https://fossilfueltreaty.org/fossil-free-pacific>

³ <https://fossilfueltreaty.org/>

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<https://acfonline.sharepoint.com/sites/climateandenergy/Shared%20Documents/Forms/AllItems.aspx?id=%2Fsites%2Fclimateandenergy%2FShared%20Documents%2FCampaign%20areas%2FInternational%2FPacific%20Island%20Nations%2F20231102%20Port%20Vila%20Call%20Sign%20on%20Letter%2Epdf&parent=%2Fsites%2Fclimateandenergy%2FShared%20Documents%2FCampaign%20areas%2FInternational%2FPacific%20Island%20Nations&p=true&ga=1>



decreases sharply to less than 20% of current levels by 2050, as the cost of backfill projects makes Australian LNG uneconomical. Even a report by the CSIRO commissioned by woodside found that increasing Australian gas supply could prolong coal, displace renewables and increase emissions in Asia without a global carbon price.⁵

Not only does this contradict the assumptions of the consultation paper, but it also clearly means we cannot rely on a future LNG export industry as trading partners decarbonise, and it puts Australian taxpayers at risk of stranded assets. The world has already moved on and renewable energy, processed critical minerals, green metals and manufacturing are now our strong advantage.

ACF is disappointed to see “maintain Australia’s trade relationships, ensuring we remain a reliable and trusted supplier of *Liquefied Natural Gas (LNG)* to our region” as a key objective of the FGS. As an explicit objective for the whole strategy, this should be reframed as building our reputation as a *reliable and trusted supplier of renewable energy and critical minerals* to our region, as discussed on page 16 of the consultation paper, which states “Australia aims to maintain our position and reputation as a reliable energy supplier and grow our clean energy exports to meet our obligations under the Paris Agreement. We want to take advantage of our world class renewable resources to become a renewable energy superpower”.

Recommendation 6: *The Australian government negotiates with major LNG importing nations to rapidly phase out the LNG seaborne trade with Australia and provide trading partners with a clear timeline for Australia rapidly phasing out gas.*

Australia needs to provide timeframes to major trading partners to collectively plan the switch to renewable alternatives. We need to demonstrate transformational pathways and enable our trading partners through renewable energy and critical minerals. This timeline should include sectoral targets based on the Sector Decarbonisation Plans. The Australian government should build the trading relationship needed to trade our renewable energy and critical minerals through bi-lateral negotiations with major LNG importing nations to rapidly phase out the LNG seaborne trade with Australia. This would allow Australian industries to plan their own exit, as well as provide a signal to our trading partners.

⁵ <https://www.smh.com.au/business/banking-and-finance/woodside-contradicts-csiro-report-debunking-key-climate-claims-20220307-p5a2d5.html>



Underlying assumptions

For the development of an effective strategy, and one that is fit for purpose for action on climate change, maintaining energy security, and supporting Australia's economic health, the underlying assumptions for the strategy need to be objective, evidence based and sincere. While gas has been an essential energy source for many households and businesses, the world has changed, as have community and business expectations and needs. Gas is declining as a share of Australian power generation (Grattan Institute 2020).

Current and projected gas demand based on current trends should not be taken on face value to inform planning and decision making. Australia's starting point needs to be how to rapidly phase out fossil gas – that is, reduce demand to maintain energy security, rather than *“to ensure sufficient - but not excess - supply of gas to meet demand at all stages of the energy transition”*.

The consultation paper also assumes that “supply disruptions and high prices are among the consequences of reducing supply faster than demand”. This is only the case due to bad planning and slow action on climate change, including increased renewable energy and improved energy performance. We need to prioritise supply of and demand for renewables, green hydrogen and demand management to reduce the need for gas.

Recommendation 7: *Include actions in the strategy to prioritise electrification, particularly in buildings, over green hydrogen.*

In the case of hydrogen, the paper notes that the current gas transmission infrastructure is not suitable for gas needs in the future, such as the existing gas transmission network needing to be converted to transport pure hydrogen, while in distribution networks, hydrogen can be supplied when blended with natural gas at low levels of up to 10% by volume. This can be higher in transmission networks, but it significantly increases leakage and reduces its emissions advantage.⁶ There are several options not yet realised or actively planned for that would support reducing gas demand while maintaining energy security, such as large scale batteries and demand response and flexibility.

The paper also states that manufacturing gas demand is expected to remain steady until 2028. ACF questions this assumption given the energy transition is technology-driven, policy-driven and disruptive in nature. With the greater emphasis of the private sector towards decarbonisation, and increased

⁶ <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/natural-gas/102723-hydrogen-blending-in-gas-pipelines-faces-limits-due-to-leakage-us-doe-lab>



funding and other supports available for technology start-ups, manufacturers are likely to be finding cheaper and more efficient and resilient systems and technologies.

Carbon Capture and Storage

Recommendation 8: *The Federal Government exclude Carbon Capture and Storage from the Future Gas Strategy.*

The consultation paper assumes producers and consumers will reduce, capture or offset emissions to meet our national climate targets. We need actual reductions, and not rely on offsets or carbon capture and storage (CCS), which is an expensive failure and delays the vital transition to a renewable powered Australia. The strategy assumes that CCS is mature and proven and that we're moving towards large-scale commercial CCS operations in Australia when the evidence is stacked against this. Industry, Australia and national governments throughout the world have failed to demonstrate these technologies work at scale. There is no justification for governments to spend public money on the fossil fuel industry's carbon capture and storage pipedream. ACF acknowledges there could be a limited role for CCS in hard to abate industry through capturing process emissions from cement, iron and steel production as part of a plan to reach net zero emissions. ACF's position will be reviewed if proven and safe CCS and CCU technology advances.

ACF has a long-held position that CCS does not genuinely reduce emissions, should not be considered a climate solution for the fossil fuel industry, is mostly used to extend fossil fuel extraction (and not capture carbon),⁷ and has no role in the Australian energy system. CCS is unproven, in terms of both permanence and percentage of CO₂ capture, and is unnecessary with a range of existing decarbonisation technologies. The majority of industry's emissions can be reduced through other means such as renewable energy, electrification, energy efficiency, the application of 'circular economy' principles (reducing waste and the emissions in production and consumption of products) and 100% renewable hydrogen.

Carbon Capture and Storage is a false solution to climate change, and remains unproven at scale. According to the Global CCS Institute, there were 30 CCS projects in operation internationally last year, with a combined maximum capacity of 42m tonnes of CO₂ a year.⁸ This only represents around 0.1% of global emissions. It said 11 more were under construction. Allowing CCS to extend the longevity of the gas industry would have perverse economic, environmental and social impacts.

⁷ <https://ieefa.org/articles/if-chevron-exxon-and-shell-cant-get-gorgons-carbon-capture-and-storage-work-who-can>

⁸ <https://www.theguardian.com/australia-news/2023/jun/30/australian-sea-dumping-law-changes-condemned-amid-warnings-of-gas-industry-expansion>



The abject failure of Chevron's Gorgon project is one example, which has been plagued by serious delays, cost overruns and failures - but most notably has seriously underperformed against the agreed commitment to re-inject 80 per cent of Gorgon's CO₂ deeply and permanently underground. It has been reported that almost 15 million tonnes of CO₂ arrived on Barrow Island, and only 30 percent of it was injected underground, falling far short of Chevron's 5-year requirement, and resulting in a serious increase in its anticipated emissions.⁹ In the six years since export of LNG commenced from the Gorgon Project, 20.4 million tonnes of CO₂ has been extracted but only 6.5 million tonnes has been stored under the island.¹⁰

Employment

Recommendation 9: Consider the broader employment opportunities, including in regional Australia, energy performance, renewable industry and manufacturing and electrification when compared to fossil gas, taking the Jobs and Skills Australia report on Workforce needs for a net zero economy as the starting point.

The strategy suggests that fossil gas is a "major" source of economic industry with 20,900 direct employees. The fossil gas sector, however, is one of the least labour-intensive sectors in Australia, while the Energy Efficiency Council refers to energy efficiency as the "Jobs Machine" (EEC 2020). Beyond Zero Emissions put potential jobs at 50,000 in the hunter valley alone as part of their National Retrofit Program (BZE 2020), almost doubling the current 58,000 energy efficiency jobs in Australia (ACF 2020). The Energy Efficiency Council puts it at 120,000 job years (i.e. 120,000 full-time jobs for one year if all those upgrades are completed within 12-months, 12,000 jobs a year for 10 years, or 24,000 jobs a year for five years). Energy efficiency minimum standards and mandatory disclosure in particular offer employment opportunities. None of these numbers include employment in broader electrification, such as demand response and behaviour change.

Jobs and Skills Australia recently completed a review of the workforce needs for Australia's transition to a clean energy economy, giving recommendations of the workforce planning, policy development and program design needed to build a strong and vibrant clean energy sector.¹¹ They note the following contributions to employment:

- clean energy supply workforce (clean energy generation, transmission and distribution) – 0.4%
- clean energy demand (energy usage and energy performance) – 8%
- transitioning sectors (coal, oil and gas) – 1.1%

⁹ <https://www.boilingcold.com.au/times-up-on-gorgons-five-years-of-carbon-storage-failure/>

¹⁰ <https://theconversation.com/australia-has-introduced-a-new-bill-that-will-allow-us-to-ship-carbon-emissions-overseas-heres-why-thats-not-a-great-idea-208456>

¹¹ <https://www.jobsandskills.gov.au/publications/the-clean-energy-generation>



- emissions intensive sectors (metals, cement and chemicals manufacturing) – 4%

Noting that we are transitioning away from fossil fuels, the real employment opportunities are in the growth sectors of clean energy supply and demand. This is especially important noting that employment in the fossil gas industry is in competition with the industries we need to grow and plan for.

Gas Demand

Recommendation 10: *The Federal Government include a significant demand reduction program before investing in new supply as part of the Future Gas Strategy to improve energy security.*

The FGS undermines the region's (South-east Asia) ability to credibly hit net zero. As the biggest demand is from fossil gas industry itself – only through reducing fossil gas for exports would Australia demonstrate genuine leadership through actual reduction in Australia and overseas. Combining this with the export of value-added critical minerals and products made using renewable energy including replacing traditionally high carbon embodied goods such as aluminium and steel with green aluminium and green steel, are the only ways to assist trading partners to decarbonise, which is an explicit objective of the FGS, and we cannot expect trade partners to raise their own ambition when Australia's is not genuine.

At the consultation webinar, it was acknowledged that fossil gas supply is decreasing faster than demand – at home and abroad. The paper acknowledges that reducing domestic fossil gas demand faster than supply will meet the strategy's first and second objectives, but warns supply disruptions and high prices are among the consequences of reducing supply faster than demand. This is only a result of a poorly planned transition. A key mitigation policy is efficient electrification powered by renewable energy, including optimising demand response, reducing the need for gas peakers. This could be achieved through establishing an Energy Performance Statement of Opportunities to inform the Integrated Systems Plan, with an intention to phase out fossil gas.

Recommendation 11: *The Federal government implement a domestic gas reserve for eastern gas markets.*

The consultation paper also suggests (page 16) that the fossil gas market is increasingly globalised, noting the growth of LNG trade and a shift towards spot pricing in many markets has created greater interconnectivity between fossil gas markets. As seen following Russia's illegal invasion of Ukraine, demand or supply shocks in one region have global implications for gas and electricity prices. Linking domestic fossil gas to international markets is a matter of Australian government policy, which directly leads to exacerbating the consumer cost impacts of price spikes, such as due to Russia's invasion of the Ukraine. A key mitigation would be a domestic gas reserve for domestic gas.



Recommendation 12: *The Federal Government work with states and local governments to develop a program and timeline to rapidly transition away from gas, including announcements in the May 2024 budget as part of the A\$10 billion a year Australian Renewable Industry Package.*

A key stated objective for the FGS should be to reduce fossil gas demand. That is, all jurisdictions should signal a reduction, rather than simply being responsive. The Federal Government needs to work with all jurisdictions to develop programs and support to rapidly transition away from gas and electrify homes, businesses and industry. Victoria and the ACT are already doing this.

A response to the US Inflation Reduction Act is needed. It is also known that while Australia burns, our governments hand over \$11.1 billion in subsidies to coal and gas companies annually.¹² Our public money is funding the companies most responsible for climate damage and their plans for massive gas expansions – that will literally throw fuel on the fire. These subsidies should instead go to a clean energy future, and not funding climate destroying industries, especially if we're spending that money anyway. ACF has joined the call of several other organisation for the Federal Government to establish the A\$10 billion a year Australian Renewable Industries Package,¹³ which is less than what we subsidise fossil fuels.

Biggest domestic demand is from gas industry itself – in production for exports

Recommendation 13: *The Federal Government prioritise a reduction in gas production for export, instead prioritising products made from renewable energy and processed critical minerals for export.*

Households are only responsible for about 3% of fossil gas used in Australia, with the biggest demand coming from the fossil gas industry itself to produce fossil gas for export, for an industry that doesn't pay much tax, sends profits offshore, provides minimal employment and causes climate change (The Australia Institute 2023). The biggest demand reduction win is ironically banning new fossil gas itself.

There is an urgent need to reduce fossil gas production for exports to demonstrate real leadership, real reduction in Australia and overseas. Australia needs to prioritise products made from renewable energy and processed/value-added critical minerals for export, which will also both onshore profits from these industries and ensure Australian generators and consumers aren't competing with international markets.

¹² <https://australiainstitute.org.au/wp-content/uploads/2023/05/P1378-Fossil-fuel-subsidies-2023-Web.pdf>

¹³ <https://www.acf.org.au/100bn-renewables-industry-package>



Gas Supply

Constraints in the fossil gas market are assumed in the consultation paper to be driven by supply shortfall. The supply shortfall, however, is driven by over-contracting to export markets, which can be resolved by a domestic gas reservation and more electrification. In reality, there is no shortfall in supply, it is just mis-directed.

Gas will not be needed for households and commercial customers, and only some industrial processes that are hard to decarbonise. Predicating fossil gas supply on an artificially inflated demand flies in face of the need for efficient electrification.

ACF only sees the limited need for hydrogen (and this must be green hydrogen). There is no future need for hydrogen for households or commercial customers, with limited use for hard to abate industries.

Hydrogen

Recommendation 14: *Exclude hydrogen of all types from the reticulated gas supply for residential and commercial customers, reserving green hydrogen for hard to abate sectors.*

ACF does not support the extensive use of hydrogen in the residential sector. Electrification and rapidly getting off gas altogether for residential, small business and commercial sectors, along with energy efficiency is a more viable option, leaving hydrogen for harder to decarbonise sectors. In addition, electric motors and appliances are more efficient than gas, further reducing energy intensity.

As noted in the consultation paper, hydrogen cannot be transported long distances due to losses when blended, limiting to the emission reduction potential of blended hydrogen. In terms of affordability, transitioning current infrastructure for green hydrogen passes these costs to consumers, as does upgrading appliances capable of utilising hydrogen. This of course reduces the impact of the counter narrative that up-front costs of electric appliances are more expensive (than fossil gas). Australian homes and businesses are nonetheless upgrading to electrify, as electric appliances are cheaper to run and produce less emissions than gas appliances over their lifetime.

It is highly improbable that hydrogen will replace gas in households considering the cost of the fuel itself, the cost of the infrastructure to transport it and the doubling up of service charges for households. Regarding probable futures, household hydrogen for cooking or heating is not one of them. In relying on hydrogen and biomethane, the cost of gas network, plant and other machinery upgrades is likely to be extremely expensive. Such a development path would also disadvantage renters and low-income households who lack agency to make their own choices as landlords have no market or other incentives to upgrade, leaving tenants to rely on more expensive and polluting fossil gas.



Global Methane Pledge

Recommendation 15: *The Federal Government task the Climate Change Authority with developing a Methane Action Plan to implement the Global Methane Pledge to reduce methane by 30% by 2030, with immediate priority on the energy sector, and update progress through the annual Climate Change Statement.*

Australia is a signatory of the Global Methane Pledge¹⁴ that aims to reduce methane by 30% by 2030, yet the consultation paper fails to mention this. The pledge is an aspirational commitment, but the Australian government can demonstrate its own commitment though updating progress via the annual Climate Change Statement.¹⁵

Many countries already have national plans to reduce emissions completed or in development, but Australia is not yet one of them. We need the Australian government to task the Climate Change Authority with developing a Methane Action Plan so that we have a clear and measurable roadmap to reduce our methane emissions, while also improving the transparency and accuracy of Australia's methane reporting. This plan needs to mandate global best practice so big methane emitters can be held to account, including reporting on actual on-site, independently verified measurements so we really know exactly how much is being released into the atmosphere. Of particular concern is the amount of unreported fossil gas leakage recently uncovered by ACF's investigations team.¹⁶

The plan should include recommendations for methane targets and actions across sectors, in keeping with a 1.5C global climate goal. For the energy sector, it should consider and recommend actions to deliver a 75% cut in methane by 2030 in line with the IEA and IPCC's stated net zero pathways.

The Methane Action Plan should also include:

- Actions to deploy mitigation technology across the energy sector, and high emissions facilities.
- Actions to address abandoned methane emissions, and ensure proper mine rehabilitation.
- Australian Government leadership in ensuring national, state and territory coordination, policy alignment and investment to address methane.
- Measures to ensure the economic, climate, and health impacts of methane emissions are fairly apportioned.

¹⁴ <https://minister.dcceew.gov.au/bowen/media-releases/australia-joins-global-methane-pledge>

¹⁵ <https://www.dcceew.gov.au/climate-change/strategies/annual-climate-change-statement>

¹⁶ <https://www.acf.org.au/methane-camera-reveals-widespread-potent-gas-leaks>



Engagement

On first reading, the consultation paper clearly leans into maintaining or increasing fossil gas at the exact time we need to be reducing our emissions. It is ACF's position that this consultation paper needs rethinking in terms of both its objectives and underlying assumptions.

Recommendation 16: Undertake a second phase of community consultation after the publication of the six draft Sector Decarbonisation Plans.

Recommendation 17: Publish a consultation report, responding to positions and recommendations of all stakeholders.

Once drafted, there needs to be future consultation on the strategy, including ENGO's and community sector organisations and academics. It is clear from the consultation so far, that many organisations working directly with businesses and households feel the stated objectives of this strategy are misaligned with community expectations. Further, as noted, this strategy needs to be informed by the six Sector Decarbonisation Plans. As the timing of the two processes do not match, it is recommended a second phase is completed.

DISER should also publish a consultation report, as the Australian Energy Market Operator (AEMO) does following their consultations, reporting on how submissions were included, and giving evidence-based reasons for rejecting positions and recommendations.

First Nations

Recommendation 18: Ensure Free, Prior and Informed Consent by embedding a process for industry best practice engagement of First Nations in the Future Gas Strategy for the development of all fossil gas extraction and generation projects.

ACF supports free, prior and informed consent of Traditional Custodians, which should always be attained, and First Nations Peoples should benefit from developments on their Country. ACF supports the principles outlined in the Best Practice Principles for Clean Energy Projects¹⁷ by the First Nations

¹⁷

https://www.firstnationscleanenergy.org.au/network_guides#:~:text=The%2010%20principles%2C%20designed%20for.and%20free%2C%20prior%20and%20informed



Clean Energy Network (which can equally be applied to gas projects) as well as the rights to Free, Prior and Informed consent as outlined in the UN declaration on the Rights of Indigenous Peoples.¹⁸

Many Traditional Owners, however, have repeatedly opposed development on their Country and their wishes need to be respected (such as the Burrup Peninsula, Beetaloo Basin and Middle-Arm, all of which have received strong pushback by TOs) resulting from real risks to water, country, culture, sacred sites and songlines.

Equity and Affordability

Recommendation 19: *Align the Future Gas Strategy with existing Federal Government strategies to link climate action and improve energy affordability through renewable energy and improved energy performance, and prioritise this before increasing fossil gas supply.*

The consultation paper notes that supply disruptions impact those who can least afford them the most, worsening poverty and inequality. It is often from the gas industry itself, or coal fired generators, that lead to supply disruptions and price volatility, especially those that caused significant cost impacts such as following the Russian invasion of the Ukraine. Renewables, improved energy performance and efficiency are the cheapest and lowest carbon and cost options to address this. More importantly, well planned energy performance, especially demand response and flexibility, adds resilience to price shocks and supply disruptions. ACF notes that several analyses demonstrate that efficient electrification is by far the more affordable option than fossil or green hydrogen for households and businesses (IEEFA 2023).

Climate impacts from the burning of fossil fuels like gas are a significant cause of inequity and affordability, impacts, disaster and food prices, a burden disproportionately borne by at-risk populations. It is these at-risk populations who in poor quality homes, survive on low-incomes, have poor access to public transport and social networks who suffer the most. Climate costs will outweigh any energy reduction costs – and hit low-income at-risk communities the most. In addition, gas is unhealthy for homes. A child living with gas cooking in the home has a comparable risk of asthma to a child living with household cigarette smoke.

¹⁸ <https://en.unesco.org/indigenous-peoples/undrip>



Furthermore, we have seen many Australian jurisdictions exclude gas appliances from their energy efficiency programs, including the Federal Government in its Home Energy Upgrades Fund (HEUF), and the Queensland government in its' efficient appliances' rebates program. ACF supports this. It does however mean that households relying on gas will be worse off and paying more.

Questions 39 and 40 in the consultation document on domestic gas security and affordability of gas are the wrong questions. The question should be around affordability and sustainability for consumers. Emission reduction, energy security and affordability are all best served through renewable energy and planning for a transformation. This means we should be planning for rapid efficient electrification powered by renewable energies. While the up-front costs of electric appliances are currently higher, the operational costs over the lifetime of appliances are cheaper for electric compared to gas appliances, as they are by their nature much more efficient.

Furthermore, many businesses reliant on gas as an input or energy source have reported significant business risk or going bust because of gas prices. In addition to being the more expensive fuel, gas is also often the price setter for retail electricity, especially during peak times. It is precisely at these times that improved energy performance, especially demand response will provide access to cheaper energy.

From the equity point of view, consumers in many areas of Queensland can only access gas bottles. They therefore do not have a gas account and cannot get gas related concessions. If they were electrified consumers could access electricity concessions. Affordability would be further improved if jurisdictions introduced percentage based concessions.

Sector Decarbonisation Plans

Recommendation 20: *In consulting on the Future Gas Strategy, include a process to inform the strategy through the development of the Sector Decarbonisation Plans (SDPs), and ensure both the FGS and SDPs aim to keep warming below 1.5 degrees in alignment with the Paris Agreement and the science of climate change.*

The Australian Government is developing a Net Zero 2050 plan, with the first step being to develop Sector Decarbonisation Plans (SDPs). These SDPs need to be aligned with keeping warming below 1.5oC. In addition, energy security and affordability are best served through planning for the transformation of the energy system. The development of Sector Decarbonisation Plans should be used to inform the Future Gas Strategy, not the other way around.

Efficient Electrification of Everything

Recommendation 21: *The Federal Government work with states and territories to harmonise industry support for electrification and decarbonisation, including prioritising industry transition away from gas through the*



Net Zero Economy Taskforce, the National Energy Performance Strategy, the Safeguard Mechanism, the National Reconstruction Fund, the Sectoral Plans, and the Australian Renewable Industry Package.

Recommendation 22: *Inform and integrate the Future Gas Strategy with the National Energy Performance Strategy, National Construction Code, and Trajectory for Low Energy Buildings.*

Recommendation 23: *The Federal Government should establish a dedicated Energy Performance Agency, including a plan for all households to rapidly transition away from gas, and a strategy to support renters and rental providers to electrify (including minimum standards for energy efficiency and improved tenure security).*

Australia needs to focus on reducing demand, not financing \$billions for supply on assumed demand that will only leave Australians paying for stranded assets. Efficient electrification powered by renewable energy offers the greatest opportunity to reduce emissions, gas demand, gas peaking, affordability, consumer choice and to improve grid resilience. Efficient electrification provides much more choice and is anti-inflationary.

According to Energy Consumers Australia (ECA), around 22% of consumers were planning to decarbonise and make their homes all-electric, up from 16% in 2021.¹⁹ ECA and the CSIRO (ECA 2023) found that households swapping to electric appliances and vehicles could reduce their annual energy bills by \$2,250 by 2030, while solar panels and a battery increased the projected saving to \$3,500. Furthermore, we have seen many Australian jurisdictions, exclude gas appliances from their energy efficiency programs.

There are however currently many barriers to making the switch, particularly for low-income households, renters and residents of multi-unit dwellings. Business and residential consumers need to be encouraged to disconnect, not be discouraged through exorbitant and inconsistent disconnections fees, including for meter removal.

Industry

State and Federal Governments need to harmonise their support for business and households. State governments are offering differing levels of support, with some states offering no support. The best way would be to enable, standardise and co-fund opportunities for efficient electrification for industry and

¹⁹ <https://www.theguardian.com/environment/2023/oct/04/energy-consumer-lobby-calls-for-australia-wide-ban-on-gas-connections-in-new-homes>



manufacturers. While fossil gas is currently a direct input to many industrial processes, there are commercial products available or in development.

Residential

Around 5 million households are connected to gas and these households need to rapidly transition away from gas if we are to decarbonise. The residential sector should be the first to rapidly transition away from fossil gas. It has the lowest demand, yet hits above its weight during early evening peak, leading to fossil gas being the price setter at higher prices. This presents a great opportunity for electrification and demand response and flexibility.

Question 10 of the consultation paper asks if home or small business gas appliances (stove, heating, or hot water system) stop working, would consumers prefer to keep using gas or switch to an electric appliance. The government should be asking consumers what would encourage them to rapidly transition away from gas and electrify, and should aim to understand what barriers consumers are facing. This question also assumes full understanding, which may require significant energy literacy. Consideration should be made for grants, no- and low-interest loans, or financing the difference between gas and electric appliances. There is also a key role for large scale batteries and demand response.

The biggest barriers to household electrification are upfront capital and tenure type. Renters, and private renters in particular, have minimal agency to electrify their homes due to current tenancy laws, there being no market or other incentives for landlords, tax barriers preventing installation as landlords are unable to claim a tax deduction or depreciation for energy efficiency upgrades on their rental properties. These barriers are unlikely to change without updating state-based residential tenancies legislation, significant supportive policy, changes to tax law, or mandatory energy efficiency standards that include electrification outcomes. This cohort represents over a third of Australian households. They are likely to miss out on the more impactful opportunities for electrification, emission reduction and improved affordability and health, including upgrades to the built fabric, and distributed energy resources such as solar, batteries and heat pumps.

ACF recommends a dedicated national Energy Performance Agency. There is a large amount of information available for homeowners and renters, but it can feel overwhelming, there are issues of what is trusted advice, or homeowners and renters may have other priorities. Information on government websites is not enough to get the uptake we need. Furthermore, regulatory and energy agencies do not take advantage of the full opportunities that energy efficiency and demand management offer the market, households, and businesses, including market failures, such as there being no incentives for property managers and owners, and co-benefits such as emission reductions, health, and affordability.



A national energy performance agency would enable industry and business, which will in turn enable residential electrification which relies on the goods and services from those industries and businesses. Without targeting our largest, most energy intensive and climate polluting businesses, as well as supporting small business and households, Australia will continue missing significant opportunities for cost reduction, health benefits and climate resilience, as well as achieving emission reduction, renewable energy, net zero and energy efficiency targets. A national energy performance agency will also assist businesses lower their energy bills and build their capability to become more internationally competitive. Such an agency can work with sector based peak bodies to streamline energy performance across the economy, rather than responsibility for energy performance being spread over a number of government agencies and other stakeholders.

Recommendation 24: *Work with states fast-track an effective nationally consistent framework for energy efficiency minimum standards (National Framework for Minimum Energy Efficiency Requirements for Rental Properties (the National Framework), and mandatory disclosure for rental properties, using features- or performance-based standards, facilitating assessor training, and developing a standardised certification website. The framework should be based on the Community Sector Blueprint on the National Framework for Mandatory Minimum Energy Efficiency Rental Standards, including following best practice, and adhering to the principles of the Blueprint in federally owned public housing.*

A key enabler to help rental households reduce fossil gas use and ensure healthier and more affordable homes is to introduce energy efficiency standards and access to technologies across all jurisdictions. This needs to be both the carrot and stick. That is, to ensure compliance, there is a need to develop regulations and business models to incentivise landlords and property managers, as well improve rental rights, such as removing no cause evictions and setting rent caps increases to CPI to ensure compliance. New Zealand for example, has introduced regulations where Landlords can be fined \$4000+ and the money goes towards tenants if the landlords fail to implement energy efficiency minimum standards.

All Australian governments have committed to implementing a national plan that aims to achieve zero energy and carbon-ready residential buildings, including existing buildings. Through the Trajectory for Low Energy Buildings (DCCEEW 2019), federal, state, and territorial governments have agreed to establish a *National Framework for Minimum Energy Efficiency Requirements for Rental Properties* (the National Framework). It is intended that this framework builds on existing jurisdictional work and outlines the settings for minimum rental standard schemes that can be adopted and implemented by jurisdictions. While all jurisdictions are participating, many have no framework, while those that do are limited in scope and/or ambition. Civil Society members involved in the process feel the current proposed framework does not go far enough, and it is being delayed. The Federal Government can assist in developing a nationally consistent approach, as well as facilitating assessor training and a certification website. It is particularly important to ensure ongoing training during the implementation stage to embed the reliability of the scheme and build public confidence.



To guide its implementation, several community sector organisations developed a blueprint to provide an outline of key characteristics that should be present in the forthcoming National Framework. The Community Sector Blueprint (Healthy Homes for Renters 2022), which ACF has supported and signed,²⁰ takes a principles-based approach to key elements that should be in the government framework and offers suggestions to meet these principles. In some cases, the blueprint endorses specific approaches. The blueprint covers private, public and community housing in the national framework, and assists jurisdictions to meet their net-zero emissions targets, as well as lower energy bills and improve the health and wellbeing of renters.

The compliance framework must include mandatory disclosure based on a third-party assessment of the energy efficiency rating of the home. Homeowners should be given a reasonable amount of time to comply with the new home energy rating scheme, providing the right balance between compliance costs on owners, so that the industry can respond to the demand for energy efficiency improvements, while ensuring the benefits to tenants.

Recommendation 25: *The Federal Government work with states and territories to co-fund electrification and appliance upgrades, including grants for extremely low-income households, and no- and low-interest loans for low- and medium-income households.*

Recommendation 26: *The federal and state governments should investigate options to replicate the Victorian Gas Substitution Roadmap nationally.*

Maintaining gas and keeping gas supply and appliances, however, limits consumer choice. Household on gas have limited options for demand response and flexible load, while landlords for example will continue to supply gas appliances where tenants have no choice or agency. The notion that reducing gas supply too quickly affects vulnerable households is only through poor planning and policy, such as there being minimal energy performance and electrification policies in place.

The Federal Government's own Household Energy Upgrades Fund²¹ will go some way to address this, but the continuing availability of cheaper gas appliances (in terms of upfront costs only) is what puts households at risk. This is happening in some jurisdictions, such as the Victorian Gas Substitution Roadmap,²² which is helping Victorians navigate the path to net zero emissions while providing greater choice and cutting energy bills. It is not, however, acknowledged in the consultation paper as an alternative to increasing gas supply. In addition, the Victorian Essential Services Commission for

²⁰ <https://www.healthyhomes.org.au/gallery>

²¹ <https://www.cefc.com.au/where-we-invest/special-investment-programs/household-energy-upgrades-fund/>

²² <https://www.energy.vic.gov.au/renewable-energy/victorias-gas-substitution-roadmap>



example, as part of Victoria's energy transition to net zero emissions and to support customers during the transition from fossil gas to electricity, proposes to charge households up front for new gas connections, a clear challenge to affordability of gas, and brings the fossil gas industry in line with electricity and water.²³ The federal and state governments should investigate options to replicate the Victorian Gas Substitution Roadmap nationally.

As a subset of residential buildings, people who rent and low-income households are significantly disadvantaged when it comes to energy efficiency. Many renters and low-income households live in the poorest quality homes of just 1- to 2-star. Raising a 2-star home to 3-star has a greater impact than raising a 7-star to an 8-star home. ACF acknowledges the Federal Government is developing its \$1.3B Household Energy Upgrades Fund, but the recent *Household Energy Upgrades Fund Finance Consultation Pre-reading pack*,²⁴ however, suggests the financial options on the table may not support many households in need. This includes renters, as they have minimal agency to install electric heat pumps (for space heating and cooling or water heating), solar or batteries. Furthermore, the lowest income households are unlikely to access no- and low-interest loans on offer, as No Interest Loans (NILs) providers are unlikely to put those households at risk of not being able to afford other essentials like food, medication, and utilities). These more vulnerable households are likely to need grants to participate in affordable electrification upgrades.

Recommendation 27: *Integrate an education component into electrification policy, ensuring service providers, tradespeople and households understand the full benefits and opportunities for electrification, and the problems of using gas.*

Recommendation 28: *Integrate energy literacy programs with other assistance measures, such as rebates, finance and upgrade and auditing programs, and ensure energy advice and support programs are maintained at the decadal scale.*

There are several opportunities being discussed through other government programs and consultations that, if done well, will greatly reduce the demand for gas, including at peak times. A key point is agency – it is one thing to reach out to household decision makers, but there are no market or other incentives for landlords to upgrade properties they own. People may be decision makers, but there may be other

²³ <https://reneweconomy.com.au/new-blow-to-fossil-gas-as-regulator-shifts-death-spiral-risk-to-new-connections/amp/>

²⁴

<https://static1.squarespace.com/static/6182172c8c1fdb1d7425fd0d/t/64f7fc2f09b3ff1bdeb795d7/1693973553210/Household+Energy+Upgrades+Fund++Finance+consultation+pre-reading+pack.pdf>



competing priorities/issues around affordability and life influences, culture, and difficulties around making decisions when it comes to finding information and trusting advisers.

We have seen disinformation from the gas industry, leading to misinformation from installers, plumbers, electricians and homeowners. Households and businesses may ask for gas, not knowing the advantages of electric appliances, including health, affordability (electric appliances are cheaper over their lifetime), and advances in induction stoves.

Another issue is the stop-start nature of programs. Funding and support programs need to be secure and ongoing to be effective. The Queensland government has recently announced an energy efficiency rebate. The rebate allows households to get the rebate after buying efficient goods (including secondhand goods providing they fit the efficiency criteria). This is good in that it reduces waste, and potentially allows households to access cheaper goods. The fund is, however, limited and will expire when funds are exhausted. The Queensland government has also announced an energy literacy program for low-income and vulnerable households, due to be run in 2024 and 2025, but the rebate funds are likely to be spent. Households that miss out on the rebate may be provided with the literacy needed without access to the upgrades. Running the literacy program over just two years, during a critical time for affordability, equity and climate action, is inadequate. The grant guideline does include outcomes evaluation criteria around the extent to which the benefits of the project are likely to continue, but these will be limited without ongoing support. The UK has had several iterations of home energy advice and support, such as The Carbon Trust,²⁵ the Energy Saving Trust,²⁶ the Community Action for Energy (CAFÉ) program, Community Energy England,²⁷ Community Energy Scotland,²⁸ and localised support such as Plymouth Energy²⁹. That is, there has been some form of significant home energy advice throughout the UK for decades.

Workforce

Recommendation 29: *Establish a nation-wide professional development campaign to support electricians and plumbers to upgrade their skills and understanding of opportunities to provide accurate information and continue supporting households as trusted advisers.*

²⁵ <https://www.carbontrust.com/>

²⁶ <https://energysavingtrust.org.uk/>

²⁷ <https://communityenergyengland.org/>

²⁸ <https://communityenergyscotland.org.uk/>

²⁹ <https://plymouthenergycommunity.com/>



Many tradespeople are not currently qualified to do both electrical and plumbing work, and many are not fully aware of the opportunity that electrification presents to their industry. They are also often seen as the most trusted advisers for businesses and households when investigating their options for appliance upgrades. They do however sometimes give bad advice against heat pumps and controllable devices. The gas industry and some building peak bodies actively campaign against electrification and energy efficiency (disinformation), and the tradespeople on the ground are not necessarily providing accurate information (misinformation).

Workforce development needs to include retraining and expanding both employee and household, business, and industry experience (to improve social license). As we electrify, industries may be competing for a skilled workforce. Planning should be directed at the workforce we need, such as critical minerals, renewable energy and energy performance. The gas industry is also known to poach jobs from other sectors, especially during initial phases.

According to the EEC and Energy Efficiency Opportunities (EEO) program reviews, companies also often lack the skills and internal capability needed to develop the business case for energy upgrades, engage suitably qualified consultants and consider proposals put to them by consultants. Broader support for commercial and industrial energy performance training will send a strong signal that the Federal Government is serious in its commitment to a fast and fair transition. Training and employment could be channeled through the *Powering the Regions Fund*, but further funds would need to be sourced elsewhere for urban opportunities, so training and employment could be managed through the National Energy Transformation Partnership (NETP) (Australian Government 2022). Energy efficiency and demand response for example fall under the “Understand Demand Evolution”, a key priority of the NETP. ACF encourages the Federal Government to prioritise energy efficiency and demand management training and employment in the NETP, supporting its vision for Australia’s energy sector transformation to net zero.

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