



**BRIEFING PAPER:**  
**FROM FOSSIL FOOLS TO  
CLEAN ENERGY CHAMPIONS:  
CHARTING A WAY OUT OF  
AUSTRALIA'S ENERGY CRISIS**



# SUMMARY

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As complex as it seems, Australia's energy crisis is, at its most fundamental level, a failure to move more swiftly beyond fossil fuels, and in particular, it is a result of clinging to the false promise of gas.

The solution is two-fold: Australia must accelerate the transition to a modern energy system powered by renewables and storage. And we have to prioritise investment in energy efficiency. This includes supporting lower-income households with cost of living pressures.

This briefing paper outlines the key factors behind recent energy price rises and how State and Federal Governments should respond.



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## RECOMMENDATIONS FOR GOVERNMENTS

1. Prioritise policies and investments that upgrade the energy efficiency and electrification of social, low-income and rental housing to protect residents from power price spikes.

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2. Future-proof new homes by increasing minimum standards, starting with the move from 6 to 7 Stars for new homes in the National Construction Code. This update should be implemented urgently by states and territories by the end of 2022.

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4. Phase out gas in new homes and buildings and offer incentives to replace gas appliances in existing homes and buildings.

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5. Increase incentives and community education on energy efficiency to increase uptake of retrofits that reduce energy demand overall.

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6. Urgently promote private investment in renewables, storage and the grid - at utility, community and household scale - including direct support to lower socioeconomic and public housing to ensure those that cannot invest are not left behind in the transition.

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7. Identify and remove regulatory barriers to faster renewable energy uptake.

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8. Promote investment in renewables and storage with a focus on consultation and positive outcomes for the communities impacted by major infrastructure development.

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9. Fund training programs for the major increase in skilled workers needed to rapidly expand renewable energy and storage developments.

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10. Revisit transport priorities to reduce reliance on petrol-guzzling cars and allow people to get around more easily using public transport, walking, cycling and electric vehicles.



# 1 WHY ARE ENERGY PRICES SET TO RISE?

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Wholesale power and gas prices have been surging for the past two weeks in the eastern states due to:

- › a series of outages at coal-fired power stations forcing gas-fired electricity to fill the gap
- › spiking commodity prices, in particular coal and gas, because of the war in Ukraine
- › the previous federal government's failure to transition Australia more quickly to a modern, affordable energy system powered by renewables.

The situation has been a long time coming thanks to poor decisions made in the past like reducing the Renewable Energy Target and exposing local consumers to international gas prices with 80% of gas produced in Australia exported.

Gas is a polluting fossil fuel and is the most expensive form of energy generation in Australia. It is often the 'price setter' in the National Electricity Market. This increases wholesale prices because all other forms of generation are paid the same amount as the highest bidder. Gas provides a mere 8% of electricity generation on average but is having an oversized impact on wholesale prices.

Overall, a decade of inadequate climate and energy policies has created uncertainty and a lack of investment in new sources of renewable generation, an overreliance on fossil fuels, and exposure to export prices of gas. The result of these failures has been a [doubling in the wholesale electricity price](#). Failure to prioritise energy efficiency has exacerbated these challenges. Most recently, the unconscionable withholding of capacity by coal and gas generators led the Australian Energy Market Operator to suspend the National Electricity Market for the first time since its inception because it could no longer be operated under the National Electricity Rules.

Gas provides only 8% of electricity generation in Australia, but has an oversized impact on driving up energy prices.



## 2 WHAT'S THE ROLE OF RENEWABLES?

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Renewable energy backed by storage, is the cheapest form of generation available in Australia (CSIRO GenCost 2020-21). Last year, renewables provided more than a quarter of the power in Australia's largest grid, five times more power than gas.

In fact, the ACT, which gets 100% of its power from renewable sources, is enjoying a reduction in their power prices. It is the only jurisdiction in Australia to have announced a reduction in their Default Market Offer<sup>1</sup> amidst increases of up to 18% in other states. States and territories like the ACT, South Australia and Tasmania, that have already achieved a high percentage of energy generation from renewables have been better insulated from the price increases than those more reliant on coal and gas. However, even in those more protected jurisdictions, gas prices have begun to erode the gains that higher percentages of renewable generation deliver.

In the ACT, which gets 100% of its power from renewable sources, households and businesses are seeing power prices go down.

Figure 1: Wind farm in Lake George, NSW.



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<sup>1</sup> The Default Market Offer is a maximum price that retailers can charge electricity customers on default contracts known as standing offer contracts.



## 3 WHAT WILL RISING PRICES MEAN FOR AUSSIES?

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Rising energy prices have the potential to increase home gas and electricity bills, and push up the cost of living across the board as retailers pass on increased costs to their customers.

Australian homes are poorly built and perform to a low standard of energy efficiency, meaning that they require more energy to stay at a comfortable temperature and keep appliances running. They have been referred to as “glorified tents”. Poor energy efficiency means expensive bills, but with prices soaring, keeping our homes comfortable may soon be simply unaffordable. Already before this crisis, as many as 85% of Australians experienced “bill shock” in 2020 (Duffy 2021). This is particularly salient for people on low incomes, renters and social housing tenants who are more likely to live in poor quality housing and rely on inefficient appliances that require more energy to run.

Not only do higher energy prices inflict pain on our household budgets, but it also has flow-on effects on the economy more broadly. Vegetable farmers, for example, who were impacted by the recent east coast floods, are at the whim of the same price hikes. We have seen the reality of this in recent steep [increases in the cost of groceries](#). This is due to a range of factors, including related to this crisis such as costs increasing for farmers to heat greenhouses, run machinery and transport crops. We can expect fresh produce prices to continue being affected by this crisis.

On the global stage, Australia ranks very low for energy efficiency building standards. Of the world’s 25 top energy consumers, Australia is at number 18 for worst efficiency, behind Spain, France, the UK, Germany, China, Poland and Mexico. A Tasmanian home built today will use double the energy of a home built in Ireland.

# 4 HOW DO WE PROTECT THE COMMUNITY FROM ENERGY PRICE RISES?

The energy crisis requires action from governments to ease pressure on vulnerable households and better prepare Australia for future shocks. There are things that can help, including:

- › Improve the energy efficiency of our buildings
  - We can fix our buildings so they require less energy to keep us safe and comfortable. This is possible: a 7 star home (on the national energy efficiency rating system) requires one-third of the energy of a 1.5 star home.
  - There is an opportunity, as the [NSW Government has recently announced](#), to enact policies that protect households that will be the worst affected. Offering free or rebated improvements such as rooftop solar, insulation and more-efficient electric appliances improves the safety and affordability of our homes. It is essential that people who live in social housing and rental properties are not left behind.
  - Electricity prices fluctuate, but the range of benefits from improving energy efficiency remain fixed. This includes: better health, smaller bills and less strain on the grid.
  - Governments can kickstart this work by investing in upgrades to social and low income housing where residents are most vulnerable. This can be used as a training opportunity to upskill industry ready for higher demand for household energy efficiency upgrades, solar PV and batteries across the private market.
- › Reduce bills through electrification
  - Gas will always be expensive and cost more than electricity. By removing gas appliances, households can get rid of connection fees and protect themselves from future price shocks and the volatile nature of this fossil fuel.
  - There are electric, efficient alternatives to all domestic gas appliances used for heating, hot water and cooking. We should ensure new homes are built all-electric, and put a plan in place to phase out gas from existing homes.



Figure 2: Upgrading homes to be more efficient reduces bills for residents and protects from future energy price shocks.



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- › Secure strong supply through investment in renewables and storage
    - Renewables are the cheapest form of energy generation in Australia. Our country has the highest solar radiation per square metre of any continent and consequently [some of the best solar energy resources in the world](#). We also have [some of the best wind resources in the world](#). Australia has a natural advantage for generating cheap solar and wind energy to power households, businesses and industries.
    - [Clean energy exports could be worth \\$333 billion each year](#) – almost triple the value of our existing fossil fuel exports.
    - Investing in renewables, storage, and electric vehicles will increase our self-sufficiency, create new industries, and protect us from international shocks - like we're seeing with gas now - and reduce our reliance on foreign oil.
  - › Enable all Australians to share in the benefits of the transition to renewables
    - Australian households, communities and businesses deserve to enjoy the benefits of renewables and to be protected from future price shocks driven by fossil fuels.
    - Programs that promote household or community scale renewable energy and storage should be prioritised, particularly for low income and public housing.
    - Communities like Yackandandah in Victoria have decided to go 100% renewable and others should be supported to do the same because it can improve reliability of supply in rural and remote areas. This was recognised by a recent National Electricity Rule change, which will allow distribution companies to provide off grid arrangements where it is economically beneficial to do so.

Clean energy exports could be worth \$333 billion each year – almost triple the value of our existing fossil fuel exports.



## 5 WHAT'S THE REST OF THE WORLD DOING?

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The European Union responded to the war in Ukraine with plans to [accelerate a shift to renewables, and to reduce its overall reliance on fossil fuels](#). Specifically, the EU will end the use of Russian gas well before 2030 and at the same time it also announced it will use less gas overall by 2030, and ramp up its investment in renewables. Germany plans to get 100% of its electricity from renewable sources by 2035.

The US - Australia's key security ally - in February 2022 released a new Indo-Pacific Strategy that makes climate action a priority and highlights that the US wants Australia to set a much stronger 2030 target and help put pressure on China (the world's biggest emitter) to do more to cut its emissions. The US Government also [recently declared](#) solar panels and highly efficient electric heat pumps as alternatives to gas, as essential to national security and for promoting local manufacturing.

It is clear that much of the world is responding to the current crisis by focusing on renewables and emissions reduction - Australia needs to do the same.

The rest of the world is seeing this moment as a reason to stop relying on gas - Australia should too.



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## IMAGE CREDITS

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