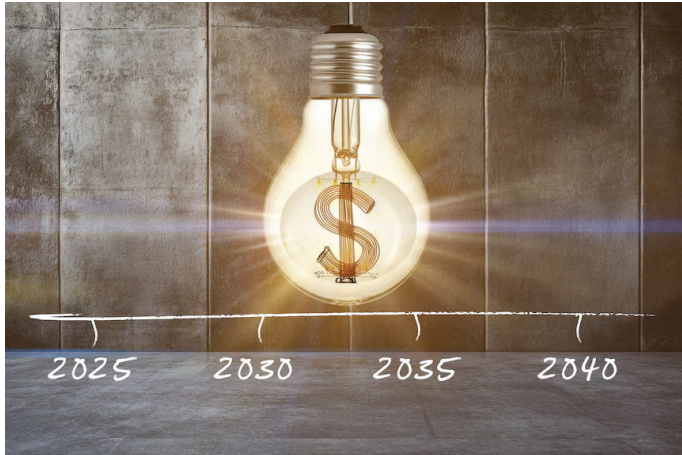


Are there quick wins for power prices? We asked some energy experts

By climate reporter Jo Lauder

Energy Policy

April 9, 2025



Power bills and how to reduce them have become a central topic in this election campaign. (ABC News: Lindsay Dunbar)

Power prices and conversations around energy policy have become a focus in the early stages of the election campaign.

Labor has promised up to 1 million household batteries for solar-loving Australians and more rebates on power bills; the Coalition has focused on saving more Australian gas for the local market.

But the electricity market is extremely complicated, with many levers to potentially pull and lots of suggestions for solutions that don't always pan out.

So we've asked some energy experts what they think are some of the solutions to help households now, and what are the long-term fixes Australia should focus on.

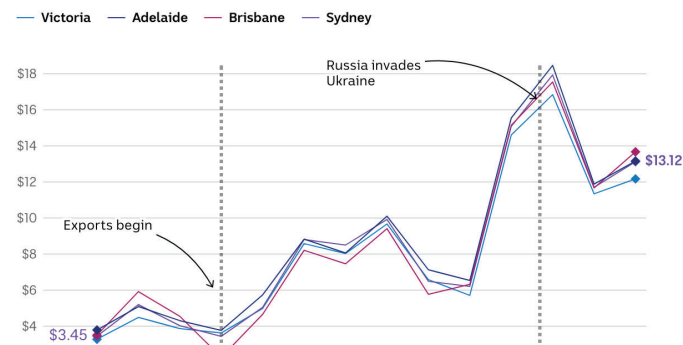
How we got here

Power prices have gone up significantly over the past few years, in a large part due to the war in Ukraine, kicking off a massive spike in the price of fossil fuels that drove coal and gas prices up around the globe, and at home.

While gas only plays a small part in Australia's total power generation, it's used at times when there's lots of demand and is responsible for spikes in the wholesale electricity price.

Global demand has pushed up prices

Gas prices (\$/gigajoules) skyrocketed at the beginning of 2022 and have only eased slightly since then.

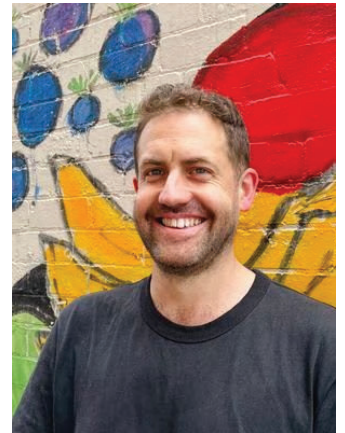


More recently, Australia's unreliable coal-fired power stations and a lack of transmission lines have also driven up prices.

Australia's coal-fired power stations are reaching the end of their life cycle, so renewable energy is increasingly powering our grid, according to Dylan McConnell, an energy expert at the University of New South Wales.

"One thing people don't understand is actually how much renewable energy we already have. We're just over just on 40 per cent renewable energy in the national electricity market," he said.

While renewable energy itself hasn't driven up prices, Dylan McConnell says it's important to understand that a lot of the cost of a power bill is in running and maintaining the grid, and getting it ready for the next century is a big and expensive task.



Dr Dylan McConnell is a renewable energy and energy systems researcher at UNSW Sydney. (Supplied: Dylan McConnell)

"We just don't really talk about the networks that much, even though they are a significant driver of costs and people's bills," he said.

So that's how we got here, but can we do anything in the short term?

Bringing in batteries

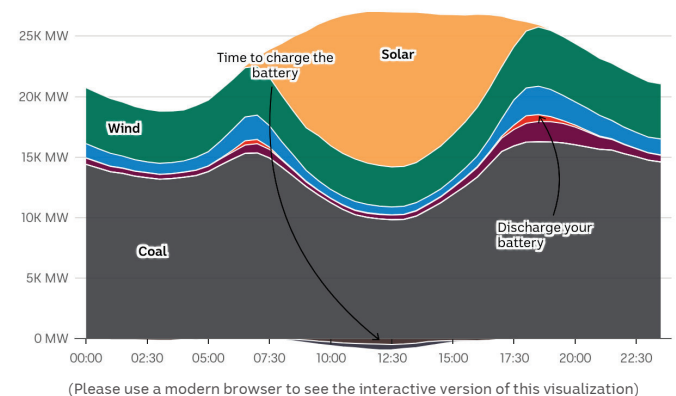
The big news this week came from Labor, which released a policy to subsidise the cost of batteries for homes and businesses, which it says could save homes up to \$2,300 a year if you're able to install one.

Batteries work by letting homes store their solar energy during the day and use it in the evenings, instead of drawing power from the grid when prices are highest.

Batteries can shift excess solar to the evening peak

Batteries can help ease the peak demand in the grid as a flexible power source when the sun goes down.

An area chart showing the daily fuel mix of coal, wind, solar and gas in the National Electricity Market.



Alison Reeve is the deputy program director of Energy and Climate Change at the Grattan Institute.

She said while battery owners will benefit the most, they also play a part in reducing demand in the evening, which is key to bringing down power prices.

"One of the things that storage allows you to do is to mop up all of that free energy in the middle of the day and then use it again at the evening peak," Grattan's Alison Reeve said.

"The more that we can lop off the top of the peak, so move loads from the evening in particular to the middle of the day, the more that pushes prices down for everybody, not just for the households who do it."



Alison Reeve is the Deputy Program Director at the Energy and Climate Program at the Grattan Institute. (Supplied: Alison Reeve)

"We have to build a system that's capable of meeting the peak and if we're building a system that is meeting a very high peak, but that's only for a couple of hours a day, that's actually quite an expensive system," she said.

The Smart Energy Council modelled what would happen to peak power prices if there were 1 million batteries installed in Australia, and found that it would save \$13 billion every year on wholesale power prices.

"They really will help [all] households save on their energy bills. They help the energy system overall because there's less demand, particularly at key times," Anna Malos, the Australia lead at Climateworks, said.

"If you avoid those peaks, then you're less likely to need that additional gas generation, which is very expensive and which sets the price for a given period that then affects everyone's overall electricity price."

Helping homes use less power

Both Anna Malos and Alison Reeve said while subsidising batteries was a good policy, there were other ways to reduce demand that policy makers often ignore.

It may sound simple, but one of the quickest and easiest ways to save money on electricity is to use less.

This isn't to say simply foregoing mod-cons and sitting in the dark is the only solution, though, and actually there are ways to make your home more efficient.

"We often hear a lot of focus on what happens to prices, but really what matters for households is how much they pay," McConnell pointed out.

"You can become more efficient and smarter with your consumption of power that results in your bills going down, your total cost going down, even though prices may be higher."

McConnell said these home efficiency upgrades could be supported with nationwide programs to roll out home insulation, rebates for more efficient electric heating and hot water systems, and even the important but unsexy business of plugging draughts around the house.

There are a stack of benefits that come from improving home efficiency — it's the quiet achiever of the energy transition. It reduces bills, it makes people's homes more comfortable in the extreme heat and cold, it's better for the climate, and it's good for the overall energy system.

One of the biggest investments the government made to reduce power bills was just to take \$75 off them every three months, but these rebates don't do anything to solve issues long term.

Instead, McConnell says spending money on efficiency can reduce power bills now, and in the long term.

"It's something you can help with electricity bills or energy bills almost immediately, but also permanently. So in that sense, it's not a short-term thing at all," McConnell said.

Climateworks Centre, an independent not-for-profit within Monash University, recently studied how best to improve Australian home efficiency with a suite of packages that could be rolled out by governments.

"People are really noticing how much it costs to heat and cool their home and that has lots of knock-on effects on their health," Anna Malos, the Australia lead at Climateworks said.

Malos said there's been more focus on the large-scale side of the energy system, but helping households is essential.

"The policy challenge there is we know what the policies are, but because there are literally millions of households, it can be a lot harder to see those policies roll out because it's lots of small changes in lots of places.

"In some ways changing big bits of kit, shutting down a whole power station, building a set of wind turbines, it can seem like it's easier to do because you've got a relatively small number of projects."

While home batteries and energy efficiency upgrades are a great way to reduce costs, all three experts pointed out that renters and low-income people were missing out.

"A lot of that really only applies if you own your own house and one-third of households rent," Alison Reeve said.

"What we haven't seen a lot of attention paid to by, I'd say, any of the parties in the election is how do you make sure that that one-third of households is not stuck with the higher bills?"

"What we risk doing is having the people who can least afford it having the highest bills."

Yesterday, Labor announced an expansion of a program that fits out social housing properties with cost-saving energy updates.

In Victoria, 14,000 social housing properties will get hot water heat pumps, reverse-cycle air conditioning and solar panels, following a recent expansion of the program in New South Wales.

The state of Victoria also just announced discounts for ceiling installation, while in Queensland, a solar rebate program for rental properties aims to cut power bills for tenants.

Retrofitting the classic Aussie home



Australian homes are notoriously cold in winter. Take a tour with an energy assessor to learn how a few tweaks can keep you warm, save money and reduce emissions.

Benefits of batteries explained



If you already have solar or are considering getting a new solar-and-battery system, we've answered some questions you might have on batteries and how they can benefit you.



Anna Malos is the Climateworks Centre Australia Lead and has worked as a climate policy expert with the UK and Victorian governments. (Supplied: Climateworks)

There is a range of other rebates and assistance programs up for grabs to help lower bills, depending on which state you live in.

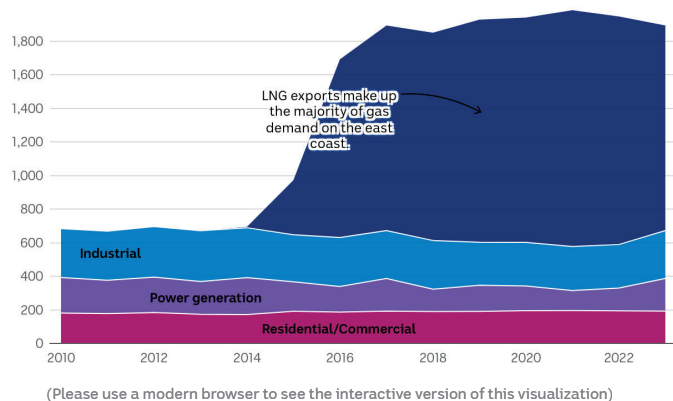
What about more gas?

There has been a lot of talk already in the election about the need for more gas to bring down power prices, but Alison Reeve said Australia has plenty of gas and we only use a fraction of it for electricity.

"The problem we've got at the moment is a price problem, not a quantity problem. The reason that prices are high is not because we're short of gas," she said.

"The reason prices are high is because people overseas are prepared to pay more for that gas than we are."

Only a small part of Australia's gas is used for power generation



The gas boom that has seen Australia become the second largest gas exporter in the world has been accompanied by a sharp rise in local gas prices, as exports hoover up the extra supply.

The Coalition has proposed a gas reservation policy that would require gas producers to keep some of their uncontracted gas in Australia for the domestic market.

They have yet to release details about how the policy will actually work, but Peter Dutton has said it will reduce gas prices from \$14 to \$10 per gigajoule.

They also want to "flood the market with gas" and encourage more gas production. But Grattan's Alison Reeve said it isn't clear the industry is prepared to commit to tap into new gas reserves.

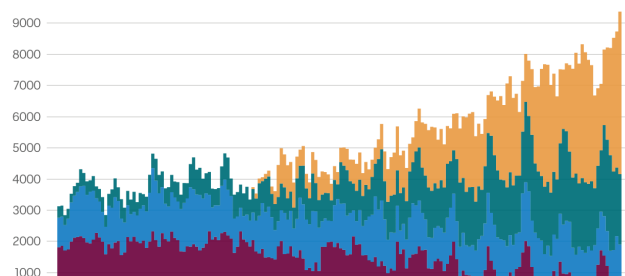
"The gas that people know is there is a potential reserve that could be developed. There's a reason why it's not being developed, right? And that's because someone's looked at it and gone, 'It's not profitable to develop that gas.'"

"When you look ahead over the decade, what you see is overall gas demand falling. And people don't tend to invest in new supply in falling markets for anything," Reeve said.

Power generation uses less gas

Monthly data from the National Electricity Market shows more power generation comes from other sources.

■ Gas ■ Hydro ■ Wind ■ Solar



Similarly, Peter Dutton tied the announcement of his nuclear policy to power prices, but Dylan McConnell said Australia was 20 years away from bringing any nuclear power online.

"It's pretty irrelevant to what we need to do in the next couple of years," he said

"Irrespective of if you think that's a pathway we need to go on, then we need to do things in the timeframe that is well before nuclear is going to be on the table and producing electricity in Australia."

CSIRO modelling has consistently found nuclear to be more expensive than renewables backed by storage.

The 'least-cost version' is clear

The experts we spoke to were all at pains to say there weren't any perfect answers to drive down power prices, they were united on the best way to approach the energy transition.

UNSW energy expert Dylan McConnell said that outside of politics, there is a lot of consensus on what our future energy system should look like and how to get there.

"It's pretty clear that the least-cost version of the future that we should be heading towards is one that is largely renewable energy backed by storage of different flavours — pumped hydro batteries and so on — and potentially some small amount of gas."

And Climateworks's Anna Malos agreed.

"I think the fundamentals around the economics [and] around aging infrastructure will mean that by 2035, Australia's grid will be predominantly renewable."

As she pointed out, decarbonising the electricity sector is also critical for Australia's climate targets.

"The energy sector itself, particularly the electricity sector, still is responsible for about a third of Australia's emissions," Malos said.

"Once electricity is clean, is as near to zero as possible, then that can help to decarbonise the rest of Australia's energy emissions, which is responsible for probably about another third."

"So getting clean energy right is probably something like two-thirds of Australia's emissions."

"There's a lot of stuff that just needs to happen right now. It's just a matter of getting on and making that happen," McConnell said.

"The bit that we need to work out is how to get the financing to work to keep the costs as low as possible," Alison Reeve said.

"The other bit that we have to figure out is how to make several things happen at the same time?"

How much should the government spend to subsidise the cost of electricity?



This is one of the questions in Vote Compass, which can help you understand your place in the political landscape. Follow the link to take the survey.