



Fact Sheet

Improving energy affordability aligns with net zero

Key actions that will **improve** energy affordability

Net zero alignment

Electricity supply	Replace retiring assets with firmed renewables , the lowest-cost option	Aligned	☒
	Accelerate deployment of cost-effective energy projects	Aligned	☒
	Increase competition in dispatchable generation	Neutral	☐
	Ensure network spending is timely, efficient and optimises existing capacity	Neutral	☐
	Fix regulation to address networks' supernormal profits	Neutral	☐
	Allow DER to compete with distribution network expansions	Aligned	☒
Gas supply	Divert some uncontracted LNG to the domestic market	Neutral	☐
	Improve transparency and competition in the gas market	Neutral	☐
Electricity and gas demand	Accelerate deployment of energy efficiency in homes and businesses	Aligned	☒
	Accelerate the shift to efficient electric appliances and electric vehicles	Aligned	☒
	Accelerate deployment of industrial heat pumps where cost-effective	Aligned	☒
	Accelerate deployment of household solar and batteries	Aligned	☒
	Incentivise consumers to maximise system benefits of DER	Aligned	☒

Key actions that will **worsen** energy affordability

Electricity supply	Extending ageing coal plants would entail significant costs and risks	Misaligned	☐
	Increasing reliance on gas generation , which sets high spot prices	Misaligned	☐
	Deploying nuclear , which is 1.5-3.8 times more costly than current electricity mix	Aligned	☒
Gas supply	Developing large new gas fields is costly and may push domestic gas prices up	Misaligned	☐

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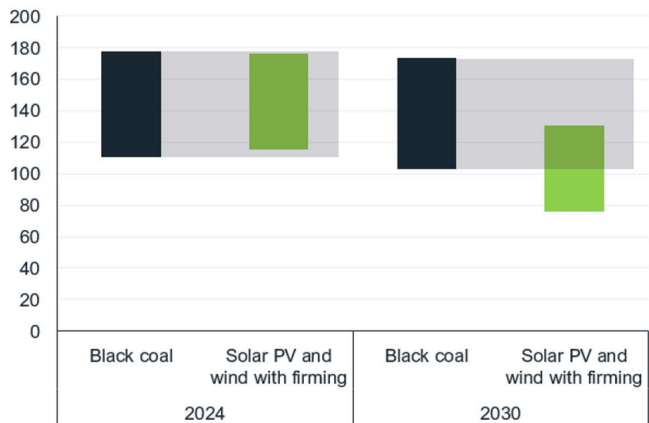


A focus on homes,
not power plants,
could halve energy
bills

Renewables are the least-cost option

Australia's coal plants are rapidly ageing and replacing them is unavoidable. CSIRO analysis shows the lowest-cost option is renewables with firming. Renewables are the lowest-cost technology for new generation – even when adding integration costs such as transmission and storage, they are already on par with new coal and will be materially cheaper by 2030.

Levelised cost of electricity, \$/MWh



Source: CSIRO

What is driving electricity prices up?

The two largest components of electricity prices are wholesale price and network costs

Wholesale price increase drivers:

- Increases in gas and coal prices
- Coal outages driving price spikes
- Delays in renewables and transmission rollout

Network cost increase drivers:

- Inflation, interest rates
- New expenditure, including transmission (which is about 20% of network costs)
- Supernormal profits

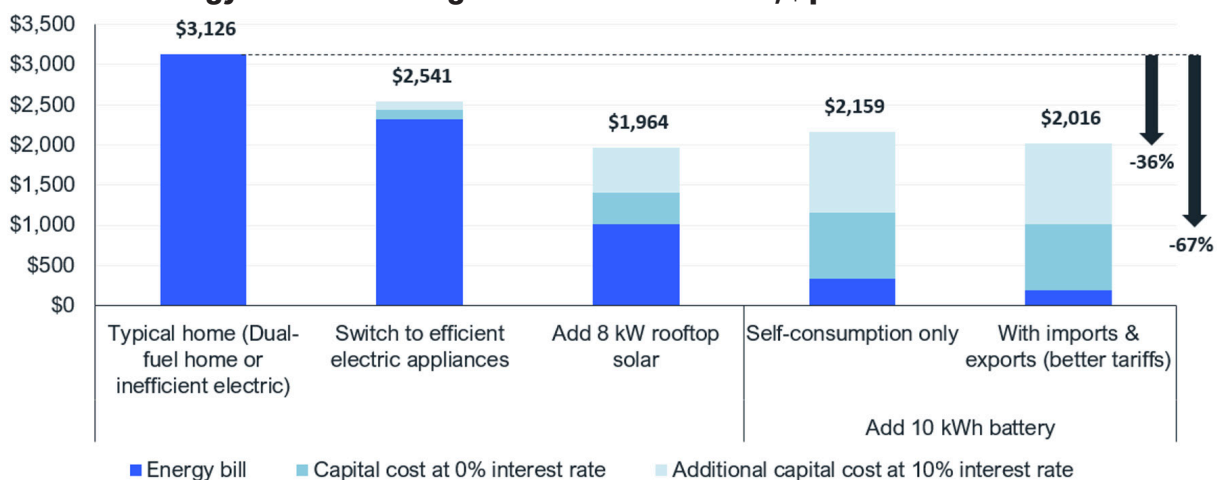
Renewables have been putting downward pressure on wholesale prices, with periods of high grid penetration by renewables closely correlated with low wholesale prices.

Retail costs also increased recently, due to increased costs such as bad and doubtful debt.

The best hopes to reduce energy bills are on the demand side

- Replacing inefficient heaters and hot water systems with modern electric alternatives could avoid \$3.4 billion in unnecessary household costs every year
- Shifting to efficient electric appliances and installing solar and battery systems can reduce net household bills by up to 67%, even after accounting for the upfront cost
- Rooftop solar, batteries and smarter demand management could save billions in generation, storage and network spending, reducing costs for all
- Industrial energy efficiency and electrification offer major cost savings with very short payback periods, yet these opportunities remain largely untapped

Net energy bill for an average Australian household, \$ per annum



Source: IEEFA (weighted average of results across major capital cities, including government rebates)

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy.

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