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Institute for Energy Economics and Financial Analysis

Oil shocks expose the limits of monetary policy

How transport electrification and grid modernisation can protect price stability

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Key Findings

Australia has become highly vulnerable to oil price shocks due to its reliance on imports, and is highly exposed to Middle East supply disruptions.

Oil price shocks have been a key contributor to all six recent inflation spikes. Traditional monetary tools can only limit spillover impacts, often at a significant economic cost.

Central bankers are calling for the energy transition to accelerate for price stability. Transport electrification could halve Australia's oil use by 2050 and blunt its impact on inflation.

Australia's price stability toolkit should include policies to accelerate transport electrification and grid modernisation, and discounted interest rates for electric vehicles.

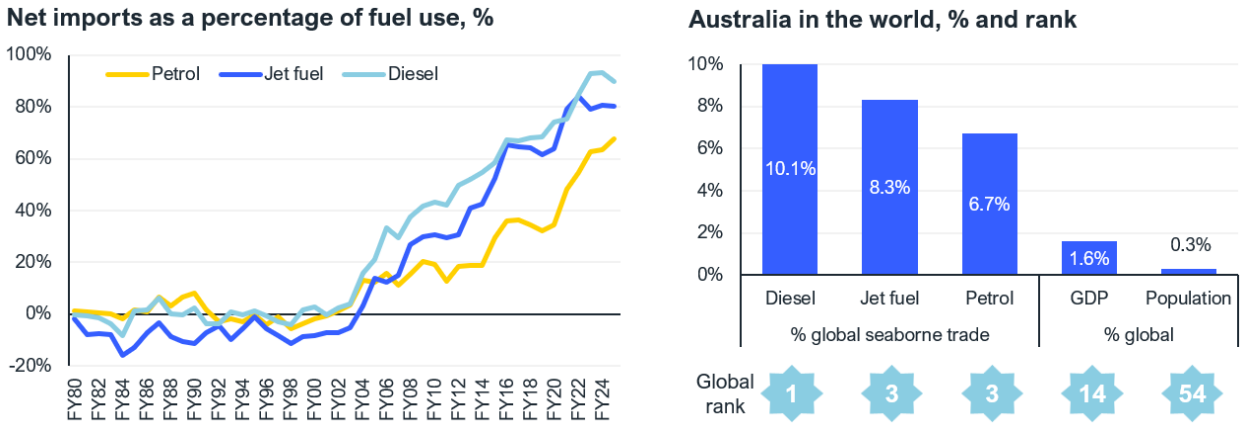
Executive summary

This report analyses recent changes in Australia's oil demand and supply, the impact of oil shocks on Australia's inflation, how those are addressed through traditional monetary tools, and the tools that could be added to Australia's price stability toolkit to build more resilience to oil price shocks.

Australia has become highly exposed to oil shocks

Since 2000, Australia shifted from being mostly self-reliant for oil products to mostly import-reliant. In FY2024-25, Australia imported the vast majority of its three key oil products: diesel (90%), jet fuel (80%) and petrol (68%). During this period, the country's use of diesel and jet fuel increased materially, multiplying by 2.5 and 1.8 times respectively. Australia's diesel use growth is at odds with other countries. It is now the world's largest importer of diesel, representing 10% of net global seaborne trade. Australia is also the third-largest importer of jet fuel and petrol, representing 8.3% and 6.7% of global seaborne trade respectively. This is well above the country's share of global GDP.

Scale of Australian oil product imports



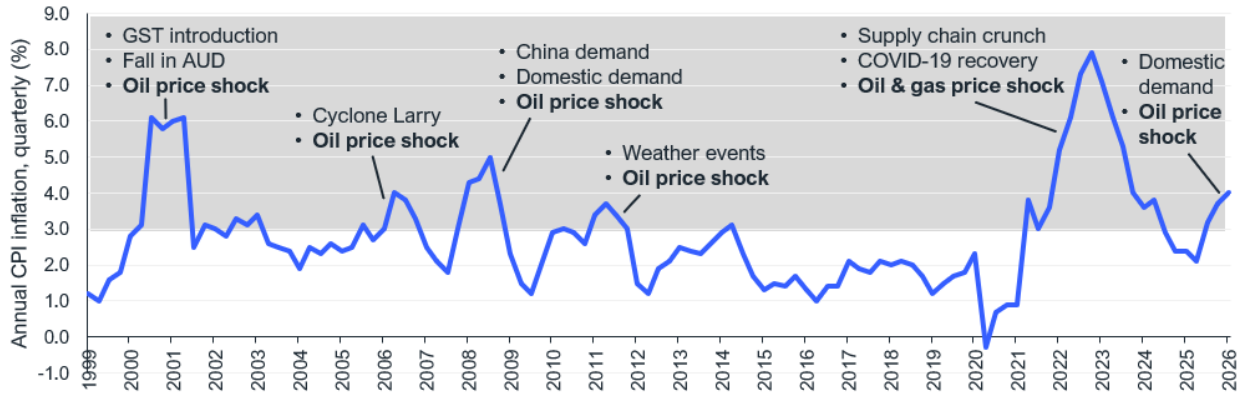
Australia imports 96% of its refined oil products from Asia, which is highly reliant on Middle East oil. Our two largest suppliers, representing half of our supply, source about 70% of their crude oil from the Middle East. Global trade of diesel, petrol and jet fuel is also dominated by Asia and the Middle East. As such, Australia has become highly vulnerable to any supply disruptions in the Gulf region. This is exacerbated by Australia's relatively low oil stockpiles compared with similar countries.

Oil shocks have a large impact on inflation

Since 2000, oil prices have become highly volatile, in part due to frequent geopolitical tensions as well as the low price elasticity of oil demand. In that period, oil prices increased by about 6.9% a year, and oil costs by about 8.9% a year, well above the annual Consumer Price Index (CPI) increase of 2.8%. The growth was not linear, with many oil shocks driven by a combination of supply- and demand-side factors.

This century there have been six main occasions when inflation exceeded the Reserve Bank of Australia (RBA)'s target of 2–3%, with oil price shocks a primary driver for each. Oil affects inflation in three ways. It has a direct impact through household transport expenditure, which contributed a one percentage point increase to the CPI in March 2026. It has an indirect impact by increasing the cost of goods and services: oil accounts for 2–2.5% of domestic costs, and could account for more through global supply-chain costs. Oil prices also have an outsized contribution to inflation expectations, which has flow-on effects.

Contribution of oil price shocks to spikes in Australian inflation



Traditional monetary policies have limitations

The RBA typically uses three main tools to maintain price stability: inflation targeting, increasing interest rates and forward guidance. In the case of oil price shocks, central banks focus on countering spillover impacts of high oil prices on broad-based inflation, using a graduated set of responses depending on the likely magnitude of the spillover. For small shocks, they may "look through" the event; for severe shocks with a high chance of unanchoring inflation expectations, they will take forceful monetary policy action. The RBA mentioned the risk of second-round effects from oil price increases as part of its decision to increase the cash rate by 0.25% in May 2026. In the case of an initial supply-side shock (as is the case with the Iran conflict), a forceful response can have high economic costs, potentially leading to a recession.

Given the increasing volatility of oil prices, and its recurrent impact on world economies, some central bankers in Europe are calling for a reduced reliance on fossil fuels to protect price and economic stability. However, monetary action to constrain the spillover of oil price shocks makes it harder and more costly to transition to the very technologies that can protect the economy from the impacts of future oil price shocks.

Technologies are now available to shift away from oil, and Australia doesn't need to remain at the mercy of global oil markets. It now has the option to sever its exposure to oil price shocks — and the inflation that follows. But it needs to add new tools to its price stability toolkit to do so.

Three levers should be added to Australia's price stability toolkit

1. Accelerate transport electrification

Transport is responsible for nearly three-quarters of Australia's oil use, and is the biggest driver of inflation through its direct and indirect impacts on household costs. Electrification of road transport is the most promising opportunity to materially and cost-effectively reduce oil use in the transport sector. Not only can it reduce exposure to oil shocks, but exposure to energy price volatility overall. It also reduces exposure to energy imports by shifting to domestically generated electricity.

It is possible to more than halve road transport oil use by 2040 and reduce it to near zero by 2050, which would dramatically reduce oil use's impact on inflation. However, trends point to more modest reductions. In particular, oil use in heavy transport is expected to increase to 2040. Government support is needed to accelerate the shift to electric vehicles (EVs).

1	**Government** Accelerate transport electrification	• Provide continued, predictable support for electric car deployment. • Scale up public funding for early heavy EV charging network. • Incentivise early heavy EV deployment to build capabilities and supply chains. • Remove regulatory blockages and introduce requirements for heavy EVs.

2. Accelerate grid modernisation

Fully electrifying Australia's road transport would require large volumes of electricity – equivalent to 42% of today's electricity demand. A large scale-up of electricity generation, storage and transmission will be required. Accelerating transmission grid expansions (or innovative alternatives) is one of the most critical enablers to rapidly increasing electricity supply.

Grid planning and upgrades are also required to deploy EV charging infrastructure, with power needs particularly high for heavy freight charging. Ensuring EV charging is managed effectively will be key to reducing the cost of distribution network upgrades, and will require new data, analytics capabilities and technical standards. Innovative, cost-reducing solutions should also be investigated, such as co-locating charging stations with renewables and batteries. Bidirectional charging can deliver significant cost benefits to the electricity system and EV owners.

2	**Government** Accelerate grid modernisation	• Improve transmission approval, planning and regulatory assessment. • Accelerate the deployment of innovative solutions to reduce system costs. • Develop a detailed plan for heavy EV charging. • Accelerate the deployment of bidirectional charging and enablers.

3. Reduce the cost of finance for EVs

EVs represent the largest investment required in the net zero transition, estimated at AUD1.3 trillion to 2050. EVs still carry a large price premium in most segments, and their business case worsens with increases in interest rates. The CEFC is limited in the scale and discount it can offer.

3	**RBA** Reduce cost of finance for EVs	• Consider introducing a targeted refinancing facility providing discounted loans to commercial banks for EV financing until they reach cost parity. • A 0.1% interest rate (as per COVID-19 facility) could make a material difference.

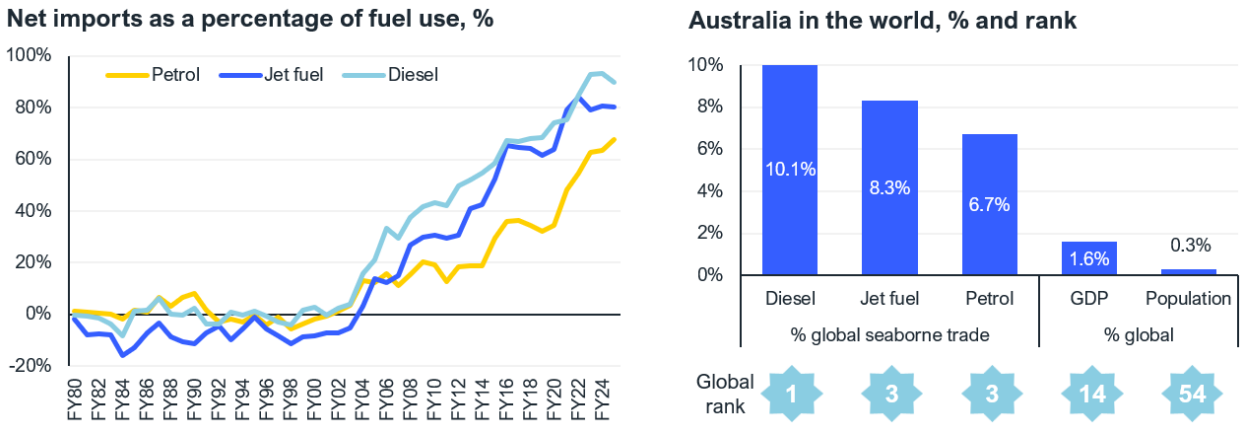
Australia has become highly exposed to oil shocks

High imports make Australia vulnerable to Middle East disruptions

Oil is critical to Australia's energy supply. It provides 41% of the country's primary energy consumption, and is the main fuel used by several of its largest economic sectors, such as transport, agriculture, construction and mining (excluding gas production).[1,2]

The three main refined oil products used in Australia are diesel (52% of oil product consumption), automotive gasoline or petrol (24%) and jet fuel (14%). Together they represent 90% of oil product consumption.[3] Since the start of the 21st century, Australia has transitioned from being nearly fully self-reliant for those three products to mostly import-reliant. In the financial year (FY) 2024–25, Australia imported 90% of its diesel, 80% of its jet fuel and 68% of its petrol (Figure 1, left).[4]

Figure 1: Australia's exposure to oil product imports

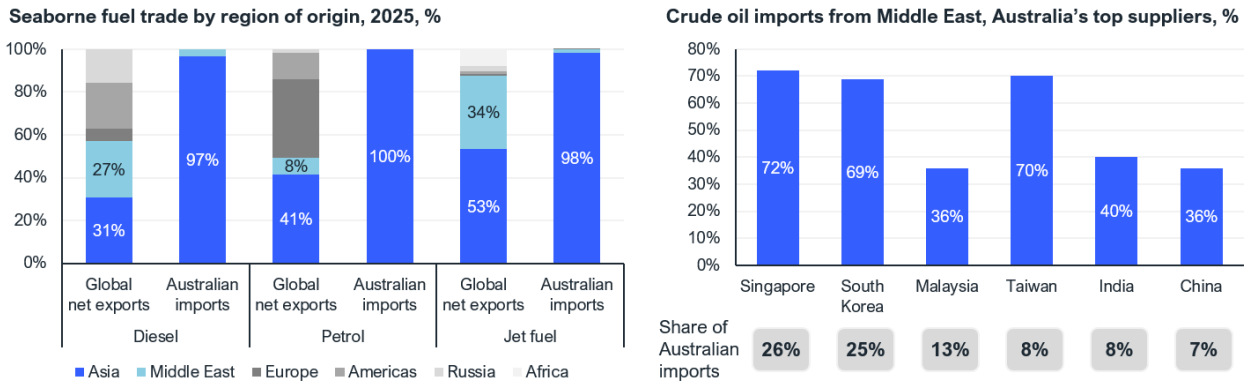


Sources: Australian Petroleum Statistics; Australian Energy Statistics; World Bank Commodity prices; RBA exchange rates.

Australia has by far the largest trade deficit in refined oil products in the world.[5] In particular, it was the largest importer of seaborne diesel in the world in 2025, with its imports representing 10% of global seaborne trade (Figure 2, left) based on net trade by country.[6] Australia was also the third-largest importer of jet fuel and petrol, representing 8.3% and 6.7% of global trade respectively. These percentages are significantly larger than Australia's share of global GDP (1.6%) or population (0.3%).[7]

[1] Australian government, Department of Climate Change, Energy, the Environment and Water (DCCEEW). Australian Energy Update 2025. 22 August 2025. Table C.
[2] IEEFA. Webinar Slides: The long tail – The Iran conflict and its impact on Australia's energy outlook. 20 May 2026. Slide 14.
[3] DCCEEW. Australian Energy Update 2025. 22 August 2025. Table F.
[4] DCCEEW. Australian Petroleum Statistics 2025. Data Extract December 2025.
[5] World's top exports. Refined oil exports by country. Accessed 2 June 2026.
[6] Kpler. Accessed 8 May 2026.
[7] World Bank Group. World Bank open data. Accessed 1 June 2026.

Figure 2: Australia's exposure to Middle Eastern oil



Sources: Kpler; World Bank open data; Australian Petroleum Statistics; IEEFA

Australia normally sources the vast majority (96% in 2025) of its refined oil products from Asia (Figure 2, left).[8] Half of its supply came from just two countries in 2025: Singapore and South Korea. This creates a major energy security vulnerability, given those countries are highly reliant on the Middle East for their crude oil supply (Figure 2, right).[9]

In addition, Australia has limited alternative sources for its oil products. Figure 2 (left) shows Asia and the Middle East represented between 49% and 88% of global seaborne trade for petrol, diesel and jet fuel in 2025. Asian exports of diesel, petrol and jet fuel have already decreased very materially since the start of the Iran conflict.[10] These decreases have been partially mitigated by large increases in net exports from the United States, but it is unclear how sustainable these are.

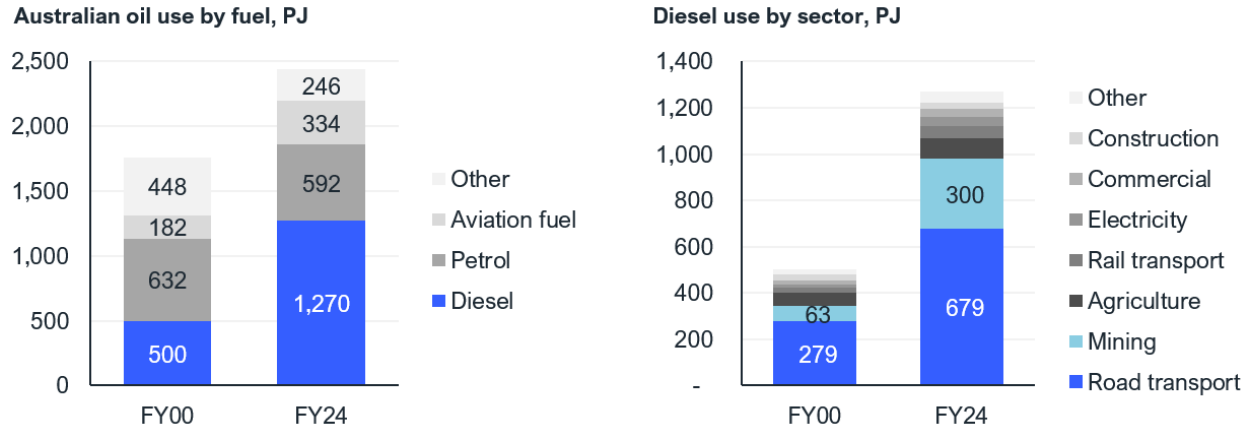
Australia's low stockpiles amplify its vulnerability. It has the lowest oil stockpiles among International Energy Agency (IEA) members at 45 days of net imports, and is the only country that does not meet the 90-day stock requirements.[11,12] On average, IEA members that are net oil importers have 141 days of net imports.

Fast growing diesel use is a particular vulnerability

Australia's oil use growth has been primarily fuelled by diesel use growth. Between FY1999–2000 and FY2023–24, diesel use increased by 2.5 times to represent the majority of Australia's oil use (Figure 3).[13] This increase was driven primarily by road transport and mining.

[8] DCCEEW. Australian Petroleum Statistics 2025. Data Extract December 2025.
[9] IEEFA. Appendix – Managing Australia's diesel squeeze. 23 April 2026.
[10] IEEFA. Webinar Slides: The long tail – The Iran conflict and its impact on Australia's energy outlook. 20 May 2026. Slide 9 (based on Kpler).
[11] DCCEEW. Australian Petroleum Statistics 2026. Data Extract March 2026.
[12] IEA. Oil Stocks of IEA Countries. 13 May 2026 update.
[13] DCCEEW. Australian Energy Update 2025, Table F. 22 August 2025.

Figure 3: Growth in Australia's oil use



Source: Australian Energy Statistics.

Australia's growing diesel use is at odds with global trends. Between 2000 and 2024, its diesel use per dollar of GDP (in constant 2015 USD) increased by 33%, while it decreased by about 30% in Europe, about 50% in the US, Japan and India, and nearly 60% in China.[14,15]

Since the start of the Iran conflict, total global seaborne net exports of diesel have dropped by about 20% to about 4 million barrels per day (Mb/d).[16] Should Asia's oil imports from the Middle East halve for a prolonged period and the region's domestic diesel demand remain constant, most of Australia's traditional diesel suppliers would have to slash their diesel exports further. In some cases, they may become importers themselves.[17]

During this fuel crisis, diesel price rises have outstripped gains in crude oil and petrol prices. At its peak, diesel was more than USD100/barrel higher than Brent crude oil, an unprecedented spread. This is because, "the Middle-East is a key supplier of both diesel and the crude oil grades that yield the greatest diesel volume upon refining. The larger refineries in Asia, which Australia relies heavily upon for importing diesel, are mostly configured to process these more sour crudes produced in the Middle-East."[18]

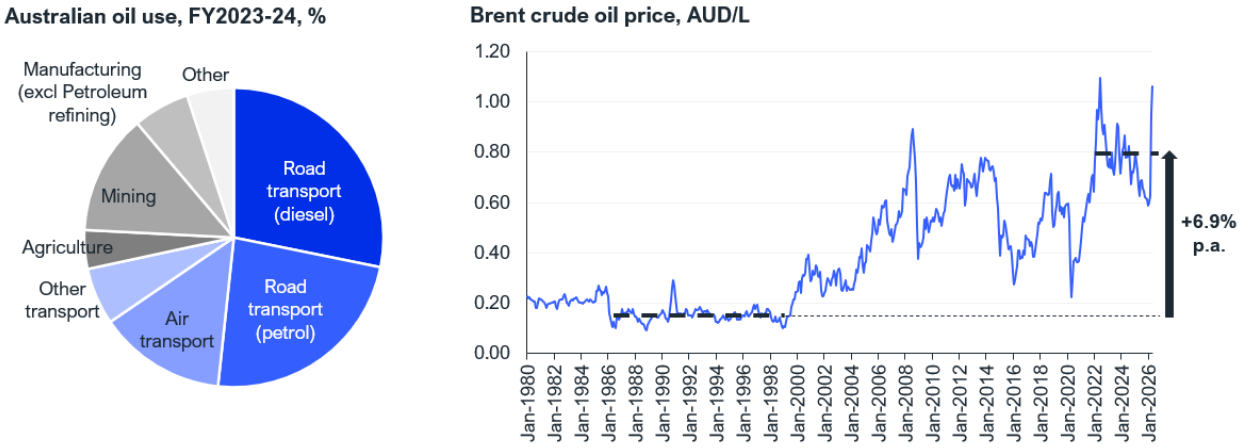
[14] Energy Institute. Statistical Review of World Energy Data 2025. 2025.
[15] World Bank Group. World Bank open data. GDP (constant 2015 USD). Accessed 8 May 2026.
[16] IEEFA. Webinar Slides: The long tail – The Iran conflict and its impact on Australia's energy outlook. 20 May 2026. Slide 9, based on Kpler data.
[17] IEEFA. Managing Australia's diesel squeeze. 23 April 2026.
[18] Australian Competition and Consumer Commission (ACCC). Weekly fuel price monitoring report. 12 June 2026 update. Page 10.

Oil shocks have a large impact on inflation

Oil prices are volatile and increasing faster than CPI

Oil prices have increased at a fast pace since 2000 (Figure 4, right). Brent crude oil prices (in AUD) multiplied fivefold between the relatively stable period of the mid-1980s to 2000 and the past few years. This translates into a 6.9% annual increase, more than double the average CPI increase of 2.8% a year.[19]

Figure 4: Australia's oil use and crude oil price volatility



Sources: Australian Energy Statistics; World Bank Commodity prices; RBA exchange rates.

Oil prices have also become increasingly volatile. Since 2000, oil markets have experienced sharp increases and decreases in prices, driven by a mix of demand and supply-side factors (Figure 5, bottom). Several factors explain this increased volatility, notably the increased frequency of geopolitical tensions, particularly in the Middle East.

Another factor is that oil demand now has a low price elasticity. Research has found that oil demand elasticity to price dropped dramatically in the 1970s and 1980s; since then, the contraction in demand after a 10% increase in price has been as little as 1–2%.[20]

IEEFA analysed the price elasticity of Australia's transport fuels, which constitute the majority of oil use (Figure 4, left), and found that demand for petrol, jet fuel and transport diesel does not appear to respond to changes in the crude oil price, neither in the same year, nor with a one-year lag. While demand for petrol and jet fuel fluctuates over time, transport diesel fuel consistently grows by more

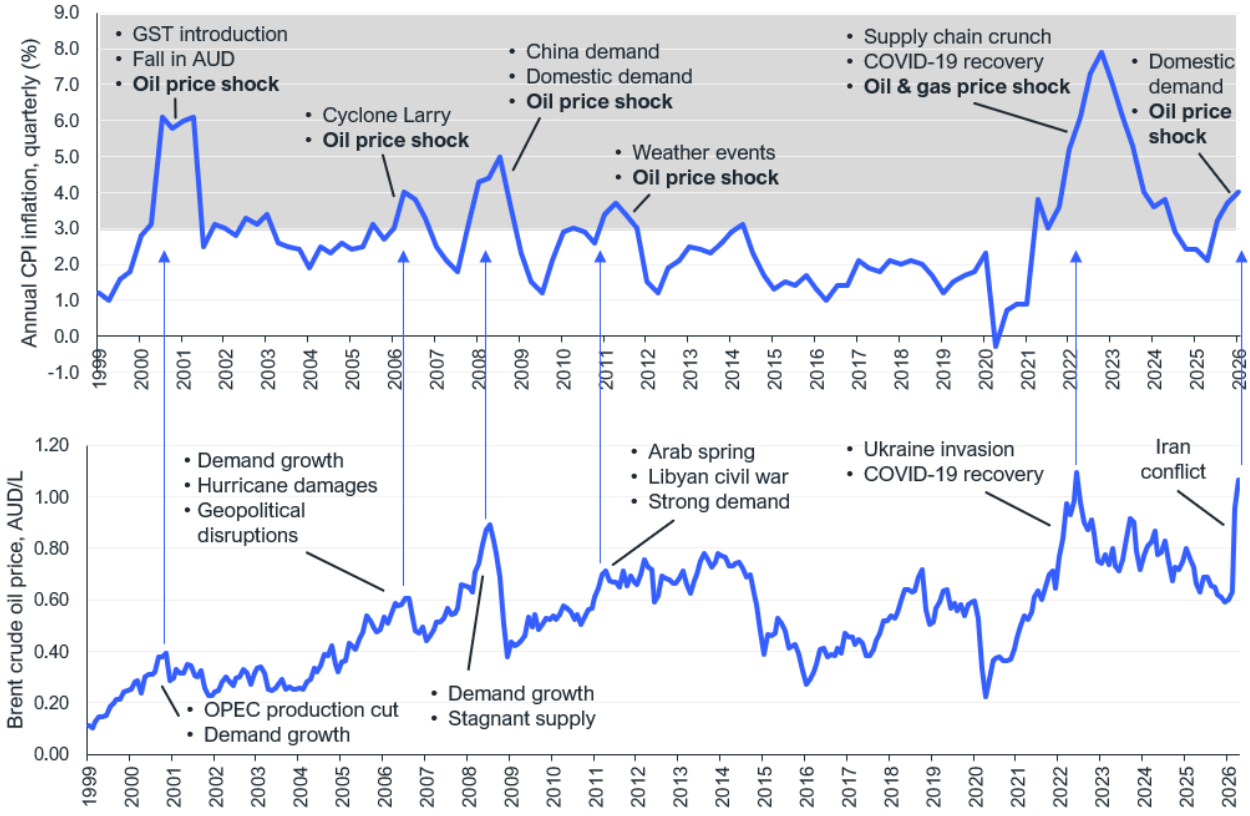
[19] Australian Bureau of Statistics (ABS). Consumer Price Index, Australia. Appendix 1a. CPI: Quarterly Analytical Series and Seasonal Adjustment Factors on pre-October 2025 basis. April 2026.
[20] RBA. The Economic Consequences of Oil Shocks: Differences across Countries and Time. 2009. Section 4.1.

than 3% a year. The only exceptions were very limited decreases in demand during the 2001 recession and the COVID-19 pandemic.

Oil price shocks are a key contributor to inflation

Since 2000, there have been six main occasions when inflation exceeded the Reserve Bank of Australia (RBA)'s target of 2–3% (Figure 5, top).[21]

Figure 5: Contribution of oil price shocks to spikes in Australian inflation



Sources: ABS, Consumer Price Index; World Bank Commodity prices; RBA, exchange rates, monetary policy statements; US Energy Information Administration; University of California San Diego Department of Economics; Resources; J.D. Hamilton; William Mitchell.

Each time, oil price shocks were a major contributor:

- **2000–2001 — GST introduction**: driven by the introduction of the Goods and Services Tax (GST), decline in exchange rates, and increase in oil prices.[22]
- **2006 — Cyclone Larry:** driven by fruit price increases after the cyclone and oil price increase.[23]

[21] RBA. Australia's inflation target. Accessed 2 June 2026.
[22] RBA. Statement on Monetary Policy. August 2001.
[23] RBA. Statement on Monetary Policy – August 2006. August 2006.

- **2007–2008 — Resources boom**: driven by global commodity price increases (including oil), fuelled by demand from China and India, high domestic demand and capacity utilisation.[24]
- **2010–2011 — Weather events**: driven by food price increases after cyclones and floods in Queensland, and oil price increase.[25]
- **2022–2023 — Post-COVID**: driven by global supply-chain disruptions from COVID-19, oil and gas price shock after Russia's expanded invasion of Ukraine, demand growth from the pandemic recovery.[26]
- **2025–2026 — Iran conflict**: driven by oil price shock following the Iran conflict, compounding existing domestic demand pressures.[27]

Literature suggests the impact of oil price shocks on Australian inflation is likely to have been materially increased as the country's dependency on oil use and on oil imports increased in the past 25 years. A study found, "the dependence on oil in a country influences the transmission of oil price shocks onto inflation among the G-7 countries. Inflation, measured in consumer prices, responds more in periods of relative oil dependence compared to periods of relative oil independence."[28] Another found net oil- and energy-importing countries experience a significant boost in inflation in response to oil shocks, while oil- and energy-exporting countries do not.[29]

How oil price shocks influence inflation

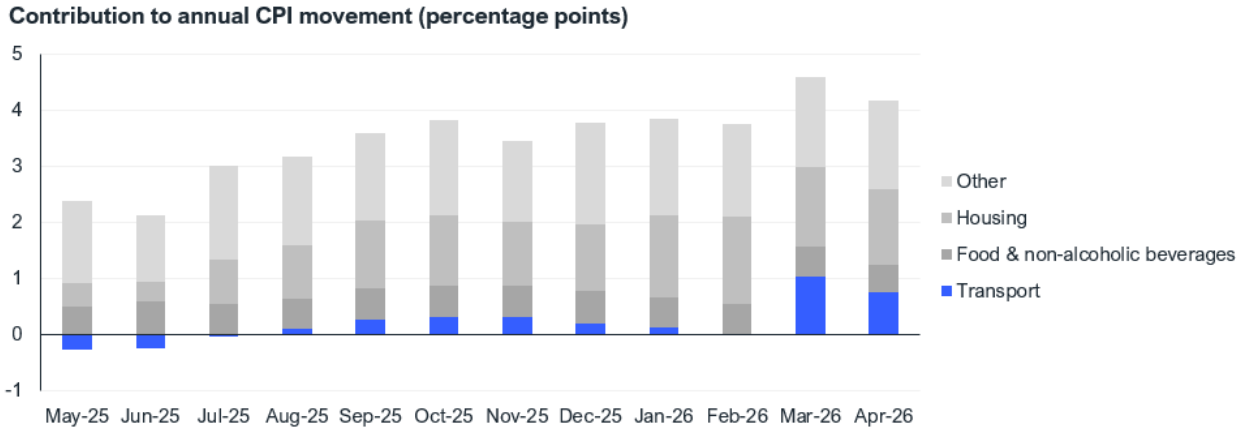
Direct impacts

Oil prices contribute directly to inflation through household transport expenditure. In March 2026, increases in transport expenditure contributed to a full percentage point of CPI movement, pushing inflation past the 4% mark (Figure 6).[30] However, the impact dropped following the halving of the fuel excise in April.[31]

The RBA states that, "A rule of thumb is that the *direct* effect of a 10 per cent increase in domestic fuel prices will lead to an increase in headline inflation (via higher retail fuel prices) of a bit over 0.3 percentage points over one to two quarters."[32] Petrol is central to this impact, making up 90% of household fuel consumption.

[24] RBA. The Economy in Late 2008: Conditions and Prospects. 19 November 2008.
[25] William Mitchell. Australian inflation rate – or rather – the banana rate. 27 July 2011.
[26] RBA. Box C: Supply and Demand Drivers of Inflation in Australia. February 2023.
[27] ABS. Consumer Price Index, Australia, March 2026. 29 April 2026.
[28] Lund University. The Relationship between Oil Prices and Inflation – the Role of Oil Dependency. 2022.
[29] RBA. Annual Conference presentation. The Economic Consequences of Oil Shocks: Differences across Countries and Time. *Baumeister C., Peersman G. and Van Robays, I.* 2009. Page 45.
[30] ABS. Consumer Price Index, Australia, April 2026. 27 May 2026.
[31] Prime Minister of Australia. Fuel excise halved for three months. 30 March 2026.
[32] RBA. In Depth – The Impact of Higher Global Energy Prices on the Australian Economy. May 2026.

Figure 6: Contribution of transport fuel costs to the recent inflation spike

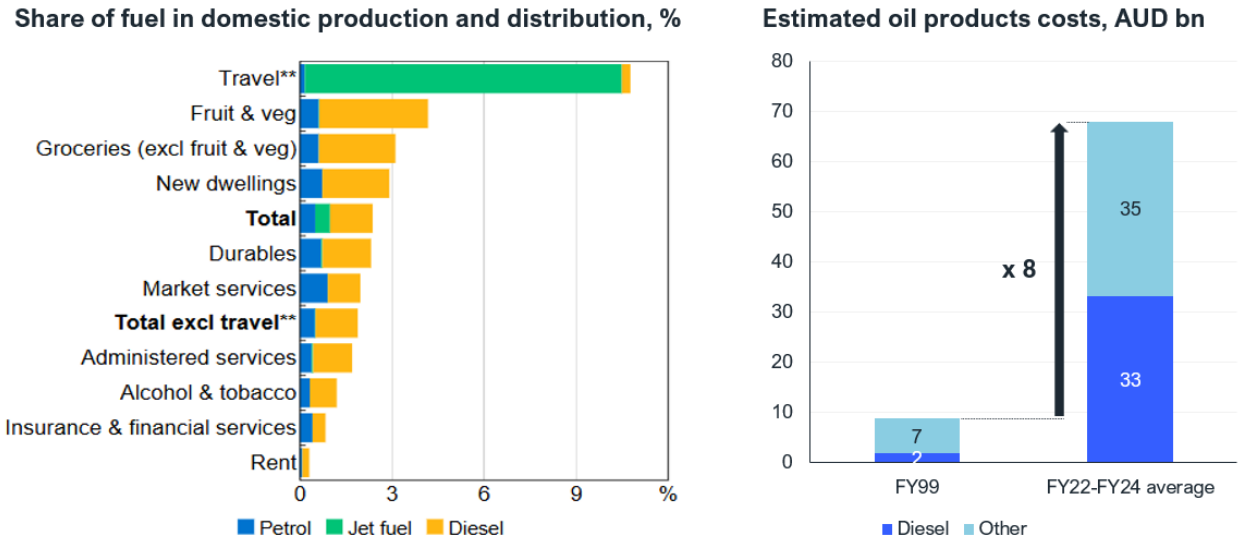


Source: ABS, Consumer Price Index, Australia.

Indirect impacts

Oil prices also have an indirect impact on inflation by increasing the cost of goods and services. This can occur through increased input costs, production costs or transportation costs. The RBA estimates fuel account for 2–2.5% of the domestic cost of producing and distributing goods and services in the CPI (Figure 7, left).[33] Of the fuels, diesel has the biggest influence on this indirect impact.

Figure 7: Contribution of oil to the cost of goods and services



Sources: RBA; IEEFA analysis based on Australian Petroleum Statistics; Australian Energy Statistics; World Bank Commodity prices.

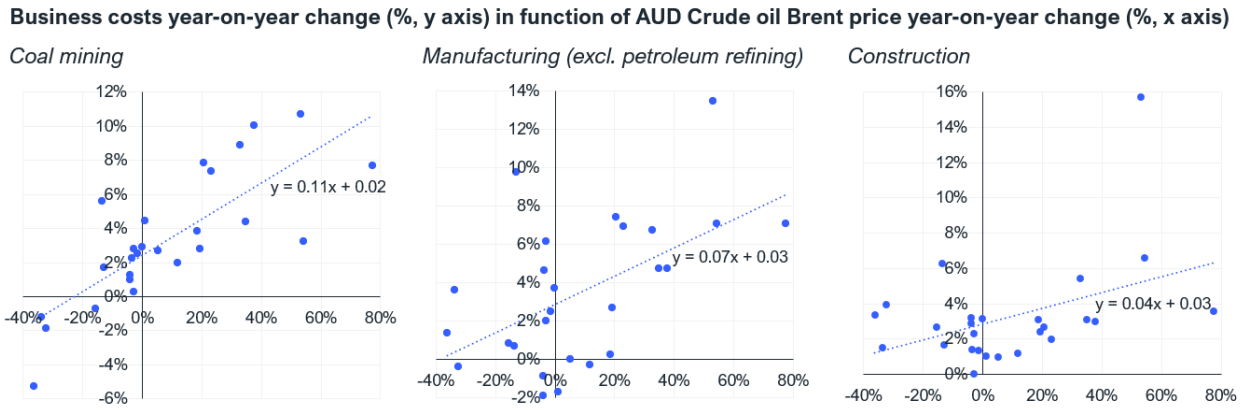
[33] RBA. In Depth – The Impact of Higher Global Energy Prices on the Australian Economy. May 2026. Section 4.2.

IEEFA estimated the total domestic wholesale cost of oil products across the Australian economy (Figure 7, right), and found oil costs have increased rapidly since 2000. Total costs have gone from about AUD9 billion in FY1998–99 to about AUD68bn across FY2021-22 to FY2023-24. This represents an eightfold growth, or about an 8.9% annual increase over the period. Wholesale diesel costs multiplied by a factor of 19 over that period, reflecting both increased use and prices. This corresponds to about a 14% annual increase.

These increases significantly outpaced growth in the CPI. This suggests the indirect impact of oil prices on inflation increased significantly during that period, and is likely to continue to do so should this trend continue.

The RBA's indirect impact analysis excludes the impact of oil within global supply chains, which could influence the cost of imported goods. IEEFA analysis of the correlation between annual changes in business input costs (for the three sectors with available data[34]) and annual changes in the Brent crude oil price (AUD) suggests the total impact of oil prices on business costs could be higher than 2–2.5%. The trend lines shown on the graphs indicate that the coefficient linking business cost increases to crude oil cost increases is about 0.11 for coalmining, 0.07 for manufacturing (excluding petroleum refining) and 0.04 for construction (Figure 8). More detailed analysis would be required to properly assess the total impact of oil prices on the cost of goods.

Figure 8: Impact of oil price fluctuations on business input costs



Sources: IEEFA analysis based on ABS Producer Price Indexes, World Bank Commodity prices; RBA exchange rates.

Notably, while strong business cost increases often occur when oil prices increase materially, it is rare for business costs to decrease when oil prices go back down. It is more common for input costs to increase slightly in those years.

[34] ABS. Producer Price Indexes, Australia. 1 May 2026 update.

Inflation expectations

The RBA indicates that oil price increases may also influence inflation by increasing inflation expectations: "Research in Australia and elsewhere finds that changes in fuel prices can affect households' inflation expectations by more than might be expected given its share in overall consumption. This is likely to be because fuel is frequently purchased, and its price is highly visible and widely covered in the press. An increase in inflation expectations can flow through to higher inflation now and in the future."[35] For example, this can happen when companies increase their prices in anticipation of their competitors doing so, or as workers negotiate higher wages when they expect high inflation.

Overall, transport oil use has the largest impact on inflation. Not only does it represent the majority of oil product use (72%), it also has the largest influence through its impact on household costs, expectations and the cost of goods.[36]

The limitations of monetary policy on inflation

Traditional tools cannot directly influence oil demand

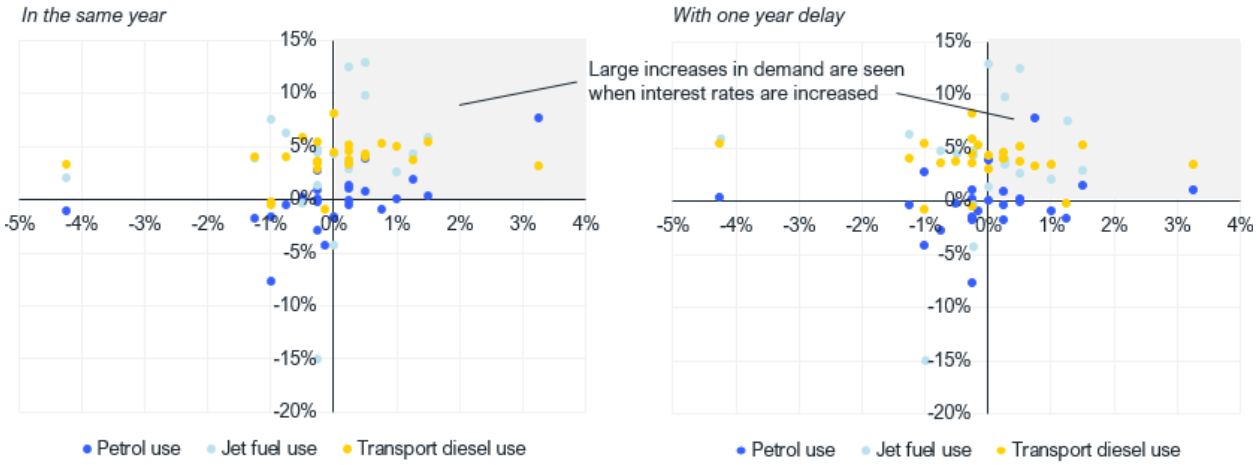
The RBA is the primary organisation in charge of maintaining price stability in Australia, via monetary policy tools. The tools used by the RBA include:

- **Inflation targeting**: The publicly stated inflation range target (2–3% in Australia), which is used to manage public expectations of inflation, to avoid inflated price or wage increases, and to provide transparency on expected monetary policy interventions.[37]
- **Increasing interest rates**: Changes to the cash rate (the rate charged on overnight loans between commercial banks) drive changes to other interest rates.[38] This reduces domestic demand for goods and services by making it less attractive or harder to borrow, which in turn reduces investment and asset prices. It also reduces disposable income for households with a mortgage or loans, makes it more attractive to save, and strengthens the exchange rate (reducing import prices).[39]
- **Forward guidance**: This signals the expected future path of the cash rate, which can be time- or outcome-based. This reduces uncertainty, and influences borrowing, spending and investment decisions.[40]

[35] RBA. In Depth – The Impact of Higher Global Energy Prices on the Australian Economy. May 2026. Section 4.2.
[36] DCCEEW. Australian Energy Update 2025, Table F. 22 August 2025.
[37] International Monetary Fund (IMF). Inflation Targeting: Holding the Line. Accessed 3 June 2026.
[38] RBA. About Monetary Policy. Accessed 3 June 2026.
[39] ECB. Transmission mechanism of monetary policy. Accessed 3 June 2026.
[40] RBA. Review of the RBA's Approach to Forward Guidance. Accessed 3 June 2026.

Given the inelastic nature of oil demand, those tools cannot directly influence oil demand and therefore oil prices. IEEFA examined whether changes in interest rates affect transport fuel use, and found there doesn't appear to be a material impact, either immediate or after one year (Figure 9).

Figure 9: Impact of increases in interest rates on transport oil use



Sources: Australian Energy Statistics; RBA Changes in monetary policy and administered rates. Note: FY1999–2000 to FY2023–24 was used for petrol and transport diesel use, and FY1999–2000 to FY2018–19 for jet fuel to exclude COVID-19 disruptions.

Monetary policy limits the spillover of oil shocks, at a high cost

Instead of influencing oil demand, monetary policy can limit the spillover of oil shocks. As European Central Bank (ECB) president Christine Lagarde explained: "Monetary policy cannot bring down energy prices. But we must identify when higher energy costs risk spilling over into broad-based inflation – be it through indirect effects or through second-round effects via wages and inflation expectations."[41] The strength of the monetary policy response to an oil shock therefore depends on the likely magnitude of the spillover (Figure 10).

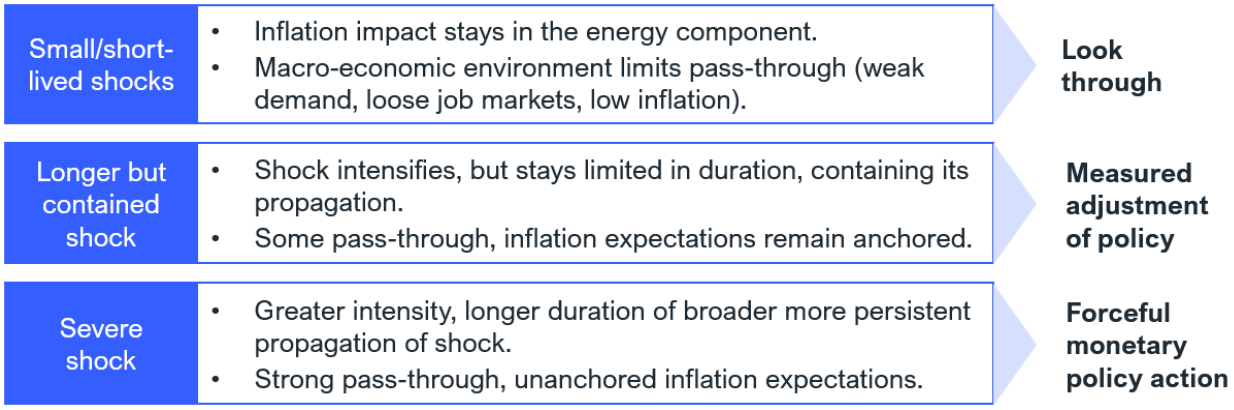
The spillover from the Iran oil crisis could have large and lasting impacts. The International Monetary Fund (IMF) modelled several scenarios, and found an adverse or severe scenario could have large and long-lasting impacts on energy prices, driving global inflation above 5% for 2026 and potentially even higher in 2027.[42]

The RBA noted concerns about second-round effects from oil price increases contributed to triggering an interest rate rise of 0.25% in May 2026.[43]

[41] ECB. Navigating energy shocks: risks and policy responses. 25 March 2026.
[42] IMF. World Economic Outlook. April 2026. Page xv.
[43] RBA. Statement by the Monetary Policy Board: Monetary Policy Decision. 5 May 2026.

Monetary policy tightening leads to decreases in output. When combined with a supply-side shock, which already drives output down, it raises the risks of a recession.[44] The RBA's chief economist has flagged this with the Iran crisis — highlighting the risk that inflation expectations could become unanchored, requiring monetary policy tightening that could lead to a recession.[45]

Figure 10: Graduated set of monetary policy response options to oil price shocks



Source: ECB, Navigating energy shocks: risks and policy responses.

Calls to accelerate the energy transition to withstand oil shocks

Given the cost of addressing inflation driven by oil price shocks through traditional monetary policy tools, and the increased frequency of oil price shocks, there are calls for the energy transition to be accelerated to protect price stability. Research confirms that reducing oil dependence would reduce the influence of oil price shocks on inflation.[46]

ECB executive board member Frank Elderson recently noted the recurring impact of energy price shocks on Europe's economy and price stability: "Energy policy is the responsibility of elected governments, and rightly so. But Europe's energy dependence also has profound implications for the ECB. Our primary mandate is price stability. Yet repeated energy price shocks make achieving this objective increasingly difficult. […] Europe cannot eliminate geopolitical risk, but it can significantly reduce its exposure to it. The most effective way to do that is by cutting reliance on imported fossil fuels and accelerating an orderly shift to home-grown clean energy. If Europe were to meet its sustainable energy targets, the link between domestic energy prices and volatile global energy markets would weaken substantially."[47]

[44] Bank for International Settlements (BIS). Monetary policy in an era of supply headwinds – do the old principles still stand? 2 October 2024. Page 5.
[45] ABC News. Reserve Bank worries about inflation pressures building, risk of a recession. 19 May 2026.
[46] Lund University. The Relationship between Oil Prices and Inflation – the Role of Oil Dependency. 2022. Pages 45–46.
[47] ECB. Europe's fossil fuel dependence poses risks to price stability. 7 April 2026.

Electrifying transport can reduce oil-driven inflation

A range of solutions to shift away from oil use are already available. To reduce inflationary pressures, those solutions need to reduce oil use in the sectors that have the highest impact on inflation (transport), and be cost neutral or deliver cost reductions compared with oil-based technologies.

IEEFA has previously found that fuel efficiency savings of 10–20% are achievable in road and rail transport, as well as in agriculture.[48] Across those sectors, key opportunities rely on improving driver practices, maintenance, equipment utilisation and logistics. Many of those opportunities require low or no upfront expenditure for training or software solutions. While they could deliver material cost relief to those sectors, they are not a core focus of this report given their limited ability to reduce inflationary pressures.

Modal shift, particularly from car travel to active or public transport, can also reduce oil use, but is likely too limited to materially affect inflation. Alternative fuels are also limited in scale and not cost effective. Electrification of road transport is the most promising opportunity to materially and cost-effectively reduce oil use in the transport sector. [49]

Road transport electrification can slash oil use

Electric vehicles are now a mature and mainstream technology. In May 2026, EV sales broke records in Australia, with battery electric vehicles (BEVs) comprising 20.6% of all new vehicle sales, and plug-in hybrids accounting for a further 9%.[50] Australia has lagged global trends, with electric cars representing only 15% of sales in 2025, compared with a global average of 25%. Norway is a global leader with electric cars representing 97% of sales in 2025, and China is fast catching up at 55%.[51] The share of large cars and SUVs within EV sales has been consistently increasing over the past few years, and BEV ranges can now cater for the vast majority of daily driving needs.[52]

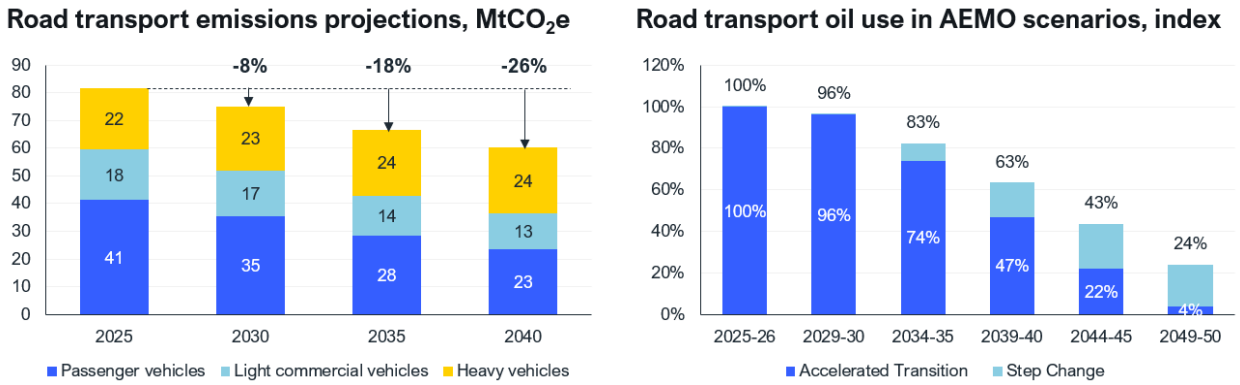
The market is far less developed for larger EVs, but advancing fast. Global sales of electric light commercial vehicles (LCV) increased by 45% in 2025 compared with 2024, and reached 10% or more of new sales in Europe, China and South Korea.[53] For heavy duty vehicles, global electric truck sales doubled in 2025 to reach 9% of new sales.[54] China is a global leader with 28% of new trucks electric. While battery electric trucks carry a price premium in China, fuel cost savings make them cheaper than traditional diesel vehicles, and competitive with LNG-powered vehicles.

[48] IEEFA. Managing Australia's diesel squeeze. 23 April 2026. Pages 5–6.
[49] IEEFA. The perfect storm to boost energy security. March 2026. Pages 10–11.
[50] EV Council. Electric Vehicles Nudge 30% Sales Share as Tesla Model Y Becomes Australia's Best-Selling Car. 3 June 2026.
[51] IEA. Global EV outlook 2026. 20 May 2026. Page 18.
[52] Ibid. Pages 35 and 38–39.
[53] Ibid. Pages 73–75.
[54] Ibid. Pages 80–82.

Australia lags badly, with EVs less than 1% of new heavy vehicle sales between January and May 2026.[55] There are immediate opportunities to increase the uptake of electric vans.[56] While electric utes are still emerging, consumer interest in diesel vehicles appears to be declining.[57]

The Australian government expects EVs to reduce road transport emissions (a proxy for oil use) by 18% by 2035 and 26% by 2040 (Figure 11, left).[58] This reduction is mostly driven by cars (–43%). LCV emissions also reduce materially (–30%) while heavy vehicles increase (+8%).

Figure 11: Road transport oil use reduction, projection and potential



Sources: AEMO, Draft 2026 ISP Inputs and Assumptions workbook; DCCEEW, Australia's emissions projections 2025 chart data.

It is possible to materially accelerate the uptake of EVs beyond these expectations. The Australian Energy Market Operator (AEMO) publishes annual electricity system scenarios to guide planning decisions. The *Step change* scenario is considered the most likely, and the *Accelerated Transition* represents a more ambitious decarbonisation scenario that exceeds government targets.[59]

Both scenarios include full or near-full electrification of road transport in coming decades (Figure 11, right), with much stronger reductions in oil use from 2035 than government projections. The *Accelerated Transition* scenario has oil demand decreasing by 26% by 2035, 53% by 2040, 78% by 2045 and 96% by 2050. This would halve Australia's oil use, and cut transport oil use by about 70%.

In addition, a key benefit of electrification for inflation is that it reduces the overall variability of costs to energy prices. Electric car energy costs are about 60% lower than fossil fuel equivalents (based on 2025 fuel prices).[60] As EVs are powered by domestically produced energy, they also reduce the reliance on fuel imports.

[55] Truck Industry Council. Low and zero emissions truck sales dashboard. Accessed 5 June 2026.
[56] IEEFA. Managing Australia's diesel squeeze. 23 April 2026. Page 7.
[57] The Driven. Diesel ute and SUV sales crunched as buyers look to go electric. 4 June 2026.
[58] DCCEEW. Australia's emissions projections 2025. November 2025. Chart data (Figure 20).
[59] AEMO. Draft 2026 Integrated System Plan. 8 January 2026. Pages 9 and 52.
[60] RACQ. Private vehicle expenses 2025. Accessed 1 June 2026.

Government support needed to accelerate electrification

The federal government has already developed plans and strategies to accelerate transport electrification, and implemented a range of initiatives to support their deployment.[61,62] Key policies include the New Vehicle Efficiency Standard (NVES[63]), tax incentives and infrastructure funding.

By applying declining emissions targets for new cars sold in Australia, the NVES is a key lever to increase the supply of EVs and accelerate their uptake, although there is some flexibility on the mix of vehicles that can meet the target.[64] Electric cars are also exempt from Fringe Benefits Tax (FBT[65]), making EVs purchased through novated leases financially attractive compared with internal combustion engine (ICE) vehicles.[66] This has been credited as one of the key drivers behind recent increases in EV uptake.[67] The government has also allocated AUD500m to improve EV charging infrastructure and innovation through the Driving the Nation Fund.[68,69,70] These measures have helped kick-start the electrification of cars. Federal initiatives are also complemented by state-level support. For example, New South Wales (NSW) has invested more than AUD330m to support EV rollout, including to build an EV charging network.[71]

Significant progress was made in car electrification in the past few years, but some have warned that continued efforts are needed to maintain the momentum. Premature removal of government support could prompt a fast drop in EV uptake, as was seen in New Zealand.[72] Electrification of heavier vehicles hasn't received as much policy support, and is still emerging. Key barriers, especially for heavy vehicles, include:[73]

- **Upfront cost and access to capital**. EVs still command a high price premium in Australia (see Targeted refinancing facility could aid EV investment). While tax exemptions have made a big difference to electric car purchases via novated leases, these only represent a small share of new sales.[74] An impending review of the EV exemption in mid-2027 has created uncertainty on how long it will remain.[75] For heavier vehicles, there are often significant constraints on capital expenditure, or competition for capital allocation, in businesses.

[61] DCCEEW. The National Electric Vehicle Strategy. Accessed 12 June 2026.
[62] Australian government. Transport and Infrastructure Net Zero Roadmap and Action Plan. September 2025.
[63] Australian government, Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA). Australia is introducing the New Vehicle Efficiency Standard. September 2024.
[64] CSIRO. Electric vehicle projections 2024. February 2025. Pages 18–20.
[65] Australian Taxation Office (ATO). Electric car exemptions. 1 April 2026.
[66] RACQ. Private vehicle expenses 2025. Accessed 1 June 2026.
[67] EV Council. State of Electric Vehicles 2025. 15 October 2025. Page 76.
[68] Australian government. Government initiatives supporting electric vehicles. Accessed 12 June 2026.
[69] DCCEEW. National EV strategy. Annual update 2024-25. Pages 11–12.
[70] NSW government. NSW Electric Vehicle Strategy. April 2026. Page 13.
[71] Ibid. Page 4.
[72] EV Council. State of Electric Vehicles 2025. 15 October 2025. Page 20.
[73] AECOM. Electrifying road freight, Pathways to Transition. July 2025. Page 13.
[74] Money.com.au. Novated lease vs car loan: Cost comparison 2026. Accessed 14 June 2026.
[75] ATO. Electric car exemptions. 1 April 2026.

This can make covering the significant cost premium for EVs and the cost of charging infrastructure challenging.[76]

- **Lack of charging infrastructure.** Access to off-street, highway and fast charging networks are key to enable EV adoption for households and businesses. While Australia has made significant progress in the past few years, it still lags globally in EV charging infrastructure deployment: in 2025, it had 40 EVs per charging station while the world average was 11.[77,78] There is a chicken-and-egg issue with early charging network deployment. Indeed, EV sales will remain limited in the absence of a developed charging network, and there is no business case for a charging network while EV numbers are low. In Norway, a study found that early charging network installations had a large impact on EV uptake.[79] Australia particularly lags in the deployment of charging infrastructure for heavy vehicles, perceived by some as the main deterrent to electric truck adoption.[80,81] The time and costs involved in expanding grid capacity to deploy charging networks are significant, particularly in rural and regional areas.[82]
- **Lack of supply.** While a wide array of electric car models are available in Australia, the range of utes and trucks is limited. Only 21 models of electric trucks were available in Australia as of early 2026.[83]
- **Regulatory barriers.** Mass limits and road access rights can constrain the use and payload of electric trucks due to their heavier weight. Curfews unnecessarily limit the use of electric trucks, which are near silent.[84]

Other barriers include the slow turnover of freight fleet, and the cost and time associated with charging.

Given those barriers, there is a strong case for government intervention to unlock private capital. Several organisations have made recommendations on priority policy areas, particularly for accelerating heavy vehicle electrification.[85,86,87,88,89] These include:

- **Financial incentives:** Introduce new subsidies, tax benefits or discounted finance to make EVs cost-competitive, and/or adjust existing incentives such as the Fuel Tax Credit Scheme and the Safeguard Mechanism to provide greater financial driver for electrification.
- **Initial charging network**: Support the deployment of initial charging network, including by enabling necessary grid upgrades.

[76] Climate Change Authority (CCA). Sector Pathways Review, Transport. 2024. Pages 4–6.
[77] Evee. State of Charge: The Complete Guide to Australia's EV Charging Networks in 2026. 28 February 2026.
[78] IEA. Global EV outlook 2026. Electric vehicle charging. 20 May 2026.
[79] Environmental and Resource Economics. Technology Adoption and Early Network Infrastructure Provision in the Market for Electric Vehicles. *Van Dijk J. et al*. 7 July 2022.
[80] EV Council. State of Electric Vehicles 2024. 17 December 2024. Page 52.
[81] The Energy. Electric truck rollout faces roadblocks. 22 May 2026.
[82] Australian Academy of Technological Sciences & Engineering (ATSE). Decarbonising diesel industries. August 2025. Page 20.
[83] Mov3ment. Electric truck report. March 2026. Page 6.
[84] Mandala. Decarbonising Australia's road freight network. March 2026. Page 23.
[85] EV Council. ELECTruck. 1 June 2026. Pages 12–13, 21–22, 24–25.
[86] ATSE. Decarbonising diesel industries. August 2025. Page 26.
[87] AECOM. Electrifying road freight, Pathways to Transition. July 2025. Page 4.
[88] Australian government. Transport and Infrastructure Net Zero Roadmap and Action Plan. Pages 9–11.
[89] EV Council. ELECTruck. 1 June 2026. Page 2.

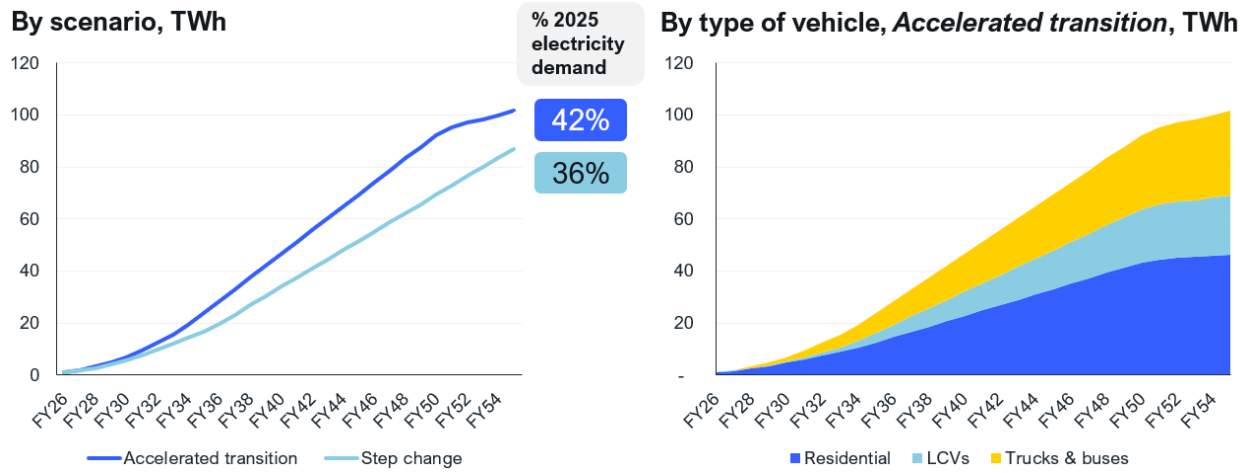
- **First mover support**: Provide initial support to alleviate first-mover risk, increase industry confidence, knowledge and capabilities, and build supply chains. This could include support for demonstration projects and knowledge sharing, as well as additional subsidies.
- **Fixing regulation:** Reform regulations that block electrification, such as mass limits, harmonise dimension laws, review curfews and road access rules; consider extending the NVES to heavy vehicles.

Large-scale grid modernisation: a critical enabler

Scaling up electricity supply will be needed

As transport electrifies, the decrease in oil use will be partly offset by an increase in electricity use. Due to EVs' efficiency benefits, the corresponding increase in electricity demand is less than a third of the decrease in oil use. Based on AEMO's *Step Change* and *Accelerated Transition* scenarios, the additional electricity demand remains very material, with 87–102 terawatt hours (TWh) of electricity demand added by 2055 across the National Electricity Market (NEM) and Wholesale Electricity Market (WEM) in Western Australia, or 36–42% of today's electricity demand (Figure 12).[90]

Figure 12: Impact of transport electrification on electricity demand, NEM and WEM



Source: AEMO, 2025-26 Inputs, Assumptions and Scenarios, EV workbook; Open Electricity.

Transport electrification is only one of the new sources of electricity demand. In total, the two scenarios expect electricity demand to increase by 82–119% by 2055 in the NEM.[91] Meeting this new demand and replacing ageing coal generation will require large investments in renewables, storage and grids. Large-scale wind and solar capacity needs to increase from 26 gigawatts (GW) today to

[90] AEMO. 2025-26 Inputs, Assumptions and Scenarios. 2025 EV workbook. 31 July 2025.
[91] AEMO. Draft 2026 ISP Inputs and Assumptions workbook. 10 December 2025. End use fuel consumption data tab.

58–68GW by 2030 and 120–219GW by 2050.[92,93] Utility-scale storage needs to increase from 9GW today to 27–28GW by 2030 and 32–47GW by 2050.[94] At least 6,000km of new transmission would be needed by 2050, or a 13% extension of the transmission network.[95]

Grid transmission expansions need to be accelerated

Accelerating grid expansions has emerged as one of the most critical enablers to rapidly increase electricity supply. A survey of clean energy investors found that transmission buildout delays and planning assessments were the top two challenges to renewable energy development (with equal ratings).[96] Research by the Clean Energy Investor Group (CEIG) also found that, "delayed transmission could result in lost renewable potential equivalent to up to 17% of annual demand" and could cost up to AUD40bn per year of delay through increased reliance on thermal generation.[97]

The federal government is already providing concessional finance to support grid expansions through the Rewiring the Nation fund.[98] Analysis has found public funding can play a key role in attracting private capital by reducing investment risk, especially in the early stages of projects.[99] However, many barriers remain for the timely deployment of transmission, including: lengthy development and assessment timeframes; inappropriate regulatory tests; tight labour markets and supply-chain issues; social licence considerations, and lack of planning co-ordination. Organisations have suggested government priorities to accelerate transmission should include:[100,101,102,103]

- **Accelerated and improved approval process:** streamlining and accelerating approval processes; improving consistency and co-ordination between agencies; increased flexibility on community engagement, involvement and compensation.
- **Improved regulatory assessment process:** simplified process for nationally significant projects identified by AEMO's Integrated System Plan (ISP) in line with changes already made by some states, including non-network/alternative solutions, including broader benefits, reducing duplication and setting maximum project costs that would trigger reassessment.
- **Improved planning, co-ordination and collaboration:** co-ordinating generation and transmission planning, improved cross-NEM and cross-agency co-ordination, a consistent pipeline of work to help secure labour, early securing of land and supplies, and upscaling projects where cost-effective and likely to be required in the future.

[92] Open Electricity. Tracker. Accessed 4 June 2026. Capacity, NEM.
[93] AEMO. Draft 2026 ISP generation and storage outlook. 13 March 2026. Summary Regional tab.
[94] Open Electricity. Tracker. Accessed 17 June 2026. Capacity, NEM.
[95] AEMO. Draft 2026 Integrated System Plan. 8 January 2026. Page 57.
[96] Clean Energy Investor Group (CEIG). 2025 Clean Energy Outlook. July 2025. Page 5.
[97] CEIG. Transmission bottleneck analysis. November 2025. Pages 4 and 17. Net Present Value (NPV) of costs over 2025–2040.
[98] DCCEEW. Rewiring the Nation. 13 May 2026.
[99] Clean Energy Council and Energy Networks Australia. Market Sounding Report on Transmission. 3 August 2022. Pages 27–28.
[100] Ibid. Page 13.
[101] CEIG. Transmission bottleneck analysis. November 2025. Pages 20–21.
[102] CCA. 2024 Sector Pathways Review, Electricity and Energy. 2024. Pages 8–12.
[103] Energy Week. Comments made during the panel discussion: "What are the effective pathways to delivering major transmission corridors on time despite social licence, cost escalation and supply-chain pressure?" 10 June 2025.

The interventions mentioned above could unlock vast amounts of private investment. AEMO estimates the total present value of the investments included in its *Step Change* scenario is AUD156bn. The transmission element is comparatively small at AUD9bn.[104] The vast majority of these investments would be supported by private capital.

Innovative solutions are also being developed to increase the capacity and utilisation of existing networks quickly to circumvent transmission bottlenecks. These include: deploying batteries to increase the utilisation of existing powerlines; replacing a line with advanced conductors to increase capacity; using Dynamic Line Rating sensors to get real-time data for line-use optimisation; deploying Advanced Power Flow Control to shift power from overutilised lines to underutilised ones, and optimising network flow efficiency by leveraging digital twins.[105] Distribution networks in NSW also suggested existing distribution capacity could be better utilised to enable new generation, buying time to deploy transmission.[106]

EV charging requires grid planning and upgrades

Other grid upgrades or management solutions will be required to enable the deployment of EV charging infrastructure. Widespread and unco-ordinated deployment of residential EV charging could lead to fluctuating demand requirements and costly grid infrastructure upgrades. Efficient integration into the grid will be key to keep costs down.[107]

Simple adjustments such as ensuring EV charging happens when grid demand is low, and is deferred when grid demand is high, can prevent unnecessary network upgrades.[108] For example Ergon Energy and Energex found that Dynamic Operating Envelopes (an intelligent, dynamic limit on how much electricity a consumer can import from or export to the grid) could prevent about 75% of grid constraints from EV supply equipment.[109] Appropriately managing those new loads will require new data, analytics capabilities and technical standards.[110,111,112]

Integrating public EV chargers with solar and storage assets, installed at the EV charger or nearby, should be considered. A study found that developing local energy communities — for example, integrating EVs with solar-powered charging, and fostering peer-to-peer trading — could deliver 31–55% reductions in energy costs compared with traditional energy supply models.[113]

[104] AEMO. Draft 2026 Integrated System Plan. 10 December 2025. Page 18.
[105] CurrENT. Innovative grid technologies. Accessed 15 June 2026.
[106] Ausgrid, Endeavour Energy and Essential Energy. NSW Distribution System Plan Overview. November 2025.
[107] Energies. Grid impacts of electric vehicle charging: a review of challenges and mitigation strategies. *Tayri A., Ma X.* 17 July 2025.
[108] IEEFA. Why Australia is likely underestimating the benefits of electric vehicles. 25 March 2024.
[109] Ergon Energy and Energex. EV charging and QECM V4: 2024. 30 January 2023. Pages 2–3.
[110] AEMO. Recommendations paper: Electric Vehicle Data. April 2025. Pages 24–25.
[111] Infrastructure News. Australian distribution networks face 'critical' visibility gap as EV adoption accelerates, warns EA Technology. 24 March 2026.
[112] Enx. EV technical standards for grid operation. December 2023. Page 5.
[113] Institute of Electrical and Electronics Engineers. Innovative Peer-to-Peer Energy Trading in Local Energy Communities Featuring Electric Vehicle Charging Infrastructure. September 2024.

The role of Distribution Network Service Providers (DNSPs) in the rollout of EV charging has come under scrutiny. A stakeholder group suggested the rollout should be driven by charge-point operators and based on consumer demand, with DNSPs acting as enablers rather than default owners.[114] DNSPs can provide data on available capacity and information on the cost and feasibility of deploying charging stations at specific locations, and should streamline the connection process.[115]

A recent review of freight electrification found significant upgrades to transmission and distribution networks would be required to support heavy EV charging. A key challenge will be fast charging networks along Australia's main freight corridors, which will require Megawatt Charging Systems, enabling charge rates greater than 1 megawatt. The study estimated 165 freight-charging hubs would be needed to support freight electrification on key routes, and proposed a staged approach starting with the routes most likely to electrify first. Several key routes will require new connections to transmission networks (for example, many secondary and regional routes, as well as Victoria's Hume Highway), and some distribution networks would need upgrades to reach charge points.[116]

More work is needed on a detailed plan for heavy EV charging and how it will be integrated in electricity system planning — outlining when, where and how to build charging hubs.[117] The IEA advises that planning charging stations near transmission lines and substations can help minimise costs, as well as "right-sizing" connections from the start, based on future demand rather than ad-hoc and short-term distribution grid upgrades. Co-locating charging stations with renewables and batteries, or battery-swapping solutions could be alternative approaches. Given the long timeframes for grid upgrades, planning needs to start as soon as possible.[118]

Smart capabilities can deliver electricity system benefits

The total usable storage capacity in Australia's EV fleet could be over three times the NEM's total storage capacity by 2050, so EVs with bidirectional charging capability could become one of the largest form of flexible electricity generation.[119] Bidirectional charging allows EVs to both charge and export from their batteries to loads, homes or the grid. Vehicle-to-grid (V2G) is a specific application of bidirectional charging that allows the batteries to feed electricity back into the grid. This in turn could generate revenue for vehicle owners as well as boost electricity supply flexibility and reduce the need for expensive gas-fired electricity generators to run during peak times.[120]

Bidirectional charging could deliver electricity system savings of almost AUD3bn in net present value (NPV) by reducing the need for generation and storage assets, and the need for distribution network upgrades.[121] IEEFA has previously estimated a household with a bidirectional charging-enabled EV

[114] Nexa advisory. Joint response to DCCEEW's Accelerating Electric Vehicle Charging Program design. 10 June 2026.
[115] Oakley Greenwood. Streamlining the connection of EVSE and large CER. 25 October 2024. Page 11.
[116] AECOM. Electrifying road freight, Pathways to Transition. July 2025. Pages 3, 35, 42 and 46.
[117] EV Council. ELECTruck. 1 June 2026. Pages 16–17.
[118] IEA. Global EV outlook 2023. Trends in charging infrastructure. 23 April 2023.
[119] enX, for ARENA and Race for 2040. National Roadmap for Bidirectional EV Charging. 12 February 2025. Page 8.
[120] IEEFA. Submission Inquiry Into the Transition to EVs. 20 March 2024.
[121] enX, for ARENA and Race for 2040. National Roadmap for Bidirectional EV Charging. 12 February 2025. Page 8.

could earn AUD1,000–3,700 a year, based on existing revenue streams. However, to realise the benefits on offer from bidirectional charging, Australia's electricity market will need to be equipped with the right regulations, standards and market settings to enable it. This includes ensuring consumers can be compensated for the wide range of services their EVs can provide.[122]

Further, enX also noted that, "the immediate issue that needs to be addressed for Australia to access near-term benefits from bidirectional charging, is to incentivise automakers to release this capability in our market over the next 24 months".[123]

Targeted refinancing facility could aid EV investment

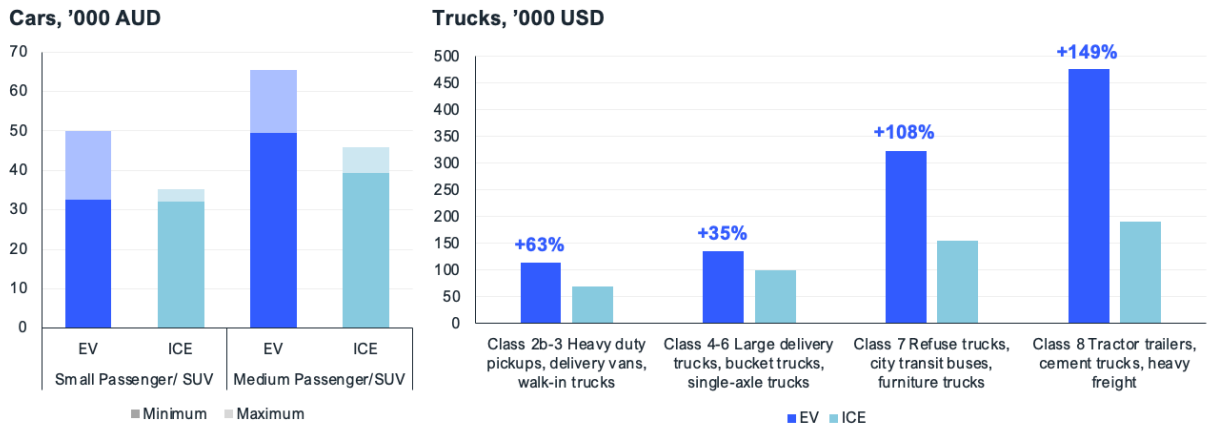
EVs still face a high price premium in many segments

The price premium of electric cars has dropped in many markets, especially in China where EVs are mostly cheaper than ICE equivalents.[124] In Australia, a material price premium usually remains overall but is being pushed down by the cheapest models (based on a sample of models, Figure 13, left). For smaller passenger cars and SUVs, the cheapest EVs have reached purchase price parity, and offer a lower five-year cost of ownership than ICE vehicles. For medium passenger cars and SUVs, the picture is different, with a material cost premium at purchase that persists over the five-year cost of ownership unless the car is financed via a novated lease.[125] Based on a more detailed price comparison, the EV council found that, "when comparing the top 10 BEV sales in 2025 to their closest ICE equivalent, there is still a significant average cost difference of $9,500 and BEVs were on average 25% more expensive".[126]

When it comes to trucks, the cost premium is particularly high in the heaviest vehicle categories (Figure 13, right). Based on US data, a cost premium of 35–149% exists across categories. Based on US total cost of ownership (TCO), operational savings are not yet able to compensate for this premium based on average kilometres driven by trucks in Australia.[127,128] Anecdotal case studies show some can be profitable already, such as trucks covering large daily distances in urban areas with regular breaks at their central depot, especially at times of high diesel prices.[129]

[122] IEEFA. Why Australia is likely underestimating the benefits of electric vehicles. 25 March 2024.
[123] enX, for ARENA and Race for 2040. National Roadmap for Bidirectional EV Charging. 12 February 2025. Page 2.
[124] IEA. Global EV outlook 2026. 20 May 2026. Pages 48 and 52.
[125] RACQ. Private vehicle expenses 2025. Accessed 14 June 2026.
[126] EV Council. Review of the Electric Car Discount – EVC submission. 6 February 2026. Pages 11–12.
[127] International Council on Clean Transportation (ICCT). Total cost of ownership (TCO) calculator. Accessed 14 June 2026.
[128] DITRDCA. Australian Infrastructure and Transport Statistics Yearbook 2025. 12 December 2025. Tables 4.2 and 4.6a.
[129] The Energy. Electric truck rollout faces roadblocks. 22 May 2026.

Figure 13: Upfront cost of electric and ICE vehicles

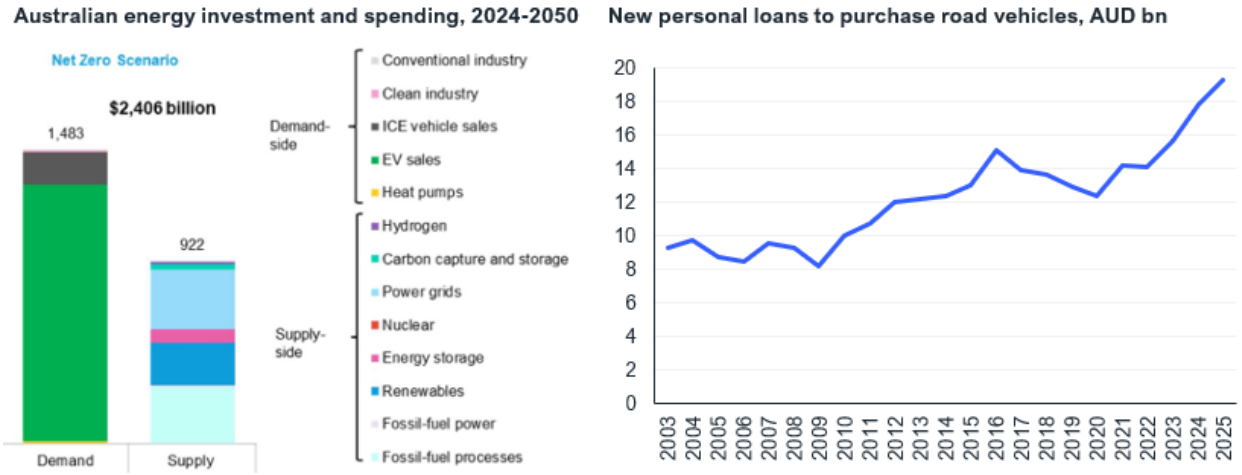


Sources: IEEFA analysis based on a sample of models from RACQ, Private vehicle expenses 2025 (cars) and ICCT, Total cost of ownership (TCO) calculator (trucks).

EVs represent a momentous financing task

Bloomberg New Energy Finance (BNEF) estimated EV sales between 2024 and 2050 could reach AUD1.3 trillion in a net zero scenario (Figure 14, left).[130] This is the single largest component of the total investment required for the net zero transition, which stands at AUD2.4 trillion. It is materially larger than the investment required on the supply side (AUD922bn), including renewables, energy storage, grids, hydrogen, carbon capture and storage, and fossil fuel processes.

Figure 14: Finance requirement for electric vehicles



Sources: Bloomberg NEF, Urgent Scale-Up of Clean Technologies Needed to Keep Australia on Net-Zero Trajectory; ABS, Lending indicators.

[130] Bloomberg NEF. Urgent Scale-Up of Clean Technologies Needed to Keep Australia on Net-Zero Trajectory. 19 August 2024.

It is likely a large share of this investment will need to be supported by finance. Personal finance for road vehicle purchases has doubled since 2010 (Figure 14, right).[131] In 2025, households made nearly AUD20bn in new loan commitments for road vehicle purchases. Household surveys suggest about a third of car purchases (used and new) require financing.[132] The share increases as the value of the car increases — 65% of vehicles above $50,000 are financed.[133] Car loans through banks and dealerships dominate financing, with novated leases representing less than 15%. The average reported car loan interest rate was 8.92%, with an average term of five years.[134]

In heavy vehicles, trucks are significant investments that usually require finance. Most truck operators reportedly use chattel mortgages (loans secured against the trucks). Some use finance leases where the lender owns the truck. Most lenders offer up to 100% finance on new trucks and 80–90% on used trucks.[135] Chattel mortgage rates typically range from 7.5–20% depending on the age of the asset, the business's financial credential and the type of sale.

Interest rate increases make the task harder

Traditional monetary tools can make the energy transition relatively harder by increasing the cost and reducing the availability of finance. Wood Mackenzie explained how increased interest rates affect clean energy solutions more than oil and gas developments: "The higher cost of borrowing affects the energy and natural resources sectors unevenly. Highly capital intensive and often reliant on subsidies, low-carbon energy and nascent green technologies are most exposed. Debt accounts for a higher share of the capital structure for low-carbon energy sectors, too. The impact of higher interest rates grows as the capital expenditure (capex) share of total expenditure increases. In contrast, the oil and gas industry, while also highly capital intensive, has far less exposure to the cost of debt, so is less affected by higher rates."[136]

The key investment that can reduce Australia's oil dependence is EVs. When EVs have a high cost premium, as is the case for articulated trucks, a 1% increase in the cost of finance can have a significant impact on the TCO. Using US cost data, IEEFA estimates each percentage point increase in the cost of finance adds more than AUD40,000 to the TCO for an EV compared with an ICE vehicle (for an average road user).[137]

As such, monetary action to constrain the spillover of oil price shocks makes it harder and more costly to transition to the very technologies that can protect the economy from the impacts of future oil price shocks.

[131] ABS. Lending indicators. 13 May 2026. Table 27.
[132] Money.com.au. Australian Car Finance Statistics 2026. Accessed 14 June 2026.
[133] Fleet Auto news. Dealers win more finance business, buyers resist shopping around for car loans, survey finds. 29 April 2022.
[134] Money.com.au. Australian Car Finance Statistics 2026. Accessed 14 June 2026.
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A refinancing facility for EVs could make a difference

To improve the cost effectiveness of EVs, and protect them from the impact of monetary policy tightening, the RBA could introduce a refinancing facility offering lower rates for EVs.

The New Economics Foundation proposed such a scheme for the Bank of England — a temporary Term Funding Scheme for Energy Price Stability (TFSEPS): "Via the TFSEPS, the Bank would offer commercial banks long-term loans, at a rate below Bank rate, to refinance their lending towards clean energy projects and buildings retrofits. This would increase clean energy supply and reduce the demand for fossil fuels, insulating the economy from fossil fuel price shocks and smoothing energy price fluctuations."[138]

There are precedents for refinancing schemes incentivising clean energy and energy efficiency lending, including two major examples still operating today:

- **China's Carbon Emission Reduction Facility** provides discounted central bank loans for clean energy, energy conservation and environmental protection, and carbon reduction technology. It allows refinancing of 60% of relevant loans at a discounted rate of 1.75%.[139] By the end of 2024, the facility was estimated to have supported USD203bn in green loans.[140]
- **Japan's Climate Response Financing Operation** provides zero interest financing to lenders supporting action to address climate change.[141] Two auctions are held each year, with the Bank of Japan disbursing YEN11 trillion (AUD96bn) at the latest auction in January 2026.[142]

In March 2026, the French National Assembly adopted a recommendation that the ECB research green dual interest rates, such as through targeted long-term refinancing operations.[143]

The RBA used a term funding facility to help the supply of credit during the COVID-19 pandemic. The bank provided loans at a fixed rate of 0.25% initially, later decreased to 0.1%, for three years.[144] The facility had AUD188bn of funding outstanding when it closed in June 2021.[145]

IEEFA conducted a high-level analysis of how much finance could be required to support EV investment in Australia until vehicles reach cost of ownership parity. We found it was unlikely to require more than AUD70bn at its peak, much lower than the COVID-19 facility.[146] More detailed modelling would be required to accurately estimate the scale of finance needed.

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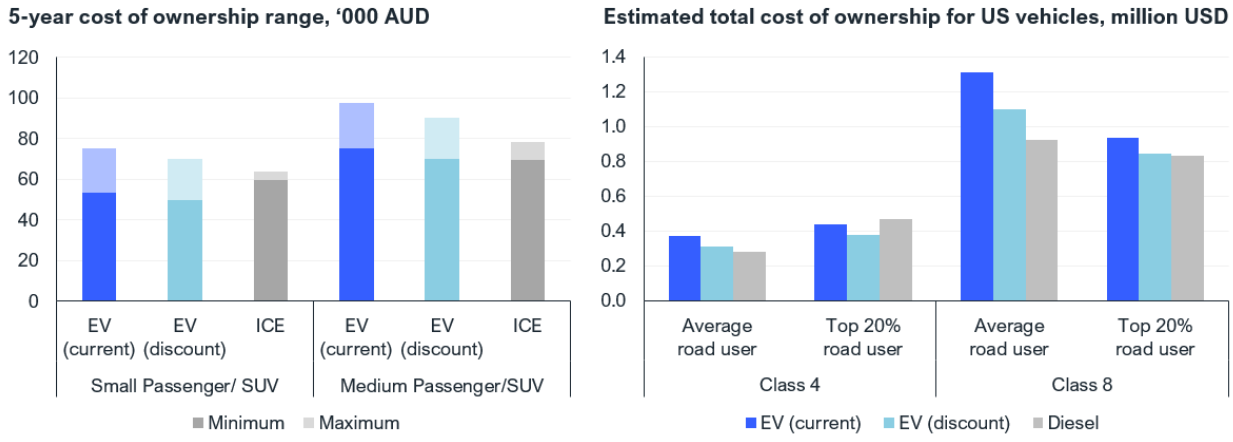
Figure 15 illustrates the impact such a facility could have on EV cost of ownership for cars (left) and trucks (right). The analysis was based on a sample of Australian models for cars, and is only illustrative for trucks as it is based on costs in the US. It assumes a refinancing facility could offer finance to commercial banks at a rate of 0.1% (similar to the COVID-19 facility). This was applied as a 4.7 percentage point discount on current interest rates offered, given the yield for Australia 10-year government bonds is about 4.8%.[147] Banks would apply an interest rate premium to reflect the costs of administering the loans, as well as the consumer and product risk. The analysis also assumes the concessional finance is accessible for 100% of vehicle costs – noting that this percentage could decrease as the EV cost premium decreases over time.

It shows discounted finance could make a material difference to the financial attractiveness of EVs, both cars and trucks. It could be sufficient to make EVs cost attractive for certain segments or user profiles, but would likely need to be complemented by other financial incentives in other cases.

Figure 15: Impact of discounted finance on EV cost of ownership



Source: IEEFA analysis based on RACQ, Private vehicle expenses 2025 and ICCT, Total cost of ownership (TCO) calculator. Notes: Cars: Based on sample of models, 15,000km driven a year. Current interest rates: ICE 6.7%, electric 6.0%. Trucks: kilometres driven based on Australian statistics for rigid trucks (class 4) and articulated trucks (class 8); top 20% of road users represent 50% of kilometres driven; lifespan of 15 years, except the top 20% road user class 8 (7 years). Current interest rates: 7.5% for all vehicles.

A refinancing facility targeted at EVs would not be duplicative with the Clean Energy Finance Corporation (CEFC) for a few reasons. It operates at a different scale; the CEFC has access to a budget of about AUD33bn, a fraction of the investment needed in EVs.[148] The CEFC is limited in the discounts it can offer, with an investment mandate to achieve an average of 2–3% above the five-year Australian Government bond rate.[149] As a point of comparison, the CEFC recently committed up to AUD60m for EV finance with a 0.5–1 percentage point discount.[150] Figure 15 (left) already includes discounted loan rates for EVs in the current case, based on RACQ's green loan discount of 0.7

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percentage point. Another difference is that the RBA is uniquely placed to offer finance at rates that are immune to changes in the cash rate.

The CEFC could leverage its deep sectoral expertise to support the deployment of an EV financing facility, for example by contributing to defining the percentage of EV finance that would be eligible for the discounted term funding facility in various segments, and when cost parity has been achieved.

The RBA may have concerns about a green refinancing facility countering the impacts of its monetary policy interventions and slowing the return of inflation to within its target range, thus delaying the energy transition.[151] If the facility focuses on EV finance, this impact should be limited given EVs are mostly imported, and as such are not expected to create significant domestic economic activity, rather a shift in purchases. The facility is also unlikely to decrease the cost of transport for users, rather making EVs approximately cost neutral with ICE vehicles. This should also limit the secondary effects on consumption.

Conclusion

Australia's high reliance on volatile oil imports is affecting its price stability, with oil price shocks contributing to all the inflation spikes experienced in recent years. While monetary policy is important to limit the spillover effects of oil price shock-driven inflation, it can come at significant economic pain, and can worsen the business case to shift away from oil.

Technology solutions that can cost-effectively reduce Australia's dependency on oil are available, especially for transport, which is the key contributor to inflation. Electrification could more than halve road transport oil use by 2040, drastically reducing the impact of oil price shocks on inflation. To unlock this opportunity, new instruments should be added to Australia's price stability toolkit:

GOVERNMENT	Accelerate transport electrification	• Provide continued, predictable support for electric car deployment. • Scale up public funding for early heavy EV charging network. • Incentivise early heavy EV deployment to build capabilities and supply chains. • Remove regulatory blockages and introduce requirements for heavy EVs.
	Accelerate grid modernisation	• Improve transmission approval, planning and regulatory assessment. • Accelerate the deployment of innovative solutions to reduce system costs. • Develop a detailed plan for heavy EV charging. • Accelerate the deployment of bidirectional charging and enablers.
RBA	Reduce cost of finance for EVs	• Consider introducing a targeted refinancing facility providing discounted loans to commercial banks for EV financing.

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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. www.ieefa.org

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