

ECONOMIC AND POLICY OUTLOOK

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ABOUT THIS PUBLICATION

CEDA's Economic and Policy Outlook (EPO) 2023

looks at the key issues likely to shape economic and policy outcomes in the year ahead. It provides valuable analysis to help policy makers and business respond to critical issues.

EPO is Australia's premier publication and series of events held in capital cities focusing on the Australian economy and policy for the year ahead.

Running for more than 40 years, the EPO brings together political, economic and business leaders and provides CEDA members with business intelligence on the environment they will be operating in over the next 12 months.

The release of EPO marks the start of CEDA's yearly program of events and research. The publication provides a retrospective of the previous year and an outlook on the year ahead to provide members with insights into the policy and economic landscape.





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About CEDA

CEDA is Australia's leading member-driven think tank. Our purpose is to achieve sustainable longterm prosperity for all Australians.

Our trusted independence, and a deep and broad membership base that extends across all sectors, states and territories, enables us to bring diverse perspectives and insights to guide and advance policy debate and development in the national interest.

We aim to influence future economic, social and environmental outcomes by:

- Promoting public discussion of the challenges and opportunities facing Australia;
- Enabling members to shape future outcomes through policy and their own actions;
- Partnering and collaborating to tackle emerging opportunities and entrenched challenges; and
- Advocating for policy change based on our independent research insights.

Our work is overseen by our independent Board of Directors and our research is guided and approved by an independent Research and Policy Committee whose members are leading economists, researchers and policy experts.



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ECONOMIC OUTLOOK: THE ADJUSTMENT WE HAD TO HAVE



Jarrod Ball Chief Economist, CEDA

Jarrod Ball joined CEDA as Chief Economist in 2017 with over 15 years of experience as an economist across the public and private sectors. He has held senior roles at the Business Council of Australia, in EY's advisory services practice and at BHP. Jarrod also worked in the Federal Government and was a lead adviser on microeconomic reform for the Victorian Departments of Premier and Cabinet and Treasury and Finance. He is a member of CEDA's Council on Economic Policy and the Melbourne Economic Forum.

Economists have entered 2023 seesawing on their predictions for the global economy. The uncertainty that pervaded 2022 was driven by geopolitical tensions and the ongoing COVID-19 pandemic. These factors remain, but have been overtaken by rising inflation. Now, the primary driver of uncertainty is how far central banks still must go to tame price pressures, and the pace at which consumer and business activity cools in response to higher interest rates.

Amid this uncertain global outlook, Australian policymakers' nerves will be tested throughout 2023. Barring any new external shocks, however, Australia will avoid recession. Higher interest rates and cost-of-living concerns will increasingly bite for consumers, and business will remain cautious until inflation begins to abate and there are more encouraging signs of growth. There are still several factors that will bolster Australia's prospects in 2023. Migration is rebounding strongly and China's re-opening – and the improvement in Australia-China relations – will boost trade. This will add momentum to a recovery in services exports and maintain robust demand for Australia's resources. In addition, consumers could well prove more resilient to inflation and challenging economic conditions than expected if the labour market holds up.

This backdrop reinforces the need for the Federal Government to bolster community confidence in 2023. It can do this by renovating economic institutions and settings that are vital drivers of stability and growth, beginning with its response to the reviews of the Reserve Bank of Australia (RBA) and the migration system, both due in early 2023. Further, it can continue to demonstrate that it is serious about fighting inflation in its second budget in May. The government must do this while continuing to navigate volatile energy markets and implementing new policies to accelerate decarbonisation.

Major economies moving at mixed speeds

The global economy is mixed and volatile, with many nations hanging precariously on the brink of recession.

In the United States, most economists believe that a recession is possible this year, but it should be mild if inflation can be contained and there is only a moderate increase in unemployment as forecast. Unemployment hit a 53-year low in January, which is good news for households but will put further pressure on the US Federal Reserve to keep raising interest rates.¹ Consumer spending has already been falling as household savings dissipate, weighing on growth. At the same time, continuing global demand for energy and food should cushion any hit to US exports from slower global growth.

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Consumers could well prove more resilient to inflation and challenging economic conditions than expected if the labour market holds up.



China is shaping up as a bright spot for the global economy this year, with growth expected to accelerate to more than four per cent after it loosened strict COVID restrictions.

While the Eurozone may also avoid a recession in 2023, the year is likely to be characterised by a combination of low growth and strong inflationary pressures. Inflation is running hot across the bloc, with major economies such as Germany enduring double-digit growth in prices. The European Central Bank has been raising interest rates, including with supersized hikes of 75 basis points. This is weighing down on confidence and will slow activity in the period ahead, based on forward indicators such as consumer sentiment and Purchasing Managers' Indices (PMI).

On the positive side, gas demand is coming down, increasing the chances that Eurozone countries will avoid gas shortages and rationing.² Unemployment has also reached record lows.

The outlook is more bleak in the United Kingdom, which starts the year on the brink of a prolonged recession. In addition to high inflation, the UK is the only advanced economy that starts 2023 with the number of people in jobs less than what it was before the pandemic, and real wages that will be back at 2006 levels.³

In contrast, China is shaping up as a bright spot for the global economy this year, with growth expected to accelerate to around five per cent after it loosened strict COVID restrictions.⁴ While the rest of the world is tightening monetary and fiscal policy, Chinese authorities will have more room to ease in 2023, with ample policy support predicted to lock in a strong recovery. Structural reforms to create a more level playing field for the private sector will also support stronger confidence and growth in 2023 and beyond.⁵ Nonetheless, amid soaring infections, China's ongoing COVID policy response will warrant close monitoring, as will any signs of further distress in the real estate sector.

Inflation remains the key driver of uncertainty at home and abroad

The subdued outlook for the global economy reflects the simultaneous tightening of monetary policy across most jurisdictions to bring high inflation under control. Across most advanced economies inflation has now peaked, due to a combination of policy tightening, demand easing and supply-chain pressures gradually dissipating (Figure 1).

FIGURE 1



Proportion of advanced economies with rising inflation

Source: World Bank 2023 · Created with Datawrapper



Headline annual inflation was still rising at a solid pace at the end of 2022 to reach 7.8 per cent.



Core inflation, which strips out volatile items such as energy, was still running at almost seven per cent.



Money supply in the US economy shrunk for the first time on record in the second half of 2022.



The current inflationary episode has revived analysis of the link between the growth of money supply in the economy and inflation. While this theoretical link has lost prominence since the 1970s and 1980s, the Bank for International Settlements (BIS) finds that there is evidence that money growth and inflation have been closely linked in this recent episode.⁶ This provides a hint of optimism that inflation will ease in 2023, with money supply in the US economy shrinking for the first time on record in the second half of 2022.⁷

Australia was lagging the global inflation cycle on the way up and appears to be doing so on the way down, with headline annual inflation still rising at a solid pace at the end of 2022 to reach 7.8 per cent (Figure 2).⁸ Core inflation, which strips out volatile items such as energy, was still running at almost seven per cent.

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The Bank for International Settlements (BIS) finds that there is evidence that money growth and inflation have been closely linked in this recent episode.

FIGURE 2

Widespread inflationary pressures

Annual CPI growth (%), December 2022



Source: ABS · Created with Datawrapper

Australia is following the pattern of other advanced economies, with services inflation now becoming more prominent, outpacing goods inflation at the end of 2022. Some see this as a sign that inflation is no longer an imported phenomenon, with the domestic economy now increasingly driving price pressures. It is unclear whether this will become entrenched. Given the last three years of substantial disruption and moderate services inflation, this looks more like a correction than a breakout in prices at this stage.

The RBA believes that inflation is likely to have peaked at the end of 2022. The first sign of whether it has in fact peaked will be at the beginning of March, when the ABS releases its monthly data for January. Monetary policy acts with a lag, so much of the economic impact of the RBA's rate rises since May last year will only materialise in 2023. The RBA's forecast gradual drop in inflation to 4.75 per cent by the end of 2023 is predicated on this long lag.

The jobs market will cool (but by how much)

The hallmark of Australia's economic recovery from COVID has been the strong labour market, with more than 550,000 additional people in work compared with the start of 2020.⁹ One of the most important determinants of whether policymakers can engineer a soft landing as growth slows in 2023 will be how the jobs market responds.

A natural consequence of bringing inflation under control will be slower employment growth (Figure 3). It slipped at the end of 2022 and job vacancies are falling, highlighting that this adjustment is already underway. Job advertisements were down in every state and territory except Tasmania in December, with Victoria and New South Wales leading the decline.¹⁰ Trades and services was the only industry to maintain positive momentum in the month.

FIGURE 3

Inflation employment nexus

Year-ended growth (%)

- Inflation - Employment



Source: ABS · Created with Datawrapper

With an acute skills shortage so fresh in their minds, it is possible that some businesses will take a longer-term view and hoard labour in 2023 while they monitor the business environment and reassess their growth prospects.

Policymakers will be hoping that this has a moderate impact on the unemployment rate, with the RBA forecasting a four per cent unemployment rate by the middle of 2024. They may well get a helping hand from business. With an acute skills shortage so fresh in their minds, it is possible that some businesses will take a longerterm view and hoard labour in 2023 while they monitor the business environment and reassess their growth prospects. In this case, hours worked will absorb more of the labour market pressure.

As the labour market loosens, this is likely to dampen recent wages momentum by the second half of the year. In the September quarter of 2022 wages grew at their fastest annual rate in almost 10 years at 3.1 per cent, driven in part by award wage increases.¹¹ Nonetheless, real wages have been in decline and this trend will not reverse until at least 2024. The biggest impediment to real wage rises at the present time is inflation, a point which RBA Governor Philip Lowe was at pains to emphasise at CEDA's Annual Dinner at the end of 2022, and will no doubt continue to highlight in public communications through 2023.

There are more than 550,000 additional people in work compared with the start of 2020.



The **RBA** is forecasting a **four** per cent **unemployment rate** by the middle of **2024.**



FIGURE 4



Westpac-Melbourne Institute consumer sentiment index

Source: Westpac Melbourne Institute · Created with Datawrapper

The cautious consumer returns

As real wages go backwards, consumers' purchasing power is declining, adding to the growing pressure of rising interest rates and the wealth effects of the weakening of housing and other asset prices. To date, household spending has remained strong, but household savings are now back to pre-pandemic levels, retail sales have turned and consumer sentiment remains in the doldrums (Figure 4), signalling a much more cautious consumer is emerging this year.

To date, household spending has remained strong, but household savings are now back to pre-pandemic levels, retail sales have turned and consumer sentiment remains in the doldrums. The negative wealth effects of declining home values are now being felt across most capital cities, except for Perth and Adelaide (Figure 5).¹² The capital cities with the greatest declines are also home to the largest loans and repayments, further reinforcing the housing pain that will be concentrated in the south-east corner of the country.

FIGURE 5

Home values

Annual % change at 31 December 2022



Source: CoreLogic • Created with Datawrapper





Housing interest payments are now rising at the fastest rate since 2009-10.

Housing interest payments may still be relatively low as a ratio of disposable income, but they are now rising at the fastest rate since 2009-10 (Figure 6). These increases will gather pace in 2023, as over 800,000 loans switch from ultra-low fixed rates to variable rates.¹³ This further underlines the careful path that the RBA must tread to bring inflation under control while maintaining positive economic growth.

FIGURE 6

Housing interest payments

Ratio of interest payments on housing debt to disposable income (%)



Source: RBA · Created with Datawrapper





Business grappling with cost and uncertainty

Australian business leaders are feeling far more optimistic than their international counterparts, with a majority having a positive outlook for the domestic economy.¹⁴ Despite this, as consumers tighten their belts, growth will be much more subdued, particularly in the retail and services sectors. In recent forums, CEDA members have reported reduced hiring intentions and tighter cost controls. Recent business surveys also show that forward orders have lost momentum and high input costs are still causing pain (Figure 7).¹⁵

FIGURE 7

Producer Price Index



Source: ABS · Created with Datawrapper

Business intentions in 2023 will move in lockstep with the path of inflation and consumer sentiment. While many Australian businesses are beginning the year in a cautious mood, the quicker inflation is brought under control and the more resilient consumers prove to be, the more confident they will be in focusing on long-term growth plans over short-term cost cutting.

Globalisation still recovering from pandemic hit

A notable feature of the economic fallout from COVID has been the hit to global trade, with the current recovery projected to be the weakest of the last five recessions (Figure 8).¹⁶ Global trade growth was already plateauing before the pandemic amid a rise in protectionist policies. The pandemic further weakened it, with supply-chain disruptions hitting goods and travel restrictions hurting services trade.

FIGURE 8

Global trade growth after recessions

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The current recovery

is projected to be the

weakest of the last

five recessions.



Source: World Bank 2023 • Created with Datawrapper



The Australian story is different, with total goods and services exports growing throughout the pandemic. Continuing demand for Australian resources at record prices has seen our goods exports continue to grow rapidly.¹⁷ Meanwhile, services exports are still just two-thirds of their pre-pandemic peak.

As long as demand for Australian resources remains strong, and migration recovers to bolster our battered tourism and international education sectors, trade will continue to provide strong tailwinds for the economy. The energy transition is also starting to drive new demand for Australian minerals, with exports of lithium expected to almost double between 2021 and 2024.¹⁸ Concerns about global food security should also put our agricultural exports in a strong position.

The forward indicators and recent migration data are encouraging – interest in migrating to Australia remains above pre-pandemic levels and net overseas migration has now staged a v-shaped recovery (Figures 9 and 10). Federal Government action to reduce the visa backlog and make the migration system more efficient will be critical to assist the services trade recovery.

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FIGURE 9

Google search interest in migrating to Australia

Search interest index* (100 = most searches), 4 week moving average



*Based on an index of relevant worldwide search terms, drawing on findings from studies such as P.Wanner 2021, 'How well can we estimate immigration trends using Google data?', *Quality and Quanity*. Source: Google Search Trends • Created with Datawrapper

FIGURE 10

Net overseas migration



Source: ABS • Created with Datawrapper

Confidence is key in the short and long term

The challenging outlook and adjustments being made by business and households underline the importance of effective policy to support confidence in 2023.

The Federal Government has a substantial reform agenda underway. However, unlike previous periods of expansive white papers with unrealised ambition, this Government's focus is on targeted and pragmatic changes across several policy areas. Federal Treasurer Jim Chalmers' recent essay on values-based capitalism also made clear the Government's intent to bring different solutions and players to the table to solve stubborn policy problems.

The Treasurer will need to continue the prudent path laid out in his first budget when he hands down his second Federal Budget in May. Fiscal policy will need to be well-calibrated with monetary policy to avoid adding to inflation. This will be particularly difficult at a time when there are justified calls for more support in areas such as Medicare, Commonwealth Rental Assistance and income support. This will be helped by providing a clearer path to fiscal sustainability over the medium term, outlining the steps that will address the structural gap in the Budget and accelerate economic growth. The release of the Treasurer's first intergenerational report will show the yawning fiscal gap growing ever wider, and should help make the case to the community.

The Federal Government can also bolster confidence in the monetary policy framework when it receives the Review of the RBA in March. Submissions to the review have outlined significant opportunities to improve the central bank's communication, governance and institutional arrangements to apply monetary policy tools more effectively. The Treasurer will do well to comprehensively respond to its findings before handing down the Budget in May.

Energy policy will also continue to feature prominently in federal and state government agendas. As CEDA Senior Economist Andrew Barker notes in Chapter 2, government action to protect consumers from high energy prices is warranted. Nonetheless, all interventions carry

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In 2023, governments must progress work on more comprehensive policy responses for the future – the challenging geopolitical situation coupled with a rapid transition to renewable energy means episodes of significant energy market volatility will continue beyond this year.

difficult trade-offs even if they moderate retail energy price increases in the short-term. In 2023, governments must progress work on more comprehensive policy responses for the future – the challenging geopolitical situation coupled with a rapid transition to renewable energy means episodes of significant energy market volatility will continue beyond this year.

As part of that comprehensive policy response, the government is seeking to provide increased certainty to business while reducing carbon emissions in line with the 2030 target through a reformed safeguard mechanism to take effect in mid-2023. Critically, the arrangements will include a cost containment mechanism to give businesses certainty about maximum compliance costs.¹⁹ The mechanism is expected to drive 205 million tonnes of abatement by 2030, the equivalent of cutting emissions from Australia's cars by two-thirds.

Cutting emissions directly from vehicle use will also be a central feature of the Government's climate policies as its 2030 target of 3.8 million Electric Vehicles approaches. In Chapter 3, CEDA Senior Policy Adviser Ian Hamilton highlights that take-up will need to be rapid, much more so than the adoption of household solar PV technology. While a range of policies and subsidies is in place to encourage adoption, more policy levers remain available to government to further boost take-up, including reforms to fuel-efficiency standards and road-user charging. The growing fiscal and economic costs of natural disasters reinforce the need for climate resilience and adaptation to complement emissions abatement (Figure 11). Research shows that natural disasters have a lingering impact on communities, including through reduced incomes for years after the disaster.²⁰ This year's budget will need to confront the need for a dedicated fund for disaster relief and the mechanism to finance this growing expenditure line.

Australian governments now have a National Climate Resilience and Adaptation Strategy in place, funding to identify and manage climate risks and a National Adaptation Policy Office to coordinate implementation. We now have the opportunity to make progress in responding to natural disasters and minimise their impacts as far as possible.

FIGURE 11

Natural disaster relief

\$m, Commonwealth Government



*The total cost of relief and recovery from past events may not be completely realised for some years. Source: PBO • Created with Datawrapper

As noted above, the strong recovery in migration will support economic growth over coming years. The migration policy review's report due in early 2023 will provide a foundation for the Federal Government to fine-tune migration settings to better support productivity and growth while lifting community confidence. As CEDA highlighted in Australia's Future Migration System, ageing will accelerate across major economies over coming decades, intensifying competition for global talent. This requires a more nimble skilled-migration system, examining dedicated arrangements for family skilled migration, improving the interface between temporary and permanent migration and improved administration and governance.

The resumption of strong population growth and tight rental markets means housing affordability will remain a hot-button issue throughout 2023, even as house prices moderate. The Federal Government's Housing Accord puts the issue back squarely on the policy agenda. The accord is rightly focused on the supply side, after years of government policies and subsidies exacerbating already hot demand. As CEDA Senior Economist Cassandra Winzar highlights in Chapter 1, in 2023 governments will need to quickly start planning how they will build one million new homes over five years and the policies necessary to make serious progress on affordability.

There is little doubt that 2023 will be challenging for the Australian economy. It is the adjustment we had to have after the economic policies of the pandemic unwound and to bring down inflation. But Australia remains better placed than most advanced economies. If the RBA steers the right monetary policy course and governments introduce confidence-boosting policy reforms, Australia should be able to navigate the global volatility and emerge in a solid position.



1. HOUSING POLICY BACK ON THE AGENDA IN 2023

HOUSING POLICY BACK ON THE AGENDA IN 2023



Cassandra Winzar Senior Economist, CEDA

Cassandra Winzar is a Senior Economist at CEDA. Prior to joining CEDA she was Principal Economist at the WA Department of Communities (Housing Authority) where she focused on WA economic conditions and housing-related research, including running the state government's Housing Industry Forecasting Group. Cassandra has also held roles as the WA-based Economist for the Reserve Bank of Australia and in Transfer Pricing at EY.

The announcement of a new Housing Accord as part of last year's Federal Budget shows housing policy is firmly back on the government agenda.

As an overarching policy document, the accord has some real positives. After years of policy focusing squarely on first-home buyers and demand-side assistance, the accord has a strong supply-side focus. It also includes commitments to improve rental housing, which is increasingly becoming the area of most concern for housing affordability and availability. This is a welcome change and sets the scene for a broader conversation focused on getting all Australians into stable, secure housing, regardless of tenure.

Along with the accord, the Albanese Government has announced the establishment of a Housing Australia Future Fund and a National Housing Supply and Affordability Council, further cementing the importance of this issue to the Government.



The Housing Australia Future Fund will have initial funding of \$10 billion, with investment returns to fund social and affordable housing. The establishment of the National Housing Supply and Affordability Council to independently advise on policy is also a positive move. The council's interim members have a strong background in housing policy, setting the body up for success. The council will provide advice and report on housing supply and affordability data to guide policy in the right direction. But many policy issues in this area in recent years have arisen due to a lack of commitment to implementing research-backed initiatives. The Government will need to be willing to listen and act on the council's advice and avoid implementing politically popular, but ineffective, measures.

As concerns over housing affordability and availability continue to grow, governments, the building industry and the community all want the Housing Accord to be a success. So how can we build on the strong foundation laid out in the accord to ensure it succeeds?

The Government's focus should be on providing clarity around its commitments and who is responsible for delivering them; boosting direct government involvement through investing in social housing; addressing capacity constraints in the industry; and prioritising planning and zoning reform.

Right direction, light on detail

The accord lists four immediate actions, all of which are worthwhile:

- 1. Building new affordable dwellings;



2. Improving financing for social and affordable housing projects;



- 3. Removing barriers to zoning, planning and land release; and
- 4. Expanding the skilled workforce in the housing industry to meet these commitments.



The headline commitment of the accord is to deliver one million new, well-located homes over five years from 2024. This is a worthy goal, but there must be further explanation of what the commitment means, who will deliver the dwellings and how the commitment will be tracked and evaluated. The accord relies heavily on encouraging private-sector investment to increase housing supply. This is potentially easier said than done.

On the face of it, a commitment to building one million homes in Australia over five years is unremarkable. On average over the last ten years, around 200,000 homes have been built in Australia each year (Figure 1). The accord does not define what "well-located" means, whether the one million homes need to be affordable, nor whether they are in addition to normal building activity. There is also no commitment to developing regional markets (many of which are currently struggling with extraordinarily low vacancy rates), nor addressing sustainability issues in the building and running of new homes.

The Federal Government's National Housing Finance and Investment Corporation is forecasting a shortfall of more than

160k

dwellings nationwide between 2025 and 2032, based on expected construction activity and household formation rates.

FIGURE 1



We're already building a million homes every five years

Dwelling commencements - financial year ('000) Source: ABS Building Activity 8752 • Created with Datawrapper



There is no indication the target is grounded in an assessment of housing supply needs based on expectations of future population growth. The Australian housing stock is already supply constrained, and simply continuing to build at the same rate, while the population increases, will not improve affordability. The Federal Government's National Housing Finance and Investment Corporation is forecasting a shortfall of more than 160,000 dwellings nationwide between 2025 and 2032, based on expected construction activity and household formation rates.²¹ The NSW Government expects that more than 45,000 new dwellings will need to be built each year for the next 20 years to meet increasing demand.²²

To truly expand housing supply and improve affordability outcomes, the accord and its commitments will need to do more than just business as usual, encouraging investment above and beyond normal levels. The building industry and the community must know exactly what commitments are expected.



A significant expansion of the housing stock would also require more resources in a sector already under strain from supply-chain challenges and worker shortages. Without a plan to address these issues, increased pressure on the industry will drive up prices and delay current activity, exacerbating current affordability and availability concerns and repeating the mistakes of previous initiatives such as the COVID-19-era HomeBuilder policy.

Reliance on private sector investment

The private sector and institutional investors have a role to play in the development of affordable housing, but given their reluctance until now to play a larger role, we must ask what will be needed to encourage the substantial investment required. Returns currently do not stack up commercially and are unlikely to do so without either a change in Australian market conditions or, more likely, some form of 'top-up' payment or incentive from government to make returns commercially viable and competitive with other investment options.

There is a lot of talk about the large amount of money sitting in superannuation funds that is potentially available to invest in all sorts of infrastructure, including social housing. It is unreasonable to expect this money will be available unless there are attractive commercial returns to be made. The accord has a commitment from institutional investors and superannuation funds to "Endorse the Accord and commit to increase investment in affordable housing where it is in the best financial interests of investors or members to do so". The latter half of this sentence is critical and is likely to be the biggest stumbling block to investment.

While the accord acknowledges the barriers to institutional investment, the main commitment is to commission the new National Housing Supply and Affordability Council to review these barriers. This will take time and is largely unnecessary, given the volume of research already in this space. There is thus unlikely to be noticeable improvement in institutional investment over the five years of the accord, which may affect the ability to deliver on its targets.



Prioritise action on urban sprawl and planning reform

To house our growing population without resorting to continued urban sprawl, Australia desperately needs more infill, higher density development, combined with careful town planning. Yet given high construction costs, apartments are often unprofitable outside of high value locations, and barriers remain around council approvals, zoning and planning rules, often backed up by community opposition.²³ There will need to be considerable engagement with communities to change entrenched views about the appropriateness of higher density development.

Concerningly, the percentage of higher density residential building commencements has been falling since 2016 (Figure 2). This is the opposite of what we need to increase our housing supply.

FIGURE 2 Going up? Apartment building is slowing

Higher density residential commencements as a percentage of total residential commencements



Source: ABS Building Activity (2022), Cat. No. 8752.0 • Created with Datawrapper



Growth-accommodating reforms to planning arrangements are crucial and have a statistically significant positive effect on housing supply.

The accord clearly acknowledges the need for reform of planning and local government regulations. Critical to its success will be the state and territory government commitment to work with local governments to deliver planning and land-use reforms that make housing supply more responsive to demand. However, with so many jurisdictions involved, it's unlikely to be a smooth process. The accord's commitment to work with "local governments to deliver planning and landuse reforms that will make housing supply more responsive to demand over time" holds little in the way of concrete action.

Growth-accommodating reforms to planning arrangements are crucial and have a statistically significant positive effect on housing supply.²⁴ Land-use rules are necessary to prevent inappropriate development and protect community values, but restricting development means more housing is needed elsewhere, often further from city centres where infrastructure is not as well-developed, exacerbating congestion. The accord also calls for new housing development to be "well-located". The most efficient way to achieve this without substantial wraparound infrastructure development is to increase density in already well-serviced areas.

The need for planning and zoning reform is well known and well documented. Widespread research has estimated significant cost impacts from planning and land-use regulations on housing affordability and the economy.²⁵ There is already a strong evidence base on the most effective reforms, including the Productivity Commission's 2021 *Plan to identify planning and zoning reforms*. Effective reforms include better aligning planning requirements at different levels of government, making land use regulations less prescriptive and streamlining assessment processes, amongst others.²⁶ There is no need for further research. Rather, there must be investment to incentivise real reform. This will not be simple and will require the Federal Government to have a strong hand in encouraging state and local governments to take action.²⁷ This could be done in various ways, potentially through funding tied to reform, or a national agreement. For example, in 2017 the Productivity Commission recommended a national agreement to apply competition policy principles to land-use regulation and policies.²⁸

As it currently stands, there is little in the accord to truly encourage higher density development. Timeframes for developing and building apartments are long²⁹ and any substantial increase is likely to happen outside the period of the accord commitments. The National Housing Finance and Investment Corporation suggests it can take up to six years from development application to completion for higher density development.³⁰ There is a risk that any rush to meet the one-million home deadline will simply encourage further greenfield development. This is not needed, and will further entrench lowdensity builds as the norm, as occurred during the building activity spurred on by HomeBuilder. Short timeframes to meet commitments can also disincentivise innovative design and efforts to improve the sustainability of developments.

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The Housing Australia Future Fund commits to funding 30,000 new social and affordable homes and the accord commits to "up to" an additional 20,000 affordable dwellings to be delivered by the Commonwealth and state and territory governments. This does not properly address the shortfall of social housing across the country.



targeting should also be improved.

Direct action needed to boost social housing

The Housing Australia Future Fund commits to funding 30,000 new social and affordable homes and the accord commits to "up to" an additional 20,000 affordable dwellings to be delivered by the Commonwealth and state and territory governments. This does not properly address the shortfall of social housing across the country.³¹

A more direct boost, jointly funded between federal and state governments, is needed to increase social-housing stock and improve outcomes for our most vulnerable cohorts – an important step to disrupt entrenched disadvantage.³² Social housing plays a vital role as a safety net for those who are not well-served by private rental markets, and this is not addressed under the accord.

There has been little change in the number of social-housing properties since the Social Housing Initiative ended in 2012. In 2021, more than 160,000 households were on a wait list for public housing. With rental vacancy rates at or below one per cent in most capital cities³³ and rents increasing significantly over the past year, demand for social housing is only likely to grow. Supply has not been keeping pace with population growth³⁴ and the current shortfall poses a risk of more Australians falling into precarious housing situations. Socialhousing builds can also provide a reliable pipeline of building activity, softening cyclical fluctuations in private-market activity. This can ensure skilled workforces and industry capacity are retained during downswings.



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The National Rental Affordability Scheme should also be revisited to help households with slightly higher financial capacity but still struggling to rent in the private market without falling into rental stress. The current scheme is winding down, with the last tenancies concluding in 2026.

Affordability could also be addressed through a review of the role and rate of Commonwealth Rent Assistance (CRA), which has not kept pace with rent increases, and is not mentioned in the accord. CRA should be ramped up for those in greatest need, at least in line with recent rent increases, while targeting should also be improved. For example, reforming CRA eligibility rules to better reflect housing need would substantially improve affordability while generating cost savings.³⁵ Improving targeting would also minimise the extent to which higher payments would raise rents through increased demand. There would also be benefits to assessing the best mix of funding allocations between CRA and social housing.³⁶

The National Rental Affordability Scheme should also be revisited to help households with slightly higher financial capacity but still struggling to rent in the private market without falling into rental stress. The current scheme is winding down, with the last tenancies concluding in 2026. The scheme has been plagued by administrative problems, but the underlying model has proved successful and should be kept as a small, but crucial, part of the affordable-housing mix.³⁷



Workforce and supply constraints to add to challenges

The ability to deliver more housing will depend on the availability of a skilled construction workforce. A lack of trade availability has hamstrung recent housing construction³⁸, and a slow pipeline of apprenticeships means this is unlikely to improve without effort from the industry and governments. A combination of investment in domestic training and more migration pathways is likely to be required. While acknowledging the industry is facing capacity constraints, the only workforce commitment is extending the Australian Skills Guarantee to include the need for apprentices on government-funded housing projects. Given little of the housing target is planned to be government-funded, this is unlikely to amount to much.

The sector has also been constrained by material shortages and supply-chain challenges over the past two years, which has led to delays in housing construction. Building-material costs have been growing at the fastest rate since the 1970s, mainly driven by supply-side issues, and it's not clear whether cost pressures have yet peaked.³⁹ The pressure on material prices has led to financial difficulties for many builders, particularly those that had signed fixed-price contracts with clients. More building companies leaving the industry could further constrain the ability of the sector to respond to demand in the future.

There may be a benefit to the National Housing Supply and Affordability Council looking into these challenges, and opportunities to use more non-traditional building methods, modular construction or alternative materials. Improving the sustainability of building development and encouraging more climate-appropriate housing could also support broader government commitments on emissions reduction. If it doesn't explore such options, the building industry may struggle to cope with any additional demand.



What will 2023 hold?

With rising interest rates, soaring rental prices and a shortage of rental stock impacting housing markets throughout the country, housing affordability and availability will be front of mind in 2023. If they use this year to build out the foundations of the Housing Accord, government and the industry can set a course for real improvements to the housing system.

As an overarching strategy document, the Housing Accord hits the mark and positively resets housing policy towards a supply-driven response. But its true success will lie in the outcomes it achieves. Its commitments and policy direction still need further development. By focusing on planning and zoning reform, boosting social housing and addressing capacity constraints, the accord could drive real change in the Australian housing landscape. Ultimately, it will be judged on its actions and impact, not on plans and strategy.


2. ENERGY MARKET VOLATILITY IS SET TO CONTINUE THROUGH 2023

ENERGY MARKET VOLATILITY IS SET TO CONTINUE THROUGH 2023



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In the past year, electricity and gas have become increasingly unaffordable. Wholesale prices have soared and retail prices are set to reach record highs, resulting in a massive wealth transfer from energy consumers to producers. Not all energy consumers will have the same opportunities to manage their energy costs, with low-income households particularly vulnerable. For the poorest fifth of households, average spending on electricity and gas is set to increase from around five per cent to seven per cent of disposable income.

In this context, government should protect consumers from high prices, but support must be temporary and targeted, and avoid reducing investment in measures to lower energy usage.

Governments must prepare now to ensure they have the best policy responses to current and future energy-market volatility.

Australian governments have imposed price caps on gas and coal to moderate increases in retail energy prices until the end of this year. The challenging geopolitical situation due to the war in Ukraine, coupled with a rapid transition to renewable energy, means the global outlook for energy prices remains highly uncertain.⁴⁰ Governments must prepare now to ensure they have the best policy responses to current and future energy-market volatility.

Energy prices have surged to record highs

Several factors combined to push up energy prices in 2022 (Figure 1). The war in Ukraine added to already high international gas and coal prices in the wake of the pandemic, triggering a global energy crisis. Spot prices for gas reached new highs and together with higher coal prices, this accounted for around 90 per cent of the rise in electricity costs globally.⁴¹ High international fuel prices pushed up the cost of domestic fuel as Australian coal and gas became worth more in export than domestic markets. This, combined with coal plant outages, domestic supply shortfalls and hydro generating constraints, resulted in surging wholesale electricity prices in the National Electricity Market.⁴²

Pressures on the electricity market came to a head in June, triggering the first ever suspension of the National Electricity Market in all regions. On 13 June, prices in Queensland, NSW, Victoria and South Australia were capped at \$300/MWh due to high cumulative prices. Coal and gas generators subsequently withdrew capacity. This led the Australian Energy Market Operator (AEMO) to suspend the wholesale electricity market and determine prices manually between 15 and 22 June.



Spot prices for gas reached new highs and together with higher coal prices, this accounted for around 90 per cent of the rise in electricity costs globally.

FIGURE 1



Wholesale energy prices have soared

Median quarterly price in eastern Australia (index: 2014=100)

Prices are the median of regional prices in the National Electricity Market and East Coast Gas Market. Forecasted electricity prices are the median of regional futures prices as of 1 February 2023. Forecasted gas prices are ACCC netback price forecasts as of 30 January 2023 (see box below for further explanation).

Source: AER Wholesale Statistics; ACCC LNG netback price series. • Created with Datawrapper

High wholesale energy prices are set to feed into record high retail prices over the coming year (Figure 2; Figure 3, box). These price increases will directly affect households as well as businesses, particularly small businesses that rely on retail energy. Already as of mid-2022, small businesses had seen electricity cost increases of up to 13.5 per cent⁴³, and almost one third of small businesses experienced hardship paying for energy.⁴⁴



FIGURE 2

Indexes of real retail prices and real earnings, 2004-05 = 100 Electricity 200 Gas 150 Median weekly 100 earnings Forecast 50 0 -2004-05 2007-08 2010-11 2013-14 2016-17 2019-20 2022-23

Retail energy prices are set to reach record highs

Converted into real terms using the Consumer Price Index (CPI) to adjust for inflation. Estimates for 2022-23 and 2023-24 are based on projections by Treasury (retail gas and electricity prices after the introduction of price caps in December 2022) and the Reserve Bank (CPI and wage price index used to estimate evolution of median earnings).

Source: ABS, Consumer Price Index; ABS, Average Weekly Earnings; Treasury; RBA Statement on Monetary Policy • Created with Datawrapper



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Gas and coal are produced in Australia, but as they are traded in international markets, the domestic price is influenced by global prices.

What drives retail energy prices?

The retail energy prices paid by consumers consist of wholesale costs of electricity and gas, as well as network expenses and retail customer service costs. Electricity bills also include environmental costs to fund renewable energy targets, feed-in tariffs for solar power and state government-operated energy efficiency schemes. Higher wholesale energy prices thus also send retail prices higher.

Wholesale electricity prices are linked to global prices of gas and coal, which are used to generate electricity. In the five regions of Australia's National Electricity Market, wholesale prices are set at five-minute intervals based on power stations' offers to supply electricity. The Australian Energy Market Operator (AEMO) dispatches the cheapest generator bids first, with prices set by the highest priced offer needed to cover demand. Gas and coal-fired generators usually set wholesale prices, so as their fuel costs rise, so too do their bids and thus also wholesale electricity prices.

Gas and coal are produced in Australia, but as they are traded in international markets, the domestic price is influenced by global prices. Higher global prices give local gas producers and coal miners an incentive to send their gas and coal to global markets, if their existing contracts and transport networks allow it. This leaves less supply in the domestic market, pushing up prices. There are overall economic efficiency benefits from this, as gas and coal go to higher value uses internationally, with exporters gaining windfall profits as a result. However, this can also bring substantial costs for energy users domestically.

To provide more transparency on movements in domestic gas prices, the ACCC calculates an LNG "netback price". This represents the price gas producers could receive for exporting their gas, minus the cost of transport and converting the gas to LNG.⁴⁵

FIGURE 3

Network and wholesale costs drive retail energy prices



Composition of residential bills

Cost components for the average residential customer in the National Electricity Market (2021-22) and nationally for gas (2017 estimates) Source: AER, State of the Energy Market 2022

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The share of income that the bottom income quintile spends on rent is set to rise from an average of 15.1 per cent of income in 2021-22 to 17.2 per cent in 2023-24, based on a full pass-through of a 23 per cent increase in advertised rents compared with before the pandemic.

The cost-of-living squeeze is worse for low-income households

Low-income households spend a considerably greater share of their income on energy, so are most exposed to increases in energy prices. The share of income that the poorest fifth of households spends on electricity and gas is set to increase from around five per cent in 2021-22 to almost seven per cent in 2023-24 (Figure 4). Large households and those with higher-thanaverage energy consumption are more likely to experience energy-related financial hardship.⁴⁶ This includes people living in regions with greater climate extremes and in housing with low energy efficiency, for example due to poor insulation.

The cost-of-living crunch faced by low-income households will be exacerbated by rapid increases in the cost of rental housing: the share of income that the bottom income quintile spends on rent is set to rise from an average of 15.1 per cent of income in 2021-22 to 17.2 per cent in 2023-24, based on a full pass-through of a 23 per cent increase in advertised rents compared with before the pandemic.⁴⁷

The situation will be worse for low-income households who rent in the private market rather than own their house or live in social housing. Before the pandemic, they already faced a median rental burden of 43 per cent of disposable income, with two thirds of them spending more than 30 per cent of their disposable income on rent.⁴⁸ On average, low-income households face an increase in essential housing and energy costs equal to around four per cent of their disposable income, with even greater increases for large households, renters in the private market and/ or high energy users. Absorbing these increases in essential spending while keeping overall spending unchanged would require more than a 10 per cent reduction in discretionary spending on average for low-income households,49 consistent with surveys suggesting renters are being hit hardest by energy price rises.⁵⁰

FIGURE 4

The share of income spent on energy is set to increase

Household spending on electricity and gas as a share of disposable income, by income quintile

	Historical		Projected	
	2015-16	2021-22	2023-24	2023-24 (without price caps)
Quintile 1	5.7%	5.2%	6.9%	7.7%
Quintile 2	3.4%	3.0%	3.9%	4.4%
Quintile 3	2.6%	2.3%	3.1%	3.4%
Quintile 4	2.1%	1.9%	2.5%	2.8%
Quintile 5	1.4%	1.3%	1.7%	1.9%
Whole population	2.4%	2.2%	2.8%	3.2%

Based on no change in the quantity of electricity and gas consumed. Excludes the distributional consequences of the government's Targeted Energy Bill Assistance, the final details of which are expected to be settled by March 2023. Source: CEDA calculations based on ABS, Household Expenditure Survey 2015-16; ABS National Accounts 2021-22; Treasury forecasts • Created with Datawrapper

Price caps will limit cost increases

In December 2022 the Federal Government, in cooperation with the states and territories, introduced price caps on wholesale gas and coal. These comprise a 12-month wholesale price cap of \$12 per gigajoule on gas uncontracted as of December 2022, as well as a price cap of \$125 per tonne on coal from New South Wales and Queensland used for electricity generation. Gas producers are also required to sign a mandatory code of conduct that requires them to ensure reasonable pricing for domestic wholesale gas contracts. Governments will jointly provide \$3 billion in electricity bill relief for eligible households and small businesses under the Targeted Energy Bill Assistance. Without these



Continuing intervention may be required

As global energy-market volatility persists, governments will face more difficult choices about how and when to intervene in energy markets. This will require a comprehensive examination of all options for market intervention and ensuring that policies promote an orderly market with sufficient supply.

The cost-of-living squeeze for low-income consumers means there is a strong equity argument for protecting them against the impact of energy price rises. Price caps will do this, but by artificially holding down the cost of energy, they also reduce incentives for consumers to reduce their energy use or invest in energyefficiency measures.⁵¹ The extended duration of regulation of gas pricing will also affect longterm investment signals, as part of the policy is permanent rather than temporary.⁵²

Price caps will not necessarily deliver long-term benefits for consumers if they reduce incentives for investment in energy efficiency and new sources of energy (including renewables). Under price caps, gas and coal producers will also have an incentive to redirect production to higherpriced export markets where possible (see Figure 1 above).

Reserving some gas for the domestic market, as Western Australia has done, explicitly prevents the export of gas destined for the domestic market. This approach has helped Western Australia weather the 2022 energy crisis with the lowest gas prices in the OECD.⁵³ WA electricity price rises have been just a quarter of those in the eastern states.⁵⁴ However, reservation imposes a net cost on the community by diverting gas from its highest value use,⁵⁵ with WA's reservation policy estimated to cost the national economy around \$600 million each year.⁵⁶

Global scenarios to meet net-zero emissions in the energy sector by 2050 require no new investment in gas fields beyond those already approved and sharp reductions in coal production for all exporting countries.

Another approach would be to provide temporary and targeted compensation to low-income consumers while energy prices remain extreme. Expanding on the Federal Government's Targeted Energy Bill Assistance, this would provide support for vulnerable households and small businesses without bringing energy prices down, ensuring there is still a broader incentive to save energy during the crisis.

This compensation could be funded by taxing the windfall profits that fossil fuel exporters are gaining from higher prices during the crisis. In this way, the goal of protecting vulnerable consumers could still be achieved without high costs to the Federal Budget. Any impact of higher taxes on new fossil fuel investment can be reduced in part by targeting only windfall profits above the level required to recoup investment costs. The global energy transition will also drastically reduce new fossil fuel investment anyway: global scenarios to meet net-zero emissions in the energy sector by 2050 require no new investment in gas fields beyond those already approved and sharp reductions in coal production for all exporting countries.57

It should be noted that gas producers already pay substantial taxes, with corporate income tax particularly increasing with higher prices. Tax paid by large gas exporters is forecast to rise from \$5 billion in 2021-22 to \$14 billion in 2022-23,⁵⁸ as LNG export revenue grows from \$70 billion to \$90 billion on marginally lower volumes.⁵⁹

Both targeted compensation and taxing excess profits are more difficult to implement quickly than price caps. This underlines the importance of early policy preparation to navigate future disruptions.



Security of supply will be critical during the energy transition

The suspension of the National Electricity Market in June 2022 illustrates the challenge and importance of maintaining secure power supplies. Patterns of electricity demand and supply are changing, as the increasing penetration of solar power has shifted net demand towards morning and evening peaks and away from the middle of the day. More energy storage will be necessary: under AEMO's most likely 'step change' scenario, storage capacity will grow seven-fold in the decade from 2023-24.⁶⁰ There will need to be more pumped hydro and utility-scale and distributed batteries, but there is also an important role for gas-fired electricity generation to provide dispatchable capacity to back-up the intermittent power provided by renewables.⁶¹

In December 2022, Australian governments agreed to establish a Capacity Investment Scheme. This scheme aims to unlock \$10 billion of investment in zero-emissions dispatchable generation and storage, thus improving the security and reliability of supply. But this mechanism excludes gasfired generation, so governments may need to consider other measures to ensure that gas peaking plants will provide backup capacity when this is cheaper than batteries, which have limited duration of storage, or pumped hydro, which has large establishment costs and specific siting needs. Gas peaking capacity would not create substantial greenhouse gas emissions if it was used infrequently.

The electricity transmission network must also be upgraded to underpin energy security by linking new supply sources to demand and diversifying generation sources. The Government's Rewiring the Nation scheme proposes \$20 billion of investment to rebuild and modernise the grid in line with AEMO's modelling. Funding agreements with Victoria and NSW have focused on enabling large-scale renewable developments. Key to the success of the scheme will be involving the private sector via best-practice procurement, and the ability to adapt plans as demand and generation evolve. Security of gas supply is also important for households and businesses. Gas can be stored more readily than electricity, but over longer periods users still need reliable supply. Gas producers paused signing new wholesale contracts in early 2023 in response to the new price caps.⁶²

The energy crisis can help accelerate decarbonisation

Where fossil-fuel price rises are allowed to flow through to users, rather than capped or offset, the benefits of investment in renewables and better energy performance are more apparent. Internationally, countries that have reduced their reliance on fossil fuels through rapid deployment of renewables, such as Denmark, have been better insulated from the energy crisis than neighbouring countries with greater reliance on gas.

More must be done for Australia to meet its decarbonisation goals amid the uncertain outlook for global energy markets. Continued communication of the pathway to our 2030 and 2050 goals will be necessary to underpin investment, giving industries certainty about the size of emissions cuts and the price signals they will face.

Effective collaboration across jurisdictions will also be essential to build the necessary skills and supply chains for renewable energy. Australia has deposits of many of the critical minerals required for the global energy transition, such as copper, lithium and cobalt, and should leverage this opportunity to build diversified and resilient supply chains. Planning processes need to be streamlined as much as possible by prioritising and bringing forward consultation. Experience in Europe demonstrates the critical importance of planning timelines for investment in renewable technologies such as offshore wind.⁶³

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Improving housing energy efficiency from six-star to sevenstar was estimated in 2021-22 to save Australian households an average of \$450 per year in heating and cooling costs, implying a payback time on investment of five years.

High energy prices can drive better energy performance

There are substantial opportunities for businesses and households to improve energy performance by making investments that cut energy demand, reducing bills and contributing to the transition to net zero. "Energy performance" includes adopting energy-efficiency measures, as well as shifting energy-use times and changing behaviour.

Reducing energy use in the short-term can be difficult without compromising comfort or convenience, but over a longer period energyprice increases can drive a reduction in demand that is three or four times larger.⁶⁴ For example, improving housing energy efficiency from sixstar (the current minimum standard for new buildings under the National Construction Code) to seven-star (the minimum for new buildings after 1 October 2023) was estimated in 2021-22 to save Australian households an average of \$450 per year in heating and cooling costs, implying a payback time on investment of five years.⁶⁵ Higher energy prices will contribute to an even shorter payback period. For businesses, there is substantial scope to electrify processes that have previously used gas, as long as the temperatures required are not at the upper end of the spectrum.66

Sustained high prices can play an important role in bringing forth energy-saving investment and technological change. Australia has led the world in the deployment of rooftop solar panels, as investment was underpinned by high electricity prices coupled with generous feed-in tariffs. Another relevant example is the increase in rural water prices as water trading was introduced in the Murray Darling Basin, which incentivised greater investment to improve efficiency^{67,68} and a shift towards high value uses of water such as large-scale horticulture.⁶⁹ Globally, just as the oil shocks of the 1970s triggered substantial improvements in the energy efficiency of cars, appliances and buildings, the rate of improvement in energy efficiency during the 2022 energy price surge was almost double that of the previous five years.⁷⁰ High prices need to

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Ultimately, to encourage demandside measures to fully flourish, long-term prices of energy from fossil fuels need to be high enough to create strong investment signals for renewables and behavioural change. be coupled with supportive regulation, such as measures supporting research and development and breaking down split incentives between tenants (who benefit from energy efficiency) and landlords (who pay for it).⁷¹

Consumers can also help match the timing of supply and demand for electricity, including by: orienting solar panels to the west to maximise generation during peak demand on summer afternoons;⁷² charging electric vehicles at offpeak times; installing batteries to better align solar supply with demand; and installing smart appliances that operate when electricity is available at low cost.

Commercial and industrial customers can concentrate electricity use during times of plentiful supply, for applications such as heat pumps, electric furnaces and hydrogen electrolysis (as this becomes more widespread).73 Across all users, digital technologies have the potential to significantly reduce system costs through automation to drive flexibility in the timing of demand.⁷⁴ The Australian Renewable Energy Agency (ARENA) is funding several initiatives seeking to secure more flexible demand for electricity, but market reforms will be necessary to fully exploit its potential.75 Ultimately, to encourage demand-side measures to fully flourish, long-term prices of energy from fossil fuels need to be high enough to create strong investment signals for renewables and behavioural change.

While governments are rightly focused on addressing the current crisis, they must also use 2023 to work on measures to protect vulnerable consumers during future energy-market disruptions. Key to Australia's success here will be ensuring we use the most efficient and predictable long-term arrangements.

J. AUSTRALIA MUST ACCELERATE ITS ELECTRIC VEHICLE UPTAKE IN 2023

AUSTRALIA MUST ACCELERATE ITS ELECTRIC VEHICLE UPTAKE IN 2023



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Transport is the second largest source of carbon emissions in Australia, representing 18 per centⁱ of total emissions.⁷⁶ Electric passenger vehicles (EVs) will play a critical role in decarbonising the sector, with current passenger vehicles accounting for 43 per cent of transport emissions. The electrification of commercial vehicles and public bus fleets will also have an important role to play.

Through its planned National Electric Vehicle Strategy, the Federal Government has committed to encouraging the take-up of electric vehicles. Yet its target for 3.8 million EVs on the road by 2030 implies adoption rates faster than we saw for household solar photovoltaic systems, an area in which Australia has been a world leader thanks primarily to strong policy incentives. Meeting this target will therefore require state and federal governments to introduce policies that promote take-up in the most efficient manner, a much larger variety of fit-for-purpose car models and more accessible charging infrastructure.

Excluding emissions from Land Use, Land-Use Change and Forestry.



Consistency and coordination across government will be crucial to achieve this target. This includes a plan to fund road construction and maintenance as the shift from internalcombustion engine vehicles reduces revenue from fuel excise. Additional targeted subsidies will also be necessary to support take up among low socioeconomic households and drivers with long commutes.

EV take-up is increasing, but from a low base

The Federal Government is preparing its National Electric Vehicle Strategy, expected to be released this year (Box 1). Labor made an election commitment to develop a strategy that "creates an environment for 3.8 million EVs on the road by 2030".⁷⁷

Electric passenger vehicle sales are currently growing at a rapid rate. More than 39,000 were sold in 2022," representing 3.1 per cent of all new cars sold.⁷⁸ This is a huge jump compared with just two years earlier, when just over 5000 battery electric cars were sold. However, the rate of electric car growth in Australia is slower than in other comparable countries due to a lack of policy to encourage their uptake.

There are three key barriers to the uptake of EVs in Australia:

- 1. Global supply-chain issues including shipping bottlenecks and microprocessor shortages have hampered production and availability. These are expected to ease in the next few years;
- 2. There are fewer models available compared with similar markets, owing to our lack of a national fuel efficiency standard for light vehicles. Consumers in the United Kingdom, which has emissions standards, can choose from 26 low-emissions vehicles under \$60,000, compared with just eight in Australia; and Consumers are hesitant about battery range and charging-network coverage.
- 3. Consumers are hesitant about battery range and charging-network coverage. Analysis for the Australian Renewable Energy Agency (ARENA) found with moderate growth in EVs, Australia would require more than 28,370 fast chargers to 2040, requiring an estimated \$1.7 billion in total investment (excluding the cost of land).⁷⁹

There are two main types of electric vehicles – battery electric and plug-in hybrid electric (which has both a conventional engine and an electric engine). This report discusses both using the term electric vehicles.

In New Zealand, over the past 12 months, electric vehicles have gone from 2.5 per cent to more than 11 per cent of new vehicle registrations since the introduction of new incentives for EVs. This is higher than the global average of nine per cent of sales, highlighting the importance and impact of policy, including emissions standards and changes to road user charging.

BOX 1

The role of electric passenger vehicles in reducing emissions

As part of Australia's Nationally Determined Contribution to the Paris Agreement, in July 2022 the newly elected Labor Government increased its commitment to reduce greenhouse gas emissions to 43 per cent below 2005 levels by 2030. In September 2022 the Government legislated the target to achieve net zero emissions by 2050.ⁱⁱⁱ

There are also international efforts to focus on high-emissions sectors. The Australian Government did not sign the COP26 declaration Accelerating the Transition to 100% Zero Emission Cars and Vans and does not have any phase-out date for conventional vehicles. However, four state and territory governments did sign this pledge to accelerate the transition to 100 per cent zero-emission cars and vans by 2040 globally and by no later than 2035 in leading markets (such as Australia).⁸⁰

iii The target previously submitted was a 26 to 28 per cent reduction of greenhouse gas emissions by 2030 below 2005 levels.

FIGURE 1

Projected transport emissions in Australia 2030, Mt CO2-e

Cars will continue to be the major contributor to CO2 from Australia's transport sector



Chart: CEDA; Source: Department of Climate Change, Energy, the Environment and Water



Reaching 3.8 million EVs requires rapid adoption

Australia has a relatively small share of EVs, with around 83,000 on the road at the end of 2022. To reach 3.8 million electric vehicles will require approximately 464,000 new electric vehicles every year for eight years,^{iv} or an average annual growth rate of 52 per cent, and sales to make up 51 per cent of new passenger car sales^v in 2030.⁸¹ This is more than three times the growth rate experienced in 2022 (13 per cent), which was the biggest year for EV sales in Australia to date.

Federal and state governments have been adopting policies to encourage the uptake of EVs (Figure 2). But achieving sufficient take up will require EV purchases to be made by buyers who may be reluctant to embrace new technology today. For this to happen, there needs to be a range of affordable EVs that meet the driving requirements of different demographics and charging infrastructure in line with driving patterns and battery-range constraints.

iv This is the minimum needed per year to reach the 3.8 million total and does not account for vehicles that exit circulation and when the second-hand market becomes a viable alternative for some buyers. Some of this growth may be reached by population growth.
V Estimated total new cars sold in 2030, projected from IBISWorld projections for 2029, then an additional year of growth based on the average five-year growth rate.

FIGURE 2

Commonwealth, State and Territory Government policies encouraging electric vehicle adoption

All levels of government are using a range of policies to incentivise electric vehicle uptake

Jurisdiction	Cwlth	ACT	NSW	ΝΤ	QLD	SA	TAS	VIC	WA
Electric vehicle strategy/policies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purchase target (% EVs) – govt fleet	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Subsidy at purchase	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Subsidy for ongoing costs	No	Yes	No	Yes	Yes	Yes	No	Yes	No
Charging network	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table: CEDA • Source: Adapted from government sources and Electric Vehicle Council. (2022, October). State of EVs October 2022. • Created with Datawrapper



To meet the proposed targets, Australia will need to adopt EVs faster than it installed solar photovoltaic (PV) panels (Figure 3). Since 2008, 3.3 million small-scale solar PV systems have been installed^w. The technology adoption rate for solar PV shows the potential experience for electric vehicles.

There were enablers and barriers to the adoption of solar PV across Australia. The public good benefits of lower greenhouse-gas emissions and reduced reliance on the electricity grid encouraged a range of supportive federal and state funding programs. These policy initiatives fostered investment and innovation in the sector and economies of scale in production, which brought prices down and therefore increased uptake.

vi This only includes solar PV panels, there are other technologies that are eligible under the Small-scale Renewable Energy Scheme such as solar water heaters and wind turbines.

FIGURE 3

Projected EVs on the road needed to meet target

Solar PV, despite large subsidies, took longer to reach fewer households

- EVs needed on the road to meet 2030 target, millions (Projection)



Chart: CEDA • Source: CEDA estimates (EVs), Bureau of Infrastructure and Transport Research Economics (EVs), Clean Energy Regulator (Solar PV) • Created with Datawrapper



There are similar public-good arguments for the greater take up of EVs, but state and territory government support has only taken off over the last few years, with federal support only just starting to emerge. As global manufacturers embed economies of scale, and new technologies improve the quality of the product, the cost of EVs will continue to fall. Due to differences in the complexity of the product, however, it is unlikely that EVs will experience similar price reductions to solar PV, which saw costs decline by 85 per cent over nine years (Figure 4).

One key enabler of growth in EV sales will be ongoing demand for new cars as households replace their cars periodically. But governments must go further if we are to see the uptake of EVs outpace that of solar PV.

FIGURE 4

Cost of Solar PV in Australia over time

The cost per Kilowatt of power fell as technology improved



Chart: CEDA • Source: International Renewable Energy Agency • Created with Datawrapper



Norwegian EVs are charged by an electricity grid with 97 per cent renewable energy. This is in contrast to Australia's more emissions intensive electricity grid, with only 29 per cent of total energy sourced by renewable energy.

Subsidies are expensive and inequality is an emerging issue

The central issue for the National Electric Vehicle Strategy is how most efficiently and effectively to achieve the target of 3.8 million electric vehicles by 2030.

Policymakers have looked to Norway as a leader in the EV transition. While subsidies formed part of Norway's suite of policy measures, other supporting factors made the transition to EVs in Norway a more effective way to reduce emissions than in Australia (Box 2).

BOX 2

Lessons from the EV transition in Norway

Norway has been a leader in transitioning to EVs and favourable government policies alongside heavy subsidies have been driving take up for more than a decade. Conventional vehicles are subject to a high registration tax on purchase as well as a CO² tax, and a road-use tax on petrol and diesel fuel.

Support for EVs includes no stamp duty at purchase, exemption from once-off registration tax as well as reduced toll roads, ferry and parking fees. Because of these policies, Norway has the world's highest share of zero-emission vehicles in both car stock (16 per cent) and new car sales (64.5 per cent). These policies are costly abatement methods (500 Euros per tonne) and have affected long-term government revenue – there has been a sizeable decline in car-related excise duties.⁸²

Norwegian EVs are charged by an electricity grid with 97 per cent renewable energy.⁸³ This is in contrast to Australia's more emissions intensive electricity grid, with only 29 per cent of total energy sourced by renewable energy in 2021. This highlights that if Australia had transitioned earlier to EVs, this would have shifted emissions production from fossil-fuel engines to a fossil-fuel powered electricity grid, diminishing the abatement achieved.



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Automotive industry bodies forecast both cost decreases and increased model availability this year.

If Australian governments are looking to directly spend public funds on carbon abatement, other policy levers should be the priority, with EVs having a support role in the transition. The Productivity Commission has estimated the cost per tonne of CO² avoided for electric-vehicle subsidies by states and territories. These direct subsidies range from \$83 up to \$6999 per tonne.⁸⁴ As such, it recommends avoiding further direct subsidies, and for governments to focus on cheaper, established mechanisms to reduce emissions in the short-term, including purchases through the Renewable Energy Target and the Emissions Reduction Fund (Figure 5).

FIGURE 5

Indirect carbon prices in Australia, selected Commonwealth policies

The Productivity Commission recommends focusing on cheaper, established mechanisms to address emission abatement in the short-term

Policy	\$ per tonne of CO2 emitted			
Renewable Energy Target certificates (Both small- and large-scale generation certificates)	\$57-\$220			
Emissions Reduction Fund (Australian carbon credit units) - Average fixed-delivery price	\$12-\$59			
Emissions Reduction Fund (Australian carbon credit units) - Spot price	\$29-\$144			
Discounted excise for E10 fuel	\$128-\$274			
Discounted excise for B20 fuel	\$135-\$152			

Table: CEDA • Source: Productivity Commission • Created with Datawrapper



Automotive industry bodies forecast both cost decreases and increased model availability this year. With subsidies already in place for the purchase prices and ongoing costs, governments should focus on reducing other barriers to additional take up of EVs, such as inequality of access. Low-income or vulnerable consumers are unlikely to invest in EVs due to high upfront costs and imprecise benefits. Other consumers are discouraged because they rent or occupy high-density buildings and are unable to easily access charging infrastructure.

This growing inequality in uptake can be seen in major cities across Australia, with households in high socioeconomic status, inner metropolitan areas purchasing EVs at a faster rate. This reflects not just the higher upfront cost, but the limited availability of models that cater to the longer commutes of households in outer metropolitan areas.⁸⁵ These households must not be excluded from the transition. As with solar PV, additional direct financial incentives to purchase an EV are likely to be necessary to support additional take up by these groups.

Removing barriers to a progressive shift to EVs

Additional policy levers to enable broad uptake of EVs include changes to fuel-efficiency standards and parallel import restrictions. Increasing the coverage of charging infrastructure will also be crucial. This will lay the groundwork to electrify the rest of the transport sector.

Fuel efficiency standards

Australia is currently a laggard on emissions standards for vehicles. Along with Russia, it is the only country in the OECD without mandatory fuel efficiency standards for road transport vehicles and sits near the bottom of international rankings for fuel economy standards. In one ranking, Australia was 23 out of 25, ahead of only Saudi Arabia and the United Arab Emirates on transportation energy efficiency.⁸⁶ Separate to the National Electric Vehicle Strategy, the Commonwealth Department of Transport plans to consult on introducing fuel efficiency standards for light vehicles that will improve the supply of electric vehicles.

Such a standard would bring more efficient cars to Australia and increase consumer choice.

One study forecast that introducing a 105g/ km fuel efficiency standard would significantly increase the number of EVs in Australia as car manufacturers sought to meet their compliance targets at least cost.⁸⁷ Most passenger vehicles are used, on average, for at least a decade.88 Households with long commutes or limited public transport alternatives may keep a vehicle for up to 20 years before replacing it. This means that internal-combustion engine vehicles sold in 2023 will on average still be operating in 2034 and may even be on the road until 2044 or later. There may be difficult, and potentially expensive, policy decisions required to reach 100 per cent take up across all households. However, we do not yet need to consider scrappage schemes, where government buys non-compliant vehicles directly off owners to take them off the roads.

Parallel importation

Regulations currently ban the parallel importation of second-hand vehicles by individuals. This is an opportunity to increase competition in the market for cars and increase the options available to consumers. The 2015 Harper Competition Review recommended that parallel import restrictions be removed.⁸⁹ In submissions to this review, industry bodies argued there were unmitigable risks and imported cars must meet Australian safety standards. However, these risks have not materialised in jurisdictions such as New Zealand, which removed import restrictions while putting in place regulatory standards and a compliance framework.

Risks could be mitigated further by allowing only the importation of newer vehicles, or only electric and hybrid vehicles. This could also ensure that buyers cannot bypass future efficiency standards.

Road user charging

The 2021 Intergenerational Report highlighted that climate change will shrink government revenue from sources such as fuel excise and mining royalties.⁹⁰ As revenues fall, new sources will be needed such as more efficient, revenueneutral road-user charging. A considered transition and timeframe could facilitate a path towards road-user charging that accounts for greenhouse gas emissions, local air pollution, road wear and congestion. The Commonwealth should lead a nationally consistent approach to avoid confusing buyers and unnecessarily hampering take up. Efforts to implement registration and fuel-based road user charges for heavy vehicles through regulations and the National Transport Commission offer an established pathway for consistent implementation across jurisdictions. This involves registration charges collected by states and territories and road-user charging collected by the Commonwealth, with the regulatory costs incurred by the National Heavy Vehicle Regulator shared across all governments.

Charging infrastructure

Governments should ensure supporting infrastructure is not a barrier to EV adoption. Subsidies for purchases are unlikely to help unless drivers are confident they can access chargers. Battery range and charging anxiety continue to prevent households from purchasing EVs. The average passenger vehicle is driven 30 kilometres a day,⁹¹ well within the 480km average battery range of current EVs. However, many drivers want the flexibility to drive long distances and that requires a charging network.

Important factors as Australia's charging network matures include: the ability to charge at work; access for drivers without a dedicated charger at home; and continuing to scale up access to meet growing demand. Increased adoption of EVs will also naturally drive up electricity demand, including at peak periods.

Charging at home will make a sizeable contribution to the powering of electric vehicles, however apartment charging infrastructure remains insufficient. State and territory building ministers recently announced amendments to the National Construction Code that will require new apartments to be EV-ready at the time of construction. This will come into force in October 2023.

There will remain a role for government to subsidise charging or run tenders in areas where private operators do not provide sufficient services. Existing petrol stations have commenced transitioning to electric charging. A range of other energy suppliers and landowners



may also seek to provide charging infrastructure, including major energy retailers, electricity networks, automobile associations, car makers and property developers. There is likely to be a mix of operators depending on the demand for services and geographic location. Governments should follow developments closely. If consumers fail to charge appropriately during peak periods such as holiday breaks, confidence could plummet, slowing take-up rates.

The year ahead

There is now growing momentum behind the adoption of EVs in Australia. In January this year, Tesla's Model 3 was Australia's third-highest selling car, the first time a battery EV had reached such a level. The challenge now is to promote rapid uptake in an efficient and effective manner. Australians have been quick adopters of new energy technologies in the past. Strong uptake will help cut our transport emissions and ease our transition to a net-zero economy.

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