Working Future

The Australian Government's White Paper on Jobs and Opportunities

September 2023

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Contents

Fc	oreword	V			
Ex	xecutive Summary	vii			
	The Government's vision for the labour market	vii			
	A Roadmap for the Australian labour market	xi			
1	Beneficiaries of change				
	1.1 The forces reshaping Australia's economy	2			
	1.2 Changes underway in Australia's labour market	4			
	1.3 Building a better labour market	10			
2	Delivering sustained and inclusive full employment	17			
	2.1 A labour market that works for all Australians	18			
	2.2 Our objective is sustained and inclusive full employment	24			
	2.3 Achieving sustained and inclusive full employment	38			
	2.4 The path forward	44			
3	Promoting job security and strong, sustainable wage growth	47			
	3.1 Our objective is promoting decent jobs with strong and sustainable wage growth	47			
	3.2 Competition and dynamism can support wage growth	54			
	3.3 Addressing unfair pay	60			
	3.4 Improving access to secure, fairly paid jobs	68			
4	Reigniting productivity growth				
	4.1 Our objective is to reignite productivity growth	75			
	4.2 A range of factors will drive future productivity growth	79			
	4.3 Productivity agenda	91			
5	Filling skills needs and building our future workforce				
	5.1 Our objective is to fill skills needs and build our future labour force	98			
	5.2 Taking tailored approaches to critical shortages	105			
	5.3 Improving education system outcomes	118			
	5.4 Building the future workforce will require careful planning and collaboration	129			
6	Overcoming barriers to employment and broadening opportunities	139			
	6.1 Our objective is to overcome barriers to employment and broaden opportunity	139			
	6.2 There is more to do to share opportunities and overcome disadvantage				
	6.3 Investing in people through employment services				
	6.4 Creating inclusive workplaces				
	6.5 Removing financial disincentives and providing better supports to work				
	6.6 Supporting people to engage in work as life evolves				
	6.7 An integrated and multifaceted approach	166			

Our Roa	dmap for a dynamic and inclusive labour market	177					
1	Strengthening economic foundations						
2	Modernising industry and regional policy	195					
3	Planning for our future workforce	203					
4	Broadening access to foundation skills	209					
5	Investing in skills, tertiary education and lifelong learning	214					
6	Reforming the migration system	218					
7	Building capabilities through employment services	222					
8	Reducing barriers to work	226					
9	Partnering with communities	232					
10	Promoting inclusive, dynamic workplaces	235					
Ongoing collaboration							
Actio	ns to support a dynamic and inclusive labour market	240					
Appendix A Glossary of terms							

Foreword

This Employment White Paper is a roadmap for ensuring more Australians are the beneficiaries of the big shifts underway in the economy and our society over the coming decades. It crystallises our ambition for a dynamic and inclusive labour market in which Australians have the opportunity for secure, well-paid jobs in a country where workers, employers and communities can thrive and adapt.

Today our unemployment rate is around historic lows and the participation rate is around record highs. This positions us well in the face of the immediate challenges of slowing economic growth and continuing global uncertainty, but more needs to be done to shape the future direction of our labour market and put the benefits of employment within reach of more of our people.

That's why this White Paper is all about how we can work together to:

- deliver sustained and inclusive full employment
- promote job security and strong, sustainable wage growth
- reignite productivity growth
- fill skills needs and build our future workforce
- overcome barriers to employment and broaden opportunity.

Central to this endeavour will be recognising that a more productive, dynamic and competitive economy relies on investments in the skills and capabilities of our people so that they can grasp the opportunities that flow from changes in our industrial base and workforce needs. This is especially important as our economy shifts from hydrocarbons to renewables; from information technology to artificial intelligence; from a younger to an older workforce; with growth in the care and support economy; and as global fragmentation puts pressure on supply chains.

Government cannot meet this moment alone. Last year's Jobs and Skills Summit demonstrated what can be achieved through close cooperation and collaboration between workers, employers, civil society and the broader community.

We thank the hundreds of people and organisations who provided submissions, our ministerial colleagues for their input, and the Treasury team and officials from across the Government who put the White Paper together.

Together we recognise that work is more than a pay cheque; it's central to our identity, living standards and wellbeing. It's our collective responsibility to provide the dignity and security of work and to build the workforce we need for a stronger, fairer and more inclusive economy into the future.

The Hon Anthony Albanese MP Prime Minister

The Hon Jim Chalmers MP Treasurer

Executive Summary

The Government's vision for the labour market

The Government's vision is for a dynamic and inclusive labour market in which everyone has the opportunity for secure, fairly paid work and people, businesses and communities can be beneficiaries of change and thrive. We are working to create more opportunities for more people in more places.

Today's labour market is much more inclusive, flexible, services-oriented and productive than in previous eras but there's more work to do to achieve our vision and maximise our potential.

Australia currently has an unemployment rate near historic lows and a participation rate around record highs, although labour market conditions are expected to soften over the coming year. Wage growth has started to pick up, inflation has started to moderate but is still too high, and workforce shortages are holding back businesses and our economy. While skill and worker shortages are easing for some sectors, long-term solutions will be needed to meet growing workforce demands in sectors such as care and support services.

Our economy and labour market will be shaped by five forces in the coming decades — population ageing, rising demand for quality care and support services, expanded use of digital and advanced technologies, climate change and the net zero transformation, and geopolitical risk and fragmentation. These forces are changing the composition of our industries, workforce needs, and the nature of work itself. Maximising the opportunities these shifts present, and ensuring all Australians can participate and benefit, will require a more productive, dynamic and resilient economy, with a bigger, better-skilled and more adaptable workforce.

This White Paper provides a Roadmap to position the Australian labour market for the future. It outlines the practical actions being taken and further reform directions required to achieve our potential. With clear leadership, collaboration and careful policy design, we will make the most of future opportunities.

Five ambitious objectives contribute to achieving the Government's vision.

Objective 1: Delivering sustained and inclusive full employment

The Government is working to create an economy where everyone who wants a job is able to find one without having to search for too long. These should be decent jobs that are secure and fairly paid. This is central to a strong economy and a prosperous and inclusive society.

The Government's objective is sustained *and* inclusive full employment. *Sustained* full employment is about minimising volatility in economic cycles and keeping employment as close as possible to the current maximum level consistent with low and stable inflation. *Inclusive* full employment is about broadening opportunities, lowering barriers to work including discrimination, and reducing structural underutilisation over time to increase the level of employment in our economy.

While more people are participating in paid work than ever before, there is still considerable untapped potential. There are around 3 million people in Australia who want work, or want to work more hours – equivalent to a fifth of the current workforce. Labour market outcomes vary significantly across

cohorts and regions. This indicates more can be done to reduce structural underutilisation, expand employment opportunities and increase economic potential.

Identifying the causes of underutilisation is central to determining the appropriate policy responses.

- Frictional unemployment is a normal aspect of the labour market, reflecting that people may take time to move between jobs.
- Cyclical underutilisation is the result of insufficient demand for workers at different points of the economic cycle and can be lessened through effective macroeconomic policy settings.
- Structural underutilisation arises from persistent mismatches between potential workers and available work. This can occur when workers' skills don't match those required for available jobs, when there are geographical mismatches between where workers live and jobs are, or other barriers to participation, including disadvantage or discrimination.

The Government will take a broad approach to achieving sustained and inclusive full employment. This includes sound macroeconomic management to help keep employment as close as possible to its current maximum sustainable level in the short term. We are also committed to addressing the structural sources of underutilisation to increase the level of full employment that can be sustained over time without adding to inflationary pressures.

We are taking comprehensive action, including improved education, migration and regional planning systems, and setting out reform directions to improve key enablers such as employment services, affordable and accessible child care, and housing. We are equipping the workforce with the skills needed for the jobs of the future, and enhancing the ability of individuals and businesses to adapt to the modern labour market.

Objective 2: Promoting job security and strong, sustainable wage growth

The Government will seek to promote a labour market with jobs that are safe, secure, fairly paid and provide mutually beneficial flexibility to workers and employers.

Wage growth in Australia has been subdued over the past decade, though it has picked up over the past year to be at its highest level in a decade. In the long term, real wage growth depends on productivity growth, a dynamic and competitive labour market and effective wage-setting institutions.

Labour market dynamism, including job switching and labour mobility, is important for employers and workers, who both benefit from better job matches. Job switching promotes higher wage growth, while mobility more broadly plays an important role in ensuring we can adjust to structural change. A system of minimum wages, bargaining and a culture of genuine workplace cooperation can support both higher productivity and higher wage growth for workers.

Real wage growth is a key element of increasing living standards but not all workers are fairly paid. The gender pay gap remains an ongoing challenge, and some groups are more susceptible to exploitation. The Government wants all workers to benefit from fair pay for the work they do.



Objective 3: Reigniting productivity growth

Productivity growth is the key driver of real wage growth and rising living standards over the long term, but it has been slowing around the world, and in Australia, since the mid-2000s. In the decade to 2020, productivity growth in Australia was the slowest in 60 years.

While several long-standing factors have contributed to the productivity slowdown, we also face new and emerging headwinds, and our productivity challenge is changing with shifts in our industrial base.

Realising our productivity potential will require a broad-based approach that promotes the enduring drivers of productivity growth such as investments in our human capital and infrastructure, as well as promoting competition and dynamism while leveraging the big transformations underway in our economy.

The potential to generate low-cost renewable energy and increased adoption of digital technologies present new avenues to improve productivity. Raising productivity in large or growing industries such as care and support services will also become increasingly important.

Rather than repeating previous waves of reforms, Australia's productivity agenda needs to respond to current economic circumstances and identify modern strategies to advance enduring policy goals. To make the changes we need, the Government is progressing a five pillar productivity agenda. This agenda focuses on driving higher productivity growth by promoting economic dynamism and resilience, investment in physical and human capital, delivering quality care more efficiently, and realising the opportunities of the net zero transformation.

Objective 4: Filling skills needs and building our future workforce

Addressing skills shortages and proactively building a strong and skilled workforce will be fundamental to achieving full employment and productivity growth. To do this will require substantial growth in the high-skilled workforce. Over the next 10 years, more than 9 out of 10 new jobs expected to be created will require post-secondary qualifications.

Some rapidly growing industries are facing acute skills shortages and will require tailored workforce solutions. This requires investments in domestic skills and training, complemented by targeted migration pathways. Australia needs an increasingly highly-skilled labour force, equipped with the right tools and technology, in order to meet the needs of a growing care economy and to maximise opportunities from the digital and net zero transformations.

Projections produced by Victoria University for Jobs and Skills Australia show that digital and technology jobs will grow by 21 per cent by 2033, while the care and support economy is expected to grow by 22 per cent by 2033. Projections produced by Deloitte for Jobs and Skills Australia show that the occupations key to the clean energy workforce will need to increase by around 30 per cent by 2033 to deliver the net zero transformation. This represents an increase of 213,000 workers. Workforce planning grounded in data like this, together with insights from industry and educators, can drive a responsive skills and training sector.

The education system is central to our goal of filling skills needs and building our future workforce. Lifting the level of educational attainment across the Australian population requires action through all stages of the education journey. To increase the number of people with post-school qualifications, students must be set up through an effective school education to succeed and complete their tertiary qualifications. Migration is not a substitute for investing in the skills of Australians. However, well-targeted migration can complement local skills while contributing to productivity growth.

The tertiary system must adjust to meet future workforce needs by providing greater support for disadvantaged students and increasing collaboration across higher education, vocational education, industry and governments. Finally, a culture of lifelong learning, supported by greater workplace training, will ensure people are able to upskill to take advantage of future opportunities in the labour market.

Objective 5: Overcoming barriers to employment and broadening opportunity

Increasing labour force participation promotes social inclusion and boosts our economic potential.

Opportunities in Australia's economy have not always been shared equally. The five regions with the highest long-term unemployment rates make up 12 per cent of all long-term unemployed people nationally, despite only having five per cent of the working age population.

Disadvantage reduces the employment prospects of many people and can lead to intergenerational cycles of joblessness. Entrenched disadvantage often starts from birth and follows people throughout their life.

Compounding local factors, complex personal circumstances and discrimination can make engagement in work challenging for families and communities, including to break out of cycles of disadvantage. Many people face multiple, interconnected barriers to employment such as a lack of access to services or secure and affordable housing. Unemployment disproportionately affects key cohorts in our society.

- The employment rate of Aboriginal and Torres Strait Islander people continues to significantly lag that of non-Indigenous people, and the gap has not closed notably over the past 30 years.
- The employment rate for people with disability has been consistently lower than for those with no reported disability, and has shown no improvement over 20 years.
- Young people aged 15 to 24 years face an unemployment rate twice the unemployment rate for all Australians.

Women are participating in the labour market at higher rates than ever before. However more work can be done to achieve gender equality. Barriers include the affordability and accessibility of early childhood education and care, disincentives for secondary earners to engage in paid work, the unequal distribution of unpaid care between men and women, societal norms that limit choice and perpetuate discrimination, occupational segregation, and the impact of gender-based violence.

Mature age workers generally have good labour market outcomes, however, when they lose their job or want to return to the workforce, they can find it hard to get back into work.

Although governments have a range of policy tools to address these issues, employers can also contribute through creating inclusive workplaces, including by implementing recruitment practices and providing opportunities that are free of discrimination and designed to allow people to balance work with other responsibilities.



A Roadmap for the Australian labour market

The White Paper builds on the important progress made at the 2022 Jobs and Skills Summit and outlines a Roadmap to achieve the Government's vision. The future reform directions identified across the 10 areas in this Roadmap will inform policy priorities, development and design, including for the 2024-25 Budget.

Realising the Government's vision for the labour market requires ambition, collaboration and concerted action across a comprehensive range of policy areas. The labour market transformation of the past 50 years has shown we can become more inclusive and more productive – and the changes expected over the next 50 years will require even greater efforts.

The Government's Roadmap is focused on 10 policy areas:

- 1. Strengthening economic foundations by placing full employment at the heart of our institutions and policy frameworks, progressing a five pillar productivity agenda and strengthening the foundations for secure, fairly paid jobs.
- 2. Modernising industry and regional policy so people, communities and businesses are positioned to withstand the challenges and reap the benefits as we strive to become a renewable energy superpower, realise the opportunities of technological change and broaden and deepen Australia's industrial base.
- 3. Planning for our future workforce by coordinating skill priorities and policies, and meeting workforce needs in the context of a growing care and support economy, the net zero transformation and technological change.
- 4. Broadening access to foundation skills by charting a course towards universal access to affordable, quality early childhood education and care, improving school outcomes and expanding access to adult learning opportunities that help people find and keep a secure, fairly paid job.
- 5. Investing in skills, tertiary education and lifelong learning by increasing the share of Australians studying in areas of high skills need, improving collaboration between the vocational and higher education sectors, and removing barriers to learning across the course of people's lives.
- 6. Reforming the migration system through better targeting skilled migration, improving the employment outcomes of international students and realising the employment potential of migrants.
- 7. Building capabilities through employment services by setting out clear principles for future reform and implementing changes in an evidence-based way that applies learnings from evaluations and accounts for the needs of local labour markets and individuals.
- 8. Reducing barriers to work by addressing disincentives to participate, improving the quality of support for people with disability, and promoting gender equality.
- 9. Partnering with communities to achieve genuine place-based change informed by community needs, deepening ties with social enterprise and partnering with First Nations people to support economic development.
- 10. Promoting inclusive, dynamic workplaces by working with employers to foster workplace diversity, collaborating with businesses through the employment services system and improving the quality and transparency of data to measure workplace performance.

Improving women's economic equality is a Government priority, and will require a focus on women who face complex and intersecting forms of disadvantage, as well as looking at ways we can better value and share care work, ensure safe and respectful workplaces and reduce workforce gender segregation. These sit as cross-cutting principles guiding action across each of the objectives and policy priorities.

This White Paper lays the foundations for current and future Government policies that will continue to shape the labour market over the years to come. We have made meaningful progress – investing in skills, supporting women's economic participation, improving migration settings, making workplaces fairer and safer, and more – and through this White Paper we are taking new actions. But importantly, the policy directions laid out here demonstrate how the Government will prioritise and deliver reforms into the future.

Government cannot achieve its vision alone. Progress will require strong partnerships and collaboration with and between governments, employers including large, medium and small businesses, unions, civil society and the broader community. By working together, we can build a stronger, fairer and more inclusive society for generations to come.

Beneficiaries of change 1

Main points

- The Government is focused on ensuring Australians benefit from the significant forces shaping our economy, by creating more opportunities, for more people, in more parts of our country.
- The Government's vision is for a dynamic and inclusive labour market in which everyone has the opportunity for secure, fairly paid work and people, businesses and communities can be beneficiaries of change and thrive.
- Five significant transformations are underway and will continue to shape our economy over the coming decades: population ageing, rising demand for quality care and support services, increased use of digital and advanced technologies, climate change and the net zero transformation, and geopolitical risk and fragmentation.
- These forces are changing the composition of our workforce, the demand for different occupations, the types of abilities needed, and the nature of how we work. They present an important opportunity to reshape Australia's labour market to achieve our economic and social aspirations.
- The future labour market will require more digital skills, more people employed in the care and support economy, and more adaptable workers with a range of foundational and technical skills. More resilient supply chains will be needed to put Australia on a path towards net zero while maximising opportunities from the energy transformation.
- Realising these opportunities requires a proactive approach by government, working with employers, workers, unions and the broader community to prepare and position our people and the economy to make the most of these changes.

Employment is a core part of our lives, and Australia's labour market is at the centre of our success as a country. Work is an important aspect of a person's sense of belonging and identity. It can improve physical and mental health and is a way of engaging in the community and society. The income received from employment helps people improve their standard of living and provide for others. We need the labour market to function well for the economy, communities and people to thrive.

There is substantial scope for Australia's labour market to deliver better outcomes, including by providing more people with secure, fairly paid work, and addressing the skills shortages that hold Australia back from achieving its potential. The make-up of Australia's workforce, the types of work we do and skills we need, and the way in which we work, are changing. By understanding these changes and setting a clear vision for Australia's labour market, we can position Australians to be beneficiaries of the big economic shifts underway.

1.1 The forces reshaping Australia's economy

Australia has prospered through periods of remarkable economic change. The economy is much more productive than a century ago, which has led to higher wages and living standards, but productivity growth has slowed significantly since the mid-2000s. The services sector plays a significantly larger role in our economy, accounting for more than 80 per cent of employment compared to around 50 per cent at the turn of the 20th century.¹ Concurrently, the output of goods-producing sectors — mining, manufacturing and agriculture — has increased, but the share of these sectors in the economy and employment has fallen.² The typical Australian worker in 2023 produces around seven times the output of a typical worker at the time of Federation.³

Australia's economy is again being reshaped by profound demographic and global forces. The populations of advanced economies are ageing and demand for care and support services is increasing significantly. A remarkable technological and digital transformation is underway, at the same time as global action to address climate change is transforming our economy. Rising geopolitical risk and fragmentation is disrupting supply chains and increasing the value of resilience.

These forces are reshaping our industrial base and changing how we live and work. By anticipating and planning for their impacts, we can manage the pressures they present and seize the economic opportunities they bring. Moreover, by understanding their broader impacts on our workforce, Australia can leverage these fundamental forces to build a bigger, more inclusive, more productive labour market and increase living standards.

1.1.1 Population ageing

Our population is living longer, healthier lives for a range of reasons including improvements to the quality of health and aged care, and an increase in the share of people working in less physically demanding jobs. Life expectancies at birth are 81.3 years for men and 85.2 years for women in 2022–23. As set out in the 2023 Intergenerational Report, these are projected to increase to 87.0 years for men and 89.5 years for women by 2062–63. In addition, families are having fewer children, and are having them later in life. Migration is expected to offset some of these demographic shifts.

Population ageing has implications for our workforce and the types of services demanded in our economy. While the size of our workforce will continue to grow, demographic trends are projected to result in fewer workers relative to the dependent population. An ageing population is also expected to boost demand for care and support services. The effects of an ageing population will be felt more acutely in regional Australia because non-metropolitan areas tend to have older populations than metropolitan areas.

1.1.2 Rising demand for care and support services

Employment in the care and support sector is projected to double over the next four decades, as demand for quality services continues to grow. This is being driven by Australia's ageing population and improved access to formal care arrangements, including for early childhood education and people



living with disability, and Australians using more care services as their incomes grow. At the same time, care work has shifted from informal to formal care.

Rising demand for care and support services is expected to underpin a continued shift in the industry composition of Australia's economy towards services. This will increase demand for additional workers with the right skills, in vocational and highly specialised roles. Governments play a significant role in funding, delivering and regulating these care and support services, which increases the importance of good policy design to enable productivity growth, quality improvements, appropriate competition and better labour market outcomes.

1.1.3 Technological and digital transformation

Advances in technology will continue to shape industries and boost productivity, supporting rising living standards and expanding job creation. The rise of digital technologies has changed Australia's access to the global economy, increased the connections between Australia's regions and cities, and profoundly changed the nature of work. In the current context, emerging technologies such as artifical intelligence and advanced robotics are changing how people engage with technology at work, improving workplace safety and product quality, and creating new markets.

As has been the case in previous eras, technological advances are expected to have an uneven impact across industries and occupations. The broad nature of the way technology is embedded in our day-to-day lives means many people working outside the technology sector will also need to have core digital literacy skills.⁴ Governments, businesses and the broader community have a role in enabling more people to benefit from advances in technology.

1.1.4 Climate change and the net zero transformation

Governments around the world have committed to transitioning their economies to net zero emissions by 2050, which is bringing about one of the most significant shifts in the global economy since the Industrial Revolution. Australia is well positioned to benefit from the net zero transformation, with potential to generate large volumes of cheap electricity from renewable sources to power our homes and industries, and to export energy to support global efforts. Our abundant endowment of critical minerals means Australia will also play a key role in supply chains for net zero technologies like batteries.

This transformation will have a significant impact on Australia's industry mix, and the economy more broadly. It is changing the energy infrastructure needed to realise industrial opportunities and requires greater innovation and adaptability to reduce emissions. At the same time, climate change presents new physical risks and productivity challenges. 5 Overall, these changes are generating pronounced shifts in demand for particular skills, including trades and engineering, and amplifying global competition for expertise. Meeting these skills needs will be critical to delivering on emissions reduction commitments and realising the economic opportunities of the net zero transformation.

Formal care refers to paid care services in the market. Informal care refers to unpaid care provided by family, close relatives, friends, and neighbours.

1.1.5 Geopolitical risk and fragmentation

Recent shocks to the global economy and rising geopolitical risk have highlighted the adaptability of supply chains, but also their vulnerability. The Australian economy has long benefited from our participation in the global economy. Our openness to trade, investment and people movements support our prosperity, with one in four jobs in Australia linked to international trade. Open international markets built on a trusted, rules-based global trading system have also generated large efficiency dividends, as international production can be shared across regional and global supply chains according to comparative advantage.

Diversifying and de-risking supply chains, reinforcing Australia's economic security, and boosting development in critical technologies and industries will help us build resilience while continuing to benefit from integration with the global economy. Promoting adaptability in Australia's economy will also improve capacity to realise new opportunities as they arise and minimise the costs of disruptions and transitions. Maintaining and growing Australia's attractiveness as a place to live and work will also help to attract migrants with valuable and scarce skillsets that are in high global demand.

1.2 Changes underway in Australia's labour market

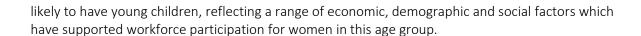
These forces shaping Australia's economy will have significant implications for the composition of our workforce, the types of jobs and skills needed, and the nature of how and where we work. By anticipating and planning for these changes, we can leverage these forces and support broader improvements in labour market outcomes.

1.2.1 Changing workforce

One of the most fundamental changes in the labour market over the past 60 years has been the rise in women's workforce participation. Women's participation, which has increased from around a third in the 1960s to nearly two-thirds today, has been driven by changing social attitudes, and more equitable access to education. This increase in participation has also been facilitated by changes such as equal pay cases, wider access to early childhood education and care arrangements, the Government-funded Paid Parental Leave scheme, and anti-discrimination laws.

Despite the gains women have made in workforce participation, there remain gaps between men and women in participation rates, hours worked and hourly rates of pay. In addition, many industries and occupations have persistent gender skews. For example, women make up over 70 per cent of the health care and social assistance sector but only around 13 per cent of the construction and engineering sectors. These patterns are driven by a range of factors including the unequal division of unpaid care work, limited flexibility in male-dominated industries, workplace cultures, and gender bias and stereotypes. Workforce gender segregation contributes to the gender pay gap, as men continue to dominate in industries and occupations with higher earnings and women in those with lower earnings, reflecting the historical undervaluing of feminised jobs. A highly gender-skewed workforce also increases the risk of workforce shortages. Around 65 per cent of occupations in shortage on the Skills Priority List have workforces that are over 80 per cent men or women.

Younger generations of women are more likely to participate, and for longer, in the workforce than previous generations. The strongest participation gains have been made by women in their 50s and 60s. Chart 1.1 also shows the upward trend in participation for women during the years they are most



% 100 80 60 40 20 0 15 20 25 30 35 40 45 50 55 60 65 70 75 Builders **Baby Boomers** Gen X Millennials Gen Z Age (years)

Chart 1.1 Women's workforce participation rates, by age and generation

Source: Treasury analysis of ABS Labour Force microdata, 1982–2023.

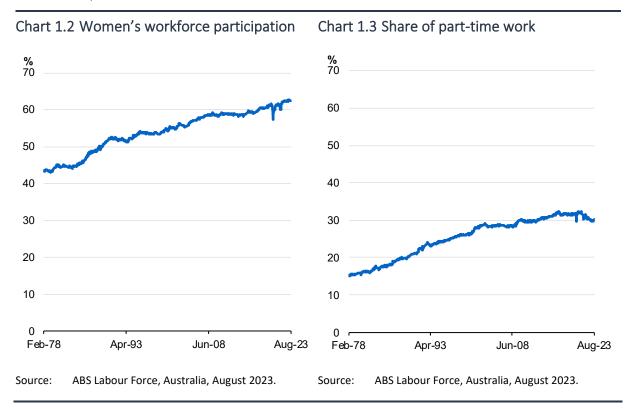
Note: Generations are defined as: Builders (1850 to 1945), Baby Boomers (1946 to 1965), Gen X (1966 to 1980), Millennials (1981 to 1996) and Gen Z (1996 to 2010).

Higher participation within age groups, including among women and older Australians, over the past four decades has added the equivalent of around 2.5 million people to the labour force. While this has been partly offset by the effects of an ageing population, it has meant that Australia's overall participation rate has continued to rise despite the changing age structure of the workforce. While the population will continue to age, Australia has a younger population than most other advanced economies due to its migration program, as new migrants tend to be younger than the existing population. In 2021–22, 76 per cent of new migrants were aged between 15 and 34, compared to 27 per cent of the incumbent population.¹⁰

The diversity of the workforce has improved too. Workforce participation by Aboriginal and Torres Strait Islander people, mature-aged workers and people born overseas has increased over time. Landmark policy decisions, including changes to legislation since the 1960s, have helped more First Nations people enter mainstream employment. 11 The introduction of the National Disability Insurance Scheme has played an important role in supporting people with disability in the workforce. However, labour market outcomes for these cohorts continue to lag. The slow progress of efforts to address this inequality has demonstrated the complexity of barriers to participation that some Australians face.

Changes in the diversity of Australia's workforce – especially the increased participation of women (Chart 1.2) have occurred in conjunction with the rise of part-time work (Chart 1.3) and the increased prevalence of dual-income households. These factors, together with an ageing population, have resulted in more people balancing work alongside caring commitments. While men are becoming

more involved in caring roles, women are still overwhelmingly responsible for caring for children, ageing parents and people with disability. This has highlighted the benefits to workers and employers of different patterns of work, as well as raising new questions about how job security and reliability can be assured.



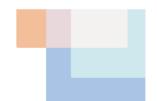
1.2.2 Changing industries and skills needs

The forces shaping Australia's economy are changing its industrial composition, the jobs required, and the skills needed to do them. In particular, the growth of the care economy, the net zero transformation and technological change are creating more jobs for workers with specific technical knowledge and skills. At the same time there has been increased demand for workers with transferable skills such as communication, ability to work in a team and problem solving.

Accelerating demand for key workforces

Australian businesses will need more skilled workers to do the priority jobs of the future. This will require supporting more people to graduate from high school, to gain tertiary qualifications, and to engage in lifelong learning, skilling and upskilling, throughout their careers.

The care and support economy has grown considerably in recent decades and is projected to grow further. The 2023 Intergenerational Report projects the care and support sector could grow from around 8 per cent of GDP today to around 15 per cent in 2062–63, while the care and support workforce could double over the next 40 years, after having doubled over the past 20 years.



Projections produced by Victoria University for Jobs and Skills Australia (JSA) show that the care and support economy is expected to grow by 22 per cent by 2033."

Achieving the transformation to net zero emissions by 2050 will reshape the skills needed in our economy, including an increase in tradespeople and technicians, such as electricians, plumbers, grid connectors and wind farm operators. Projections produced by Deloitte for JSA show that the occupations key to the clean energy workforce will need to increase by around 30 per cent by 2033 to deliver the net zero transformation.ⁱⁱⁱ This represents an increase of 213,000 workers. The clean energy supply workforce alone is projected to increase by around 127 per cent.^{iv}

Building up this workforce is a critical enabler of the transition to a clean energy economy, and a lack of available skilled workers is reported as a key barrier to investment and project development, both in Australia and internationally. 13 As a result of this demand, there is elevated competition internationally for skilled migrants in these fields.

Ensuring businesses and workers can benefit from the opportunities arising from the net zero transformation will require a stronger focus on adaptable education and training systems. The net zero transformation will change employment opportunities in some regions. Reflecting the significant regional concentration of decarbonisation and clean energy growth opportunities, 80 per cent of facilities covered by the Safeguard Mechanism are located in just eight regions.¹⁴

Digital skills are becoming increasingly important to the Australian economy. As the digital transformation continues, the demand for skills associated with building and engaging in the digital economy will continue to grow. The technological and digital transformation will require higher levels of technical and digital skills across all industries, for both ICT and non-ICT occupations. Projections produced by Victoria University for JSA show that digital and technology jobs will grow by 21 per cent by 2033. JSA also estimates business demand for workers that spend more than 50 per cent of their time on data and digital skills will increase to 411,000 workers (an addition of 44,700 workers) by May 2028. Digital adoption is also a key driver of small business growth, so growing the digital capabilities of the 42 per cent of workers who work in small businesses will play an important role in enabling overall economic growth and business dynamism.

The increase in demand across the care and support, net zero and digital industries is projected to outpace population growth. Delivering on these specific industry priorities, as well as other objectives such as improving the complexity and diversity of Australia's exports and building on areas of traditional strength, will place significant demands on Australia's skills system, workforce utilisation and broader workplace planning capabilities. Businesses, workers and all levels of government will need to coordinate investments in priority skills to realise Australia's economic and broader industry objectives.

Changes in the types of skills needed

Technological advances have always changed the nature of people's jobs. Historically, new technology has led to long-term job creation by freeing up time for workers to focus on higher value tasks.¹⁵

The care and support economy is calculated by JSA based on 19 occupations in six industries, spanning early childhood education and care, residential aged care and disability and other care. The 2023 Intergenerational Report uses the ABS definition of the Health Care and Social Assistance Industry Division.

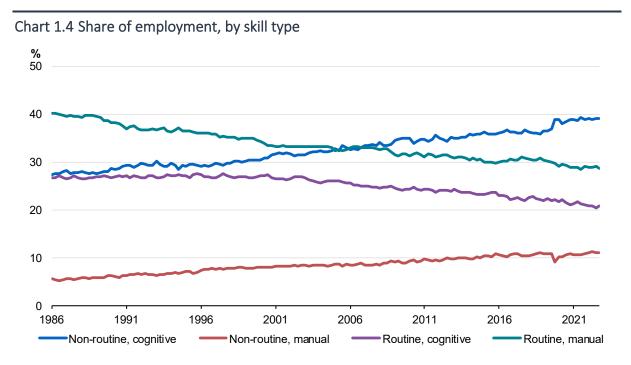
Table 5.1 provides a list of occupations.

The clean energy supply workforce relates to the generation of renewable energy and includes hydro-electricity generation, hydrogen, offshore wind generation, wind generation and solar generation.

In today's labour market the most profound changes are coming from new digital and advanced technologies, which are increasing demand for specific skills, such as computer network professionals, database and system administrators and ICT security specialists. ¹⁶ An increasing share of job ads in Australia reference emerging technology. This is likely to be a continuing trend if the demand for digital skills increases to levels seen in comparable countries. ¹⁷

Jobs with a high share of non-routine tasks have grown as a share of employment over the past 40 years (Chart 1.4). This reflects that technological advances automate routine tasks over time, which increases the share of time spent on less routine tasks. For example, the advent of personal computers, word processing and spreadsheets has allowed people working in business services to spend more time on new value-adding tasks by automating others.

The shift towards non-routine tasks is not limited to knowledge-intensive roles. Employment in jobs with a high share of non-routine manual tasks, such as bus drivers, cabinet makers and plumbers, has also increased. Automation of some tasks has also contributed to safer and more highly paid jobs, by replacing more dangerous, repetitive, and less productive tasks.¹⁸



Treasury analysis of ABS Labour Force, Australia, Detailed May 2023.

Note: Data and classifications from Australian and New Zealand Standard Classification of Occupations using Reserve Bank of Australia skills structure framework.

These trends are resulting in pronounced changes in the skills demanded by employers. Soft-skill intensive occupations are expected to grow at 2.5 times the rate of jobs in other occupations, and account for two-thirds of all jobs by 2030. Developing greater proficiency in core competencies, such as analytical skills and problem solving, can help workers be more resilient to changes in their jobs and is associated with a wage premium. ²⁰

Source:



1.2.3 The future of work

In addition to changing the skills required in the workforce, technology is also changing where, when, and how we work. This has changed people's experiences at work, and also created opportunities for more Australians to participate in work in ways that accommodate other factors in their lives such as caring responsibilities.

Digital technology now enables people in many occupations to work remotely, changing their experience of the workplace and job opportunities. The adoption of remote work can allow employers to access skilled workers from across Australia. This was accelerated by the COVID-19 pandemic, resulting in over 40 per cent of workers reporting they regularly worked from home in 2022, up from around 30 per cent pre-pandemic and 15 per cent in the 1970s. 21 Most office workers now say they prefer a hybrid work model, and research suggests that two or three days working from home does not reduce productivity, and can improve employee recruitment and retention.²² Ability to remotely work is more prevalent in sectors such as information, media and telecommunications and financial and insurance services, and in occupations such as professionals, managers, and clerical and administrative workers.²³

For some people, the rise of remote work has expanded work opportunities, reduced time spent commuting and provided more flexibility to balance work and other responsibilities. More than 10 per cent of job ads now include the option to work from home, reflecting the extent to which workers are negotiating over conditions as well as wages, and employers are improving workplace experiences to attract the best talent.²⁴ However, hybrid or remote work can also present challenges – for example, by making it more difficult to facilitate spontaneous collaboration and to support workers to build their skills through on-the-job mentoring.²⁵ Improved flexibility around where and when people work can also create ambiguity around when workers can disconnect from work, which can impact on wellbeing.

Digitalisation has also introduced new modes of employment, such as the 'gig' economy. Around seven per cent of workers offered work on a platform in the last year, with almost all of this cohort using gig work as a secondary source of income.²⁶ By intermediating between 'gig workers' and their customers, digital platforms have introduced a new pattern of work, where workers do not have all the characteristics or rights of an 'employee' but also do not have the autonomy of direct contractors. As is the case with other forms of work, minimum standards will be necessary to ensure gig workers are not left vulnerable to exploitation and unsafe work, and the benefits of employment are shared fairly with workers.

In addition to changing where and when people work, new technologies are changing the tasks jobs require, and how people work with technology. As robotics and artificial intelligence become capable of automating a growing share of routine tasks, there will be greater opportunities for businesses to leverage technology to make their workplaces safer and reduce administrative tasks for workers, and provide workers better access to information and decision-making tools. In these ways, effective adoption of technology can boost labour productivity.

Automation is expected to have a greater impact on the way each job is done than on the jobs that are required. In the decade leading up to the COVID-19 pandemic, most of the changes in the tasks performed by Australian workers were driven by changes within each occupation category, rather than by movement between occupations. Yoonsistent with this, it has been estimated that up to a

Based on analysis of O*NET and ABS Labour Force data.

third of the activities within 60 per cent of jobs are suitable for automation, but fewer than 10 per cent of occupations could be fully automated.²⁷ By another estimate, this increased automation could save the average Australian worker two hours per week on manual and routine tasks.²⁸

Overall, technological change has led to long-term job creation and improved productivity, rather than reducing employment, and many expect this to remain true through this next wave of technological change. ²⁹ Occupations that largely involve routine tasks are more exposed to the impacts of automation and may require support to benefit from the changing nature of work. Anticipating these impacts and supporting people to move into adjacent roles or upskill will reduce the disruption caused by automation, ensure people are supported and that the skills of Australian workers are being utilised effectively.

These changes to the nature of work have the potential to complement and support the shifts underway in who participates in Australia's workforce, the industries they work in and the skills they need at work. When workers are equipped with the right skills, new technologies can reduce skills shortages by boosting productivity. When flexibility is delivered in a way that is beneficial to both the business and employee, it can expand employment opportunities, allow businesses to access more skilled workers, and help people balance work with other priorities. In these ways, changes to the nature of work can serve as tailwinds that support broader improvements in labour market outcomes.

1.3 Building a better labour market

The nature of Australia's labour market and the opportunities it creates are ultimately determined by the decisions and investments made by governments, employers, workers and communities. Australia's labour market is going through a period of significant change and has substantial scope to deliver better outcomes. The Government has been working collaboratively to develop a clear vision for building a better labour market which can support Australia to achieve its broader economic, social and environmental goals.

1.3.1 Historical and economic context

The architecture of today's labour market has been built up through generations of reforms. Motivated by the lasting memories of the Great Depression and poor integration of soldiers following the First World War, the 1945 *White Paper on Full Employment* focused on securing full employment, and absorbing returned servicemen and servicewomen from the Second World War into the workforce and society as quickly as possible. It also introduced a comprehensive social security system, and the establishment of the Commonwealth Employment Service. We have continued to build on these reforms, with the social security system expanding to include support through family and parenting payments, assistance to veterans and widows, as well as the Disability Support Pension and more recently the National Disability Insurance Scheme.

The 1994 Employment White Paper *Working Nation* focused on addressing the rising incidence of structural long-term unemployment. The unemployment rate reached almost 12 per cent in 1993 and the proportion of those who were unemployed for over a year (and thus classified as long-term unemployed) was almost 40 per cent of those unemployed. *Working Nation* expanded labour market programs to include the introduction of guaranteed work and training options, and wage subsidies to assist the transition of people who were long-term unemployed back into the workforce. It represented a fundamental shift towards focusing on the length of unemployment, not just the



instance of it. Working Nation also had a renewed emphasis on spatial equity and provided adjustment assistance to regions most impacted by structural change. The policy changes adopted following Working Nation set some of the key design features of today's social security system.

1.3.2 Current labour market conditions

This Employment White Paper is being published at a unique moment in Australia's history. The unemployment rate is near record lows, and the share of our population in paid work is at record highs. There have been just 18 months of unemployment less than four per cent since monthly records first began in 1978, and 15 of those have been under the current Government. While labour market outcomes differ across cohorts and regions, current conditions have provided more opportunities for people to gain employment, especially those facing barriers to work or with less experience or skills. However, since the re-opening of the economy after the COVID-19 pandemic, labour demand has outstripped supply, creating widespread labour shortages that have held back Australia's economy and highlighted the urgency of addressing the structural skills shortages that had been emerging before the pandemic.

Growing demand for care and support services and realising the opportunities from the net zero transformation are creating pronounced demand for workers with key skills. Australia will need to increase the supply of skilled workers, especially in priority areas, to achieve its economic and broader objectives. Because the majority of industries and occupations expected to grow the most are gender segregated, a focus on improving workforce gender equality will play a part in meeting future labour supply needs.

Changes in the composition and skills of the workforce, and the way we work, have meant that Australia's labour market has also become more diverse and flexible. The trend towards part-time employment and more varied and flexible work arrangements over recent decades has enabled many more people, especially women, to balance work and other responsibilities. This has also benefitted business by opening up a new pool of workers, bringing a diverse range of experiences which are linked with higher productivity for business.³⁰ These changes have also brought about new challenges in job security which disproportionally affect some cohorts. For example, women are more likely than men to be in jobs without leave entitlements, young people (aged 15 to 24 years) are more likely to report they expect to lose their jobs than other adults, and migrants are more likely to be in less secure labour hire roles than people born in Australia.

New patterns of work have also impacted how we assess and manage spare capacity in the economy overall. While the national unemployment rate is near 50-year lows, there remains considerable untapped potential in the labour market. Around three million people in Australia would like to work but do not have the opportunity to do so, or would like to work more hours and cannot access them. Underutilisation can result from macroeconomic conditions or structural barriers, such as community disadvantage, financial barriers, a lack of access to transport, housing, childcare or having other care responsibilities.

Despite gains in employment and a tight labour market, wage growth has been subdued over the past decade and has only recently begun to increase again. Real wages have been declining and are lower than their level a decade ago. vi Australia's poor productivity growth performance has contributed to these wage outcomes: productivity growth over the decade to 2020 was the slowest in 60 years. The

Real wages (as measured by the Wage Price Index deflated by the Consumer Price Index) were three per cent lower in June 2023 than in June 2013.

structural factors currently reshaping Australia's labour market present an important opportunity to reignite productivity growth through a combination of investment in new technology and in the skills of all Australians.

The shifts underway in the global and domestic economy have been fundamentally reshaping Australia's labour market, and set up an important moment for reform. With the right institutions and policies, we can achieve our vision for a dynamic and inclusive labour market in which everyone has the opportunity for secure, fairly paid work and people, businesses and communities can be beneficiaries of change and thrive. By investing in our people and expanding opportunities to work, we can address skills shortages now, while building a bigger, more inclusive and more productive labour market for the future.

1.3.3 Consultation and collaboration

To understand the opportunities to expand the potential of Australia's labour market, the Government has consulted extensively with employers and peak groups, workers and unions, communities and state and territory governments. This collaboration commenced with the Government's Jobs and Skills Summit, held in Canberra on 1–2 September 2022. This Summit brought together over 140 Australians to discuss the challenges and opportunities facing the labour market, such as addressing skills shortages, delivering secure, well-paid jobs and boosting productivity. The Summit resulted in 36 immediate outcomes and 38 areas for further work, which have been completed or are being progressed. It built on over 100 roundtables held across Australia in the lead up to the Summit.

Key issues raised at the Jobs and Skills Summit have been explored in depth through a wide-ranging, year-long stakeholder engagement process which included over 400 public submissions, on the ground consultations in every state and territory, partnering with researchers and academics, and engagement by the Treasury Employment Taskforce with over 250 stakeholders including meeting with people with lived experience and from diverse backgrounds.

While the specific issues raised varied across the country, the consultations revealed a high degree of consensus on the priority issues facing Australia's labour market.

- Many stakeholders discussed the benefits of full employment. Some suggested a full employment
 objective should incorporate broader measures of underutilisation than the unemployment rate or
 the non-accelerating inflation rate of unemployment. Others called for more active fiscal policy or
 better monetary and fiscal policy coordination to achieve full employment.
- There was consensus across stakeholders that jobs that are fairly paid with good conditions are crucial to workers' wellbeing. There was general support for job security, but the understanding of what this means differs. Safety at work remains a central concern for workers and non-permanent forms of employment present challenges to maintaining safety standards.
- Consultations highlighted the challenge of slowing productivity growth. Stakeholders acknowledged the slowdown as one of the most important factors in explaining the decline in wage growth. Submissions argued innovation and adoption of emerging technologies were important for improving productivity growth, along with a skilled workforce.
- Both large and small businesses across industries and locations highlighted labour and skills shortages as pressing issues. Some stakeholders acknowledged that a tight labour market also improves employment prospects for those who face more barriers to employment, and emphasised the importance of supporting people to build capability and find pathways to work. Persistent workforce shortages were highlighted in the care and support economy.



- Several submissions noted that structural trends will affect the demand for skilled labour, presenting both challenges for displaced workers and opportunities for workers to move into growth industries. Lack of access to quality services, infrastructure, child care and affordable housing were raised as issues, especially for regional areas.
- Consultations revealed high levels of labour market disadvantage for certain cohorts for example, First Nations people and people with disability. We listened to people's lived experience of joblessness and disadvantage, which often highlighted broader, systemic issues, including interactions across different parts of the tax-transfer system. Listening to lived experience also emphasised the unique challenges some cohorts face in the labour market.
- Stakeholders highlighted how reforming some structural barriers faced by women could help shift systemic and societal norms which perpetuate discrimination, the gender pay gap, occupational segregation and gender-based violence.

Together with the Government's assessment of the factors reshaping Australia's labour market and the current labour market conditions, these priority issues raised by stakeholders have informed the direction of this Employment White Paper.

The Government has established the Economic Inclusion Advisory Committee (EIAC) to provide advice on addressing disadvantage and boosting economic participation. The Government also established the Women's Economic Equality Taskforce (WEET) to provide specific advice on women's economic security and equality. The Government has already acted on several EIAC and WEET recommendations through the 2023-24 Budget. Other recommendations of the EIAC including that the Government commit to a clear full employment objective and that this objective should include improving access to the workforce for disadvantaged cohorts and encompass issues of job quality, are delivered through this White Paper. The Government will draw on the WEET's advice in formulating the forthcoming National Strategy to Achieve Gender Equality.

1.3.4 Our vision for the labour market and a better future

The Government's vision is for a dynamic and inclusive labour market in which everyone has the opportunity for secure, fairly paid work and people, businesses and communities can thrive and adapt. Achieving this vision will create more opportunities for more people across our country and ensure Australians are beneficiaries of the big transformations underway in our economy.

The research and consultation completed for this White Paper concluded that achieving this vision will require delivering on five key objectives. These are unpacked in the following chapters.

Our first objective is delivering sustained and inclusive full employment, namely an economy where everyone who wants a job can get one without searching for too long. This means that the labour market should provide employment opportunities for all Australians regardless of their location or personal situation. Achieving a more inclusive labour market will require a broad range of policy actions to lower structural barriers to participation experienced by some cohorts. We recognise that the level of full employment that exists at any point in time must also be sustained by minimising cyclical labour underutilisation in a way that is fiscally sound and consistent with price stability.

Our second objective is promoting job security and strong, sustainable wage growth. Real wages are still falling, even as the gap between wages and inflation narrows. Poor job security and stagnant wage growth can erode living standards, financial security, and wellbeing. In addition to ensuring everyone who wants a job can get one, we recognise that working conditions, including a job's safety, security and mutually beneficial flexibility, also matter.

Our third objective is to reignite productivity growth, given Australia's relatively weak productivity performance in recent decades. Productivity growth is the core driver of sustainable wage growth and rising living standards. It is especially important to find ways to boost productivity in care and support services, given this sector is growing as a share of the overall economy. At the same time, the technological and digital transformation and climate change and the net zero transformation offer potential for a more productive and dynamic economy if the opportunities they present for investment in new technology are realised.

Our fourth objective is filling skills needs and building our future workforce. The jobs of the future will require higher level skills, and some businesses are already having difficulty finding skilled labour. More responsive and equitable education, training and migration systems will be required to broaden employment opportunities and ensure businesses can meet their skills needs now and into the future. This ambition recognises that the education journey to build solid foundational skills starts in early childhood and continues all the way through to tertiary education, where the focus shifts to more specialised skills that give people access to secure, fairly paid jobs. Having a skilled, strong and adaptive workforce made up of people who actively participate in lifelong learning is also critical to the success of enabling full employment and productivity growth.

Our fifth objective is overcoming barriers to employment and broadening opportunity. This is aimed at achieving economic equality for women, lifting people out of entrenched disadvantage, spreading the benefits of work more broadly in our society, and increasing the productivity of business through increased diversity. This involves reinvesting in employment services and ensuring policy settings do not disincentivise participation. Connecting more people to work and breaking cycles of disadvantage requires an integrated approach that goes beyond government and involves genuine partnerships with communities and industry.

Our objectives and policy actions will be guided by reform principles that relate to women's economic equality, which include actions such as valuing care work, supporting women who face complex intersecting forms of disadvantage and reducing workforce gender segregation.

The Government has a Roadmap for achieving its vision and objectives that sets the policy directions the Government will take to position the Australian labour market for the future. It is focused on 10 areas which are detailed further in this White Paper:

- 1. Strengthening economic foundations
- 2. Modernising industry and regional policy
- 3. Planning for our future workforce
- 4. Broadening access to foundation skills
- 5. Investing in skills, tertiary education and lifelong learning
- 6. Reforming the migration system
- 7. Building capabilities through employment services
- 8. Reducing barriers to work
- 9. Partnering with communities
- 10. Promoting inclusive, dynamic workplaces.

Endnotes

- Connolly, E. & Lewis, C., 'Structural Change in the Australian economy', Reserve Bank of Australia Bulletin, (September 2010), https://www.rba.gov.au/publications/bulletin/2010/sep/1.html, accessed 9 May 2023.
- The Treasury (Commonwealth of Australia), The Intergenerational Report, (2023), p12, 2 https://treasury.gov.au/sites/default/files/2023-08/p2023-435150.pdf, accessed 24 August 2023.
- Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Keys to growth, (2023), https://www.pc.gov.au/inquiries/completed/productivity/report/productivity-volume2-keys-to-growth.pdf, accessed 9 February.
- Jobs and Skills Australia, Digital skills in the Australian and international economies, (2022), https://www.nationalskillscommission.gov.au/reports/digital-skills-australian-and-international-economies, accessed 22 February.
- 5 The Treasury (Commonwealth of Australia), The Intergenerational Report, (2023), p96.
- Farrell, D., Trading our way to greater prosperity and security [media release], (14 November 2022), https://www.trademinister.gov.au/minister/don-farrell/speech/trading-our-way-greater-prosperity-andsecurity, accessed 6 March 2023.
- Australian Bureau of Statistics (Commonwealth of Australia), Changing role of women, 'Australian Social Trends, Dec 2011', cat. no. 4102.0, (14 December 2011), https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features30Dec+2011#changing, accessed 10 February 2023.
- Engineering Australia. Women in engineering, (2022), https://www.engineersaustralia.org.au/publications/women-engineering, accessed 23 February 2023.
- Jobs and Skills Australia, 31st Australian Labour Market Research Workshop 2022, (2022), https://www.jobsandskills.gov.au/news/australian-labour-market-research-workshop-2022, accessed 24 February 2023.
- 10 The Treasury (Commonwealth of Australia), The Intergenerational Report, (2023), pg72, https://treasury.gov.au/sites/default/files/2023-08/p2023-435150.pdf.
- 11 Leroy-Dyer, S., (Journal of Australian Indigenous Issues), A brief history of Aboriginal and Torres Strait Islander involvement in the Australian labour market, (June 2021), https://search.informit.org/doi/10.3316/informit.046688558409367
- 12 Department of the Prime Minister and Cabinet, National Strategy to Achieve Gender Equality Discussion paper, https://www.pmc.gov.au/sites/default/files/resource/download/national-strategy-gender-equalitydiscussion-paper 0.pdf, accessed 16 February 2023.
- 13 Organisation for Economic Co-operation and Development, Job creation and local economic development, (14 March 2023), https://www.oecd.org/employment/job-creation-and-local-economic-development-26174979.htm, accessed 19 September 2023; Committee for Economic Development of Australia, Powering the transition: The net-zero workforce challenge, (2023), https://cedakenticomedia.blob.core.windows.net/cedamediacontainer/kentico/media/attachments/poweri ng-the-transition-ceda.pdf, accessed 19 September 2023.
- 14 Clean Energy Regulator (Commonwealth of Australia), 2021-22 Safeguard facility data, (31 March 2023), https://www.cleanenergyregulator.gov.au/NGER/The-Safeguard-Mechanism/safeguard-data/safeguardfacility-reported-emissions/safeguard-facility-reported-emissions-2021-22, accessed 14 March 2023, accessed 15 May 2023.
- 15 Borland, J. & Coelli, M., 'Are Robots Taking Our Jobs?', The Australian Economic Review. (2017).

- 16 Hope. A., et al., (National Skills Commission), Digital skills in the Australian and International Economies, https://www.nationalskillscommission.gov.au/sites/default/files/2022-03/ABS%20Paper%20-%20Digital%20Skills.pdf, accessed 14 April 2023.
- 17 National Skills Commission, State of Australia's Skills 2021: now and into the future, (2021), https://www.nationalskillscommission.gov.au/reports/state-australias-skills-2021-now-and-future/chapter-7-emerging-skills/digital-skills-australia-and-internationally, accessed 5 April 2023; Treasury analysis of Lightcast data for Australia (2012–2020).
- 18 AlphaBeta, The Automation Advantage, (Sydney and Singapore, 2017), 21–24.
- 19 Deloitte, Soft skills for business success, (May 2017), https://www.deloitte.com/au/en/services/economics/perspectives/soft-skills-business-success.html, accessed 6 July 2023.
- 20 Heath, A., Skills for the Modern Workforce. Remarks to the Career Education Association of Victoria conference, Melbourne, (Reserve Bank of Australia, December 2017), https://www.rba.gov.au/speeches/2017/sp-so-2017-12-01.html, accessed 7 March 2023; National Skills Commission. Care Workforce Labour Market Study. (2022).
- 21 Australian Bureau of Statistics (Commonwealth of Australia), Working arrangements, (August 2022), https://www.abs.gov.au/statistics/labour/earnings-and-working-conditions/working-arrangements/latestrelease, accessed 20 February 2023.
- 22 Melbourne Institute, Tracking The Pulse of the Nation Survey, (February 2022), https://melbourneinstitute.unimelb.edu.au/data/taking-the-pulse-of-the-nation-2022/wave-48-49, accessed 7 March 2023; Vij, A. et al., Encouraging the continuation of work-from-home practices in a postpandemic world, (Department of Infrastructure, Transport, Regional Development and Communications, University of South Australia, iMOVE Cooperative Research Centre, 2022), https://imoveaustralia.com/wpcontent/uploads/2022/02/IMove-UniSA-WfH-Research-Project-FINAL-CLEAN.pdf, accessed 8 March 2023.
- 23 Vij, A. et al., Encouraging the continuation of work-from-home practices in a post-pandemic world, (2022).
- 24 Indeed, Australia's love affair with work from home continued in 2023, (2023), https://www.hiringlab.org/au/blog/2023/07/19/australia-work-from-home/, accessed 8 August 2023.
- 25 Barrero, J. M., Bloom, N., & Davis, S. J., The Evolution of Working from Home, (2023).
- 26 McDonald, P. et al, Digital platform work in Australia: Prevalence, nature and impact, (Queensland University of Technology, The University of Adelaide, University of Technology Sydney, November 2019), https://eprints.qut.edu.au/203119/19/Report of Survey Findings 2020 002 doi.pdf, accessed 1 March 2023.
- 27 Taylor, C. et al, Australia's automation opportunity: Reigniting productivity and inclusive income growth. (McKinsey & Company 2019). https://www.mckinsey.com/au/~/media/mckinsey/featured%20insights/future%20of%20organizations/aust ralias%20automation%20opportunity%20reigniting%20productivity%20and%20inclusive%20income%20gro wth/australia-automation-opportunity-vf.pdf, accessed 13 April 2023.
- 28 AlphaBeta, The Automation Advantage, (2017), https://accesspartnership.com/wpcontent/uploads/2023/03/The-Automation-Advantage.pdf, accessed 1 May 2023.
- 29 Borland, J., & Coelli, M., 'Are Robots Taking Our Jobs?', The Australian Economic Review. (2017)
- 30 Cassells, R., & Duncan, A., Gender Equity Insights 2020: Delivering the Business Outcomes, (Bankwest Curtin Economics Centre at the Curtin Business School, Workplace Gender Equality Agency, March 2020), https://www.wgea.gov.au/sites/default/files/documents/BCEC%20WGEA%20Gender%20Equity%20Insights %202020%20Delivering%20the%20Business%20Outcomes WEB FINAL.pdf, accessed 13 February 2023.

Delivering sustained and inclusive full 2 employment

Main points

- The Government's objective is sustained and inclusive full employment, which means everyone who wants a job should be able to find one without having to search for too long. This recognises that decent jobs and opportunities are central to a strong economy and a prosperous and inclusive society.
- The Government's full employment objective recognises that the quality of a job matters. What defines the right job will be different for different people, but there are common characteristics including job security and fair pay underpinning the wellbeing of workers. The importance of job conditions including strong, sustainable wage growth is discussed further in Chapter 3.
- While the national unemployment rate is near 50-year lows, labour market outcomes vary starkly across cohorts and regions. There is still considerable untapped potential in the form of people who want to work but do not have the opportunity to do so, or who want to work more hours but cannot access them. This underscores that more can be done to focus on and reduce structural underutilisation and expand employment opportunities to more people across more parts of our country.
- The Government will take a broad approach, focusing on addressing the structural sources of underutilisation to increase the level of full employment that can be sustained over time without adding to inflationary pressures. This approach will position our people, regions, businesses and industries to maximise opportunities arising from the five significant forces reshaping our economy.
- A broader range of labour market indicators than the national unemployment rate is needed to measure progress towards sustained and inclusive full employment. This includes indicators that capture different groups, regions and aspects of labour market underutilisation.
- To make progress towards the objective of sustained and inclusive full employment, the Government will use a broad set of policy tools, including:
 - maintaining sound and effective policy frameworks and settings that promote strong and sustainable economic growth, sustain the current maximum level of employment, and limit the adverse impact that economic downturns can have on the labour market
 - using fiscal and other policy levers to increase the level of full employment that can be sustained over time and deliver more inclusive full employment by equipping people with the skills and capabilities they need (Chapter 5), broadening access to work opportunities (Chapter 6) and managing structural changes in our regions and industries in ways that expand opportunity and promote growth.

2.1 A labour market that works for all Australians

2.1.1 Full employment is the cornerstone of a strong economy and a prosperous and inclusive society

Maximising opportunity to work in secure and fairly paid jobs, and achieving and sustaining full employment, are central to a strong economy and a prosperous and inclusive society. For the economy as a whole, decent and fairly paid jobs drive consumer demand, thriving businesses and growth. But work also provides financial security and helps people improve their standard of living and provide for others. It shapes the time we have with family and community. Decent work can also form an important aspect of a person's sense of belonging, foster wellbeing and improve physical and mental health.

How we define, measure, and pursue full employment has significant consequences for our economy and people. Discussions of full employment have often too narrowly centred around statistical estimates or assumptions of cyclical full employment – such as the non-accelerating inflation rate of unemployment, or the NAIRU (discussed in Section 2.2.4). Conceptually, the NAIRU represents the level of unemployment consistent with stable wage or price inflation. It indicates the current maximum level of employment that can be sustained in the short-term without adding to inflationary pressures.

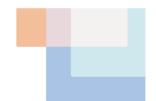
It is important to distinguish between necessary technical concepts and statistical estimates such as the NAIRU and longer-term policy objectives. An estimate of the NAIRU can be useful to gauge macroeconomic conditions, prepare medium-term forecasts, or help inform the use of macroeconomic policy across the cycle. But it does not capture the full extent of spare capacity in our economy or the full potential of our workforce. The NAIRU should not be confused with, nor constrain, longer-term policy objectives.

The Government has broader and bolder aspirations for full employment, aimed at increasing the maximum level of employment we can sustain over time, by reducing structural underutilisation. Progress in addressing structural barriers will be reflected in lower statistical estimates of the NAIRU, and expand labour market opportunities and our economy's potential over time.

Removing barriers to work and upskilling our workforce supports the economy by increasing its potential, both in terms of the numbers of people who can contribute and the diversity of skills and experience they bring.

2.1.2 National unemployment is near record lows, but does not capture the full extent of labour market underutilisation

This White Paper is set against the backdrop of a relatively strong labour market and widespread labour and skills shortages. The national unemployment rate has fallen to levels not seen in almost 50 years. Broader measures of underemployment also declined significantly in the past two years. Better job prospects, reflected in high levels of job vacancies, have encouraged more people to enter the labour market, raising the employment-to-population ratio and labour force participation rate to record highs. While labour market conditions are expected to soften, and the unemployment rate is expected to rise modestly over the coming year, it is also expected to remain lower than pre-pandemic levels and low by historical standards.



Underemployment has become a more important indicator of capacity

Part-time work and other flexible work arrangements have been increasing as a share of employment over recent decades as services have become a larger part of the economy. This trend has coincided with greater diversity in the people entering the labour market. Part-time and more flexible work has provided some people with more choices to balance employment with other responsibilities. However, the trend increase in part-time work has also been accompanied by an increase in underemployment, that is, people in jobs who would like to work more hours.

While the unemployment rate continues to be the most widely used measure of spare capacity in the labour market, it provides an incomplete picture of underutilisation.^{i,1} Measures such as the underemployment rate and the share of people outside the labour force who want to work are also needed to capture the full extent of spare capacity in the economy.

Today 2.8 million people in Australia want to work, or to work more hours than they do. This is equivalent to a fifth of the current workforce (Chart 2.1). For every person in Australia reported in the labour force statistics as unemployed, there are four others who want to work but are not actively searching or available to work, or who want to work more hours.

Currently in Australia:

- 0.5 million people are unemployed, that is they want to work, have been actively seeking work and are available to work
- an additional 1.3 million people want to work but have not been actively looking or are not immediately available to work for various reasons. Along with the unemployed, these workers are classified as 'potential workers'
- 1 million workers are in jobs, would like to work more hours, but cannot get access to them. These workers are classified as being underemployed."

Together, the hours these people would like to work represent the equivalent of 1.4 million full-time jobs. The biggest contribution to underutilisation is from those who said they want to work but are not counted as unemployed and therefore not considered to be in the labour force.^{III}

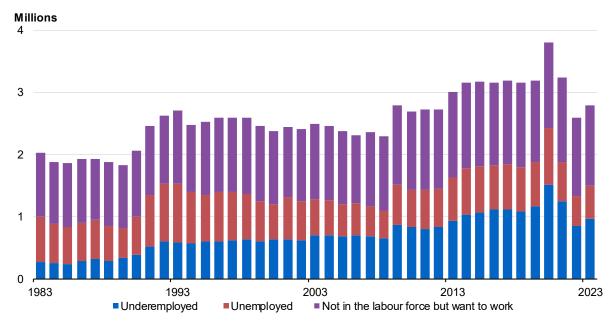
That is why our policy objective for full employment is broader than achieving a low unemployment rate and why it needs to have a higher level of ambition than is implied by statistical measures, such as the NAIRU (discussed in Section 2.2.4).

The ABS defines people as 'employed' if they work one hour or more in the reference week. The vast majority of part-time employed people work more than 15 hours. The 'one hour rule' is used internationally and allows employment figures to be compared with other countries.

The longstanding ABS (and internationally consistent) definition of underemployment includes part-time workers who would prefer, and are available for, more hours than they usually work, plus full-time workers who worked part-time hours for economic reasons. An additional 0.7 million workers are considered underemployed according to an expanded definition of underemployment that the ABS has more recently begun publishing. This includes full-time workers who would prefer to work more hours, and part-time workers who are working fewer hours than usual for economic reasons. When these workers are included there is a total of 1.7 million underemployed people in Australia.

iii Note, only people who said they want to work and were also intending to work in the next 12 months are asked how many hours they would prefer to work. This represents 1 million of the 1.3 million potential workers.

Chart 2.1 Unemployed, underemployed and people outside the labour force who want to work



Source: ABS Labour Force, Australia, August 2023; ABS Participation, Job Search and Mobility, February 2023; ABS

Potential Workers, February 2023.

Note: Unemployed and underemployed series report the August monthly outcome for respective years, whereas the 'Not in the labour force but want to work' series reflects different months of the year based on the different timing of the survey across years. This group also includes workers who have said they had a job to return to, but were considered outside the labour force at the time of the survey. These data are not seasonally adjusted.

Barriers that can prevent potential workers from being available for work or to look for it are explored in greater detail in Chapter 6. Many people face multiple, interconnected barriers to work. These barriers can include entrenched disadvantage, financial barriers, a lack of access to transport, housing, child care or other care and support responsibilities, education, training or changing life circumstances.

The benefits of a strong labour market are not equally shared

Unemployment in Australia is low by historical standards, although expected to rise modestly over the coming year. The tight labour market in Australia is providing opportunities for some cohorts that have tended to face above-average unemployment rates, including younger people who have less experience and fewer skills. The unemployment rates for young people and those with a Year 12 or lower level of education have declined by 3.4 and 3.2 percentage points respectively compared to before the pandemic, while the national unemployment rate has declined by 1.5 percentage points. However, the unemployment rates for these groups remain above the national average. The long-term unemployment rate has also fallen faster than the national unemployment rate, to around 0.7 per cent of the labour force or 110,000 people.²

Despite this progress towards full employment, Box 2.1 shows there continue to be stark differences in employment outcomes across different groups of people in our society. Women are less likely to

iv Comparable data for other cohorts (for example Aboriginal and Torres Strait Islander people and people with disability) are not currently available.



participate in the labour market or work full-time than men and are more likely to be unpaid carers and have a greater share of unpaid care responsibilities. Some cohorts have employment rates well below the national average, including Aboriginal and Torres Strait Islander people, people with disability, single mothers and migrants from particular regions. Young people and LGBTIQA+ people have relatively high unemployment rates. Mature age people can find it hard to regain employment, and carers and veterans can face unique barriers to participation. These outcomes are not consistent with our objective of sustained and inclusive employment.

There are also significant differences between regional labour markets, although the spread of outcomes has narrowed recently as the labour market has tightened. As at July 2023, there was an 8 percentage point difference between the highest and lowest unemployment rates across labour market regions in Australia.

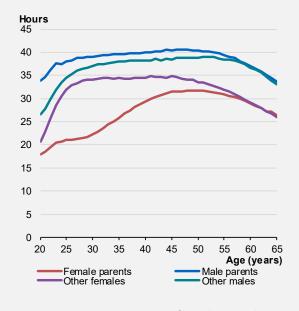
The persistently high unemployment experienced in some remote and regional areas, especially in northern Australia, is exacerbated by limited employment options, the lack of support services and entrenched disadvantage. The dependence on fly-in fly-out, seasonal workers and skilled migration highlights the need for a nuanced approach to address unique regional employment requirements.

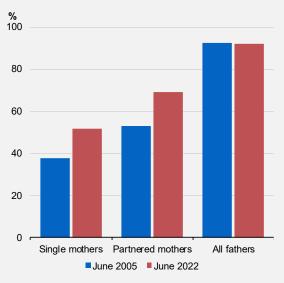
Box 2.1 Labour market outcomes vary across cohorts

Women are less likely to participate in the labour market and are more likely to work part-time than men. Overall, the participation rate of women is 62.5 per cent, compared with 71.7 per cent for men. This gap mainly emerges in the years women are likely to have children. Most men continue to work full-time after having children, but a significant share of women leave the labour market entirely or return to work part-time. On average, women who are employed work 27.7 hours per week, compared with 35.2 hours per week for men (Chart 2.2).

Chart 2.2 Average weekly hours worked by sex and age

Chart 2.3 Participation rates of parents with children under five years





Source: Treasury; ABS Census of Population and

Housing, 2021.

Note: Based on parents and children in the same

family household on Census night.

Source: Treasury ABS Labour Force Status of Families, Australia, June 2022.

In 2018, 10.8 per cent of Australians provided unpaid care to people with disability and older Australians. Primary carers aged 15 to 64 were less likely to be employed (66.6 per cent) compared to non-carers (77.4 per cent) and male carers were more likely to be employed than female carers (71.8 per cent compared to 63.2 per cent). Overall, women were more likely to be unpaid carers (12.3 per cent of women compared to 9.3 per cent of men).3

Aboriginal and Torres Strait Islander people's employment rate has historically lagged those of non-Indigenous people. In 2021, the employment rate for First Nations people aged 15 to 64 was 52.2 per cent, compared to 74.6 per cent for non-Indigenous people in the same age group, a 22.4 percentage point gap. This gap is larger in remote and very remote areas including large parts of northern Australia. In very remote Australia, 31.9 per cent of First Nations people are employed compared to 84.2 per cent of non-Indigenous people. While the gap is largest in very remote Australia, 85.5 per cent of First Nations people live in metropolitan and regional areas.

The employment rate for people with disability has been relatively stable between 1998 and 2018 at around 50 per cent. The employment services caseload and consultation with stakeholder groups suggests that this situation has not changed markedly in recent years. People with disability are a diverse group, and employment outcomes vary with the severity of disability, disability type, age, gender and remoteness. People with sensory and speech disability have the highest employment rate, followed by those with a physical restriction while those with psychosocial disability have the lowest employment rate.⁴

Australia's employment rate for single mothers is one of the lowest in the OECD. About 52 per cent of single mothers with a child under five years participate in the labour market, compared with 70 per cent of partnered mothers and 90 per cent of all fathers (Chart 2.3). Australia's employment rate for single mothers with at least one child aged 0 to 14 years is 15 percentage points lower than the OECD average.⁵

The unemployment rate for young people aged 15 to 24 years is currently twice the national average, 8.3 per cent compared to 3.7 per cent. In May 2023, 89.4 per cent of young people aged 20 to 24 years were engaged in education and/or employment, while the remaining 10.6 per cent were not in employment, education or training.

Mature age workers generally tend to have good labour market outcomes, with an employment rate for people aged 55 to 64 years of 67.1 per cent in July 2023, which is above the OECD average of 63.8 per cent. More older Australians may be choosing to participate in paid work thanks to a combination of improved health and greater availability of less physically demanding jobs. However, when mature age people lose their job or want to return to the workforce, they can find it hard to get back into work (Chapter 6). The employment rate for those aged 65 years and over was 14.7 per cent in July 2023.

The employment rate for people born overseas is 64.6 per cent, slightly lower than the rate for people born in Australia 65.3 per cent in July 2023. Moreover, outcomes vary considerably across migrant groups. Employment rates are worse for migrants from regions such as North Africa and the Middle East (50.8 per cent) and Southern and Eastern Europe (43.0 per cent). Employment rates for women born overseas are lower (59.2 per cent) than for men born overseas (70.2 per cent) and Australian-born women (62.0 per cent).

Limited data are available on the labour force experience of LGBTIQA+ people. Given the diversity of identities the term encompasses, experiences are likely to vary widely. In 2020, lesbian, gay or bisexual people had higher rates of unemployment for those aged over 15 (12.0 per cent) compared to heterosexuals (6.1 per cent).6

2.2 Our objective is sustained and inclusive full employment

The Government's objective for full employment reflects the reality of today's labour market. Macroeconomic policy has done a good job of managing swings in employment over the business cycle, but significant underutilisation persists reflecting structural changes and challenges. Our focus will be on addressing broader measures of underutilisation than the unemployment rate or other narrow statistical measures alone, as we capitalise on the opportunities and manage the challenges posed by the five major forces reshaping the economy.

2.2.1 Our objective

The Government's objective is sustained and inclusive full employment. Everyone who wants a job should be able to find one without searching for too long. We want people to be in decent jobs that are secure and fairly paid. This is a broader and longer-term objective than achieving the current maximum sustainable level of employment consistent with low and stable inflation. This objective recognises that the quality of a job and having enough hours of work matters. Jobs should improve people's living standards, agency and wellbeing. Chapter 3 analyses the key characteristics of job quality, including personal safety, security and fair pay in more detail.

Achieving this objective requires a labour market in which people can find work quickly enough that their work skills remain current and the financial and other harms of unemployment are limited. Being without work for lengthy periods can be costly, although this somewhat depends on people's circumstances. For some people even short stints of unemployment will be very challenging, while for others the benefits of searching for longer for the right job will outweigh the costs. Achieving this objective also means ensuring people have access to the number of hours of work they want.

Our objective of full employment has two parts:

- Sustained full employment: is about using macroeconomic policy to reduce volatility in economic cycles and keep employment as close as possible to the current maximum sustainable level of employment that is consistent with low and stable inflation (Figure 2.1a).
- Inclusive full employment: is about broadening labour market opportunities, lowering barriers to work, and reducing structural underutilisation to increase the level of employment that can be sustained in our economy over time (Figure 2.1b). Achieving this outcome requires policy tools, in addition to macroeconomic policy, that address the factors that lead to structural underutilisation in the labour market and improve employment outcomes for those who face major barriers to work.

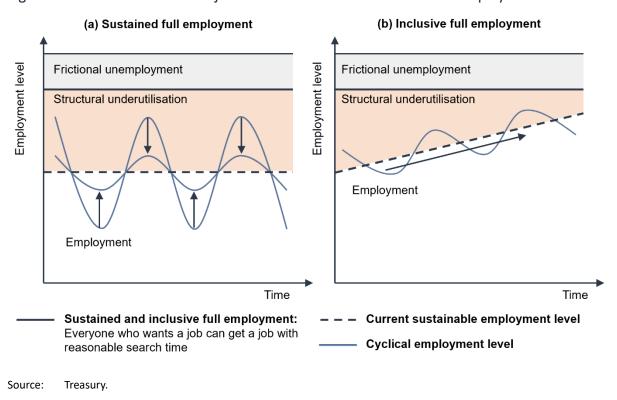


Figure 2.1 The Government's objective for sustained and inclusive full employment

2.2.2 Our approach

The first step towards operationalising this definition of full employment is to understand and measure the underlying concepts (Sections 2.2.3 and 2.2.4). History has shown that significantly misjudging the current maximum sustainable level of employment, or failing to take adequate account of short-term constraints, can lead to serious policy mistakes that cause higher underutilisation rates in the economy. Australia's strong economic institutions and policy frameworks have evolved significantly over time and are well-placed to manage these risks.

The second step is to ensure that the right policy frameworks are in place to enable the full range of policy levers at the Government's disposal to be mobilised constructively to achieve these objectives (Section 2.3). Sustained full employment can be achieved through the effective use of monetary and fiscal policy. It also provides the foundations for productively employing a broad range of fiscal and other policy levers to reduce structural underutilisation and lift the current maximum sustainable level of employment over time.

Reflecting these considerations, the key elements of the Government's approach to achieving the sustained and inclusive full employment objective are:

- recognising the importance of all types of underutilisation, and what causes them, in addition to unemployment
- giving attention to employment outcomes for specific groups and regions, as well as the aggregate national outcome

- seeking to achieve the current maximum sustainable level of employment at any point in time, but recognising that this rate changes over time and is uncertain
- more emphasis on addressing the sources of structural underutilisation and raising the maximum sustainable level of employment over time.

2.2.3 Addressing underutilisation

Despite its many successes, the Australian economy has rarely achieved full employment for extended periods and there have been prolonged periods when the available labour force was underutilised to a much greater extent than it is today. At any point in time, a range of factors can prevent job seekers finding employment or the hours they would like, including cyclical disruptions, mismatches between the skills people have and the skills employers are looking for, mismatches between where jobs and people are located, and more systemic structural barriers, including disadvantage.

Identifying the causes of underutilisation is central to determining the right policy response. These causes can be grouped into cyclical, structural, or frictional factors (Box 2.2). It is hard to measure how much underutilisation in the labour market is due to each of these factors, but the policy approach to addressing each is different (Section 2.3).

Box 2.2 Cyclical, structural, and frictional underutilisation

Cyclical underutilisation arises from weakness in the economic cycle, such as downturns and recessions. It is the result of insufficient demand for workers in the economy to match the number of people willing and able to immediately start work. Alongside measures of involuntary unemployment, metrics such as the NAIRU can, despite its limitations, be used to estimate the level of cyclical underutilisation in the labour market.

Structural underutilisation arises from persistent mismatches between potential workers and available work. This includes poor skills match, geographic mismatch, poor ability for job seekers and employers to find one another, or other barriers to participation, including discrimination. Structural underutilisation is broader than the ABS measures of unemployment and underemployment because it includes those outside the labour force who want to work but cannot. These potential workers can face structural barriers to participating or increasing their hours, for example because of high effective marginal tax rates.

Frictional unemployment is caused when people are not working because they are temporarily between jobs. Some level of frictional unemployment is a normal and healthy aspect of the labour market and can reflect a productive degree of economic dynamism. It takes time for workers to find a good quality match, so it can be useful to spend more time searching for the most suitable work opportunity, and not just take the first available job. Reflecting the current strength of the labour market, the number of people who became unemployed because they left their job voluntarily recently exceeded those who left involuntarily for the first time since these data started being collected in 2001.⁷

Cyclical shocks can have long-lasting effects

Economic downturns have resulted in large and lengthy deviations from full employment and extended periods of elevated underutilisation. The costs are damaging, especially if it takes a long time for the economy and the labour market to recover. For example, the recessions of the early 1980s and 1990s led to sharp increases in the unemployment rate that were only unwound slowly as the economy

recovered and the labour market adjusted to the changes that had occurred (Chart 2.4). The unemployment rate rose from 5.8 per cent to 11.2 per cent in the three years to December 1992. It took until August 2003 to fully unwind the increase.

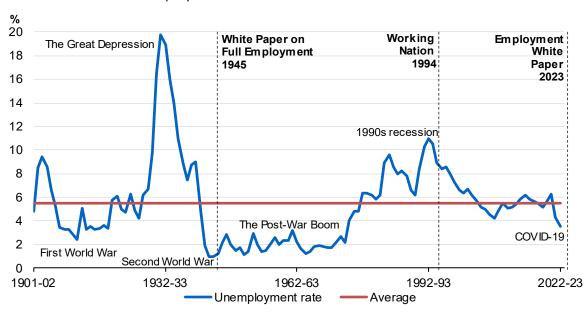


Chart 2.4 Australia's unemployment rates since Federation

Source: RBA; ABS Labour Force, Australia, August 2023.

Involuntary unemployment has significant individual and social costs. The loss of income and the psychological stress of joblessness results in lower living standards, increased financial insecurity, and can lead to diminished wellbeing.8 An extended period of involuntary unemployment can cause 'scarring' and erode human capital and soft skills, which can have adverse effects on future labour market outcomes, household incomes and business productivity. Both the 1980s and 1990s recessions led to significant increases in the incidence of long-term unemployment, which can have particularly adverse effects on social outcomes and health.9 The longer someone is without a job, the harder it is for them to get back into the workforce. 10 Although less well-studied, these effects may extend to other groups of people who are underutilised but want to work, such as discouraged workers who are not actively looking for work because they do not think they will find it.

The potential for short-term shocks to the economy to have long-term effects highlights the need for effective macroeconomic policy settings that minimise the likelihood of large economic cycles or their impacts on labour markets should they occur. This provides the best possible environment to sustain full employment. Sound monetary and fiscal policy frameworks and settings can reduce the impacts of economic cycles on employment so that people who lose work during downturns have less risk of becoming disconnected from the workforce or having their skills eroded. The experiences of the 1980s and 1990s recessions highlighted the need for policies and institutions that help labour markets adjust to avoid cyclical unemployment translating into more structural unemployment.

Sources of structural underutilisation

Structural underutilisation can be caused by a range of factors. Many of these are explored in greater detail elsewhere in this White Paper. For example, people may face:

- an inability to move to the right job, or a lack of jobs with work arrangements that suit their circumstances such as having caring responsibilities (Chapter 3)
- a lack of education and training to have the right skills for the available jobs (Chapter 5)
- challenges associated with a changing economy, including keeping their work skills relevant and up to date (Chapter 5)
- a variety of other barriers including those associated with disadvantage, discrimination, health challenges, living with disability, financial disincentives and a lack of secure and affordable housing (Chapter 6).

Many of these factors are a form of mismatch between people seeking jobs and the jobs available. In some cases, mismatches are resolved after a short period of searching by job seekers and employers (frictional unemployment). However, mismatches can also be persistent and 'structural'. Two key aspects of mismatch, which can be affected by the barriers above, are mismatches in skills and geographies. Mismatch can also be caused by a disconnect between the preferences of potential workers and the requirements, conditions and remuneration of available jobs. ¹¹

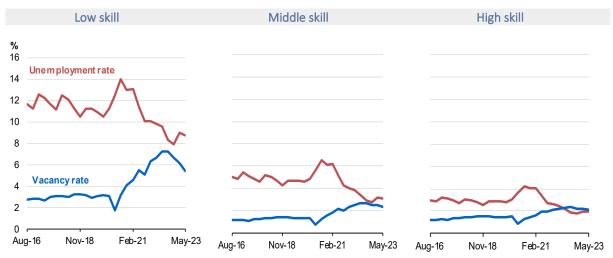
Facilitating better labour market matching, including through ensuring workers and firms have a better understanding of emerging trends and labour force needs, can help lower structural underutilisation. Other ways to facilitate better matching, including reducing discrimination, are discussed further in Chapter 6.

Skills mismatch

Workers who do not have the level of education or right skills for available job opportunities will find it hard to get a job. Mismatch can vary across skill levels because labour markets for different skills are segregated. Rates of mismatch tend to be worse for lower-skilled workers (Chart 2.5). While the ratios of unemployed people to vacancies are now close to one for the medium- and high-skilled segments of the labour market, the unemployment and vacancy rates for low-skill workers are much higher. This suggests it is more difficult for low-skilled job seekers to find suitable low-skill roles or may reflect a greater level of churn or frictional unemployment in these roles. In addition to keeping people out of the jobs they want, skill mismatches can also constrain the ability of businesses, and often small businesses in particular, to find the workers they need to grow.

The ABS assigns occupations to one of five skill levels in its ANZSCO framework. In this section, 'high skill' refers to ABS skill level 1 (occupations that typically require a bachelor's degree or above); middle skill refers to skill levels 2 and 3 (requiring Diploma or Certificate III/IV qualifications); and low skill refers to skill levels 4 and 5.





Source: ABS Labour Force, Australia, Detailed, May 2023; ABS Job Vacancies, Australia, May 2023; JSA Internet Vacancy

The vacancy rate refers to the number of vacant jobs expressed as a percentage of the labour force.

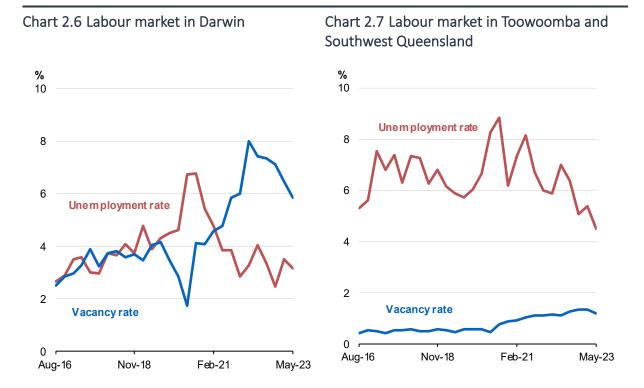
High-skill occupations require at least three years of post-school education and training. Strong demand for high-skill workers therefore cannot be filled by low-skill job seekers in the short-term. This emphasises the need for education, training and migration systems that work together effectively to deliver the workforce Australia requires.

Geographic mismatch

Note:

Another barrier to achieving full employment is mismatch between where people live and the available jobs. If job seekers do not live near available jobs that match their skillset, this can delay or prevent them finding a good job. For example, many regions in northern Australia with significant First Nations populations do not have enough jobs available for residents. The reliance on fly-in fly-out workers in regional and remote areas is a result of the mismatch in the demand for a high-skilled workforce and local education and training opportunities. Geographic mismatch can also be prevalent in regional areas where one industry contributes significantly to the local economy, especially where the industry is impacted by seasonality, like tourism.

While the current number of job vacancies roughly matches the number of unemployed at a national level, the same is not true within all regions. For example, Darwin is experiencing acute labour shortages, with more jobs available than unemployed people to fill them (Chart 2.6). By comparison, Toowoomba and Southwest Queensland have relatively loose labour markets in which the number of unemployed people consistently exceeds job vacancies, indicating a lack of labour demand in the region (Chart 2.7). This geographic mismatch contributes to less efficient matching in local labour markets as well as at the national level.



Source: ABS Labour Force, Australia, Detailed, May 2023; ABS Job Vacancies, May 2023; JSA Internet Vacancy Index, May 2023.

Note:

Vacancy rates shown are calculated using the JSA Internet Vacancy Index measures of vacancies. While providing more geographical detail, this measure of vacancies may under-report vacancies in regional areas due to lower use of internet advertisements in regions.

A range of tools and policies that can assist in addressing these structural sources of underutilisation is explored in Section 2.3 and in the remainder of the White Paper.

2.2.4 Measuring progress

It can be difficult to separate underutilisation into frictional, cyclical and structural factors, particularly when what starts as a short-term spell of underutilisation for cyclical reasons can become more structural over time. Measures such as the duration of unemployment or underutilisation can indicate how far we are from full employment. There are also statistical methods for assessing how much of the current level of underutilisation is cyclical or structural by looking at the behaviour of other macroeconomic variables, such as changes in prices or wages.

The NAIRU – a cyclical measure

Discussions of full employment in the context of cyclical management of the macroeconomy – cyclical full employment - have often centred around estimates of the NAIRU. Conceptually, the NAIRU represents the level of unemployment consistent with stable wage or price inflation; it is a measure of where the current maximum sustainable level of employment may lie rather than a guide for the Government's long-term objective of sustained, inclusive full employment.

Having an assumption about the NAIRU is necessary for preparing medium-term forecasts, understanding macroeconomic conditions and helping to inform the use of macroeconomic policy in guiding the economy towards its current maximum sustainable employment level. However, the NAIRU has several shortcomings as a measure of full employment. It evolves over time, is difficult to measure and does not capture the full potential of the workforce.

The NAIRU changes over time, partly in response to changes in policies that can affect structural unemployment, such as employment services, education and training systems, increasing access to affordable early childhood education and care, and housing. Treasury's estimate of the NAIRU was revised lower in 2022, from 4¾ per cent to 4¼ per cent. The RBA has also revised its NAIRU estimate down in recent years. 12 The NAIRU is also difficult to estimate accurately. The grey bands in Chart 2.8 indicate the degree of uncertainty around point estimates of the NAIRU.

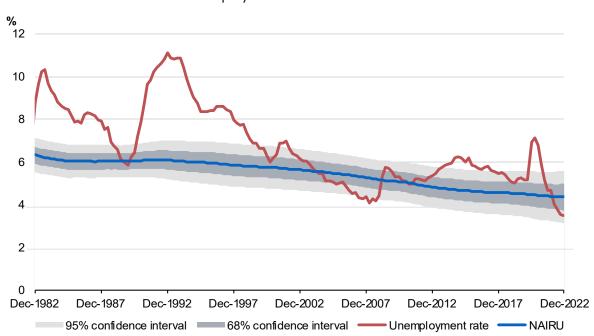


Chart 2.8 The NAIRU and the unemployment rate

Source: Treasury; ABS Labour Force, Australia, December 2022.

The RBA Review identified that uncertainty about the NAIRU estimates may have played a part in the RBA undershooting the inflation target between 2016 and 2019. The Review suggested that, as a result, economic growth potential went unrealised, and individual workers missed out on the benefits that work brings.¹³

Another important limitation of the NAIRU is that it is a measure of unemployment, while other aspects of underutilisation have become increasingly important in the modern labour market. In recent economic downturns, declines in average hours worked have been more important than the rise in unemployment.¹⁴ The number of unemployed people does not comprehensively gauge the extent of underutilisation in the modern labour market.

Better measures to capture progress

Policymakers need a broad suite of measures to gauge the extent of current underutilisation and track progress towards the longer-term full employment objective. These include measures that might indicate the cyclical and structural health of the labour market at an aggregate level. In addition, the Government monitors indicators of progress associated with increasing opportunity for specific cohorts. This 'suite of measures' approach is better able to reflect the cyclical and structural elements of the labour market and to communicate the trade-offs associated with different policy choices.

Indicators of sustained full employment

The NAIRU helps gauge how much spare capacity there is in the economy across the business cycle, although its level is uncertain and changes over time. It is one of a range of indicators that measure different aspects of spare capacity in the labour market.

The national unemployment rate is the number of people aged 15 and over that are looking for and available to work, but are not currently working, expressed as a share of the labour force. It is a narrow definition of spare capacity in the labour market. It does not distinguish between unemployment caused by cyclical, frictional or structural factors. It is an important headline measure, but does not capture some important aspects of underutilisation such as when people are in work but want to work more hours (underemployment).

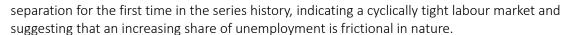
The heads-based underutilisation rate is a broader measure of the extent of underutilisation than the unemployment rate. It captures the number of workers who are underemployed as well as unemployed, expressed as a share of the labour force. The underutilisation rate has fallen following the COVID-19 pandemic alongside the unemployment rate, although in recent decades underemployment has grown in importance in measuring spare capacity in the labour market.

The hours-based underutilisation rate differs from the heads-based underutilisation rate by capturing how many additional hours are sought, but not worked, by all workers and the unemployed. As such, it more specifically captures the spare capacity associated with underutilised people based on how much additional work they would like (Chart 2.9). The hours-based underutilisation rate is currently at its lowest level since records began, and indicates that on average people in the labour force would like to work around 6 per cent more hours.

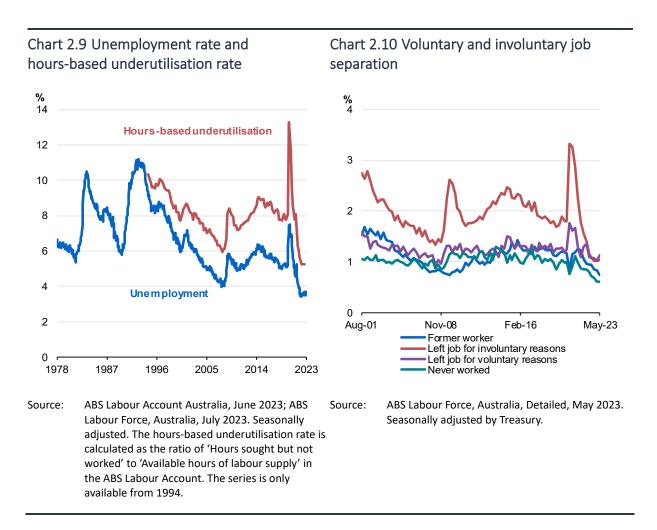
Potential workers are a broader group of people who are not working but want to work, including those who are either not looking for work or not available to start work immediately. It includes unemployed people but is broader than the technical definition of unemployment. Most potential workers who are not counted as unemployed say they are not actively looking for work but could start immediately, with men most commonly citing their attendance at an educational institution and women most commonly citing child care as reasons for not looking. The number of potential workers has been equivalent to around 15 per cent of the labour force for most of the past two decades, and has recently fallen to 13 per cent.¹⁵

The rates of voluntary and involuntary job separation give insight into the economy's position in the business cycle. Downturns typically see an increase in employment terminations, while strong economic conditions typically see more people leaving their jobs voluntarily to move to better positions (Chart 2.10). The rate of voluntary separation has recently exceeded the rate of involuntary

vi Underemployment includes part-time workers who would prefer, and are available for, more hours than they usually work, and full-time workers who worked part-time hours for economic reasons.



Wage growth and inflation outcomes can also inform an assessment of whether the labour market is near to its current maximum sustainable level of employment.



Measuring progress towards inclusive full employment

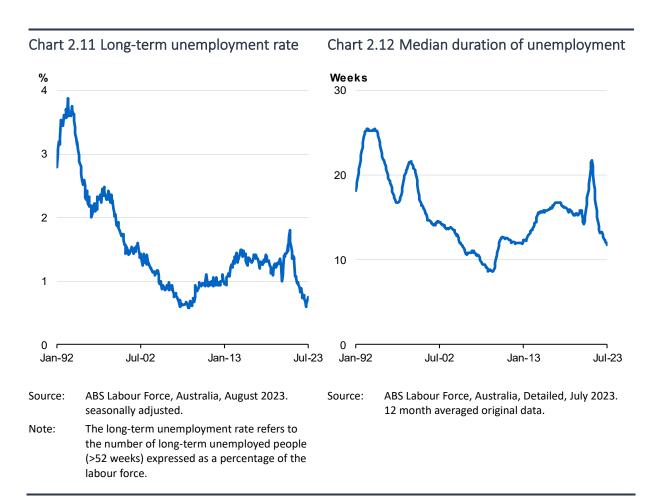
The Government monitors a suite of measures to assess progress towards more inclusive full employment. These capture employment outcomes for groups more likely to face barriers to work that contribute to structural underutilisation. Cohort-specific measures illustrate current labour market inequalities that need to be addressed to achieve inclusive full employment. Indicators that focus on the duration of unemployment, and disparity in labour markets across Australia, also speak to the inclusivity of full employment.

A lack of timely data in some areas, such as the labour market conditions and barriers some cohorts face, makes it more challenging to have a complete picture of underutilisation across the economy. To this end, the Government provided funding last year to the ABS to improve the available information on the factors preventing various groups from entering the workforce. This work aims to provide information on barriers for women, unpaid carers, people with disability, mature age people, First Nations people, culturally and linguistically diverse people and those living in remote areas.

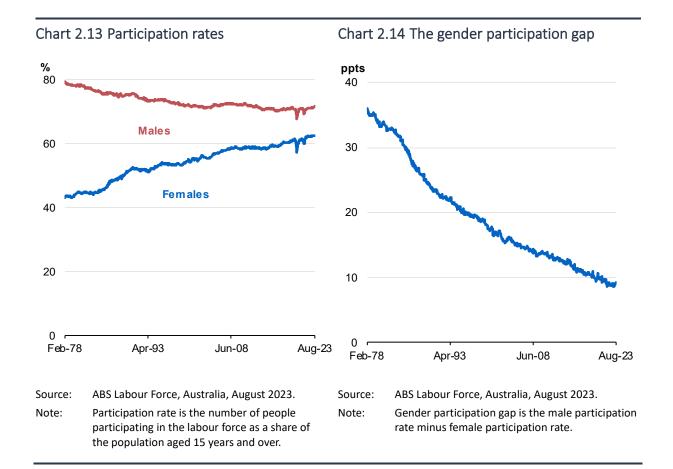
However, challenges remain in data availability and will take time to overcome. The Government's next steps to address these issues are discussed in the Roadmap.

The duration of people's unemployment is an indicator of structural underutilisation. The *long-term unemployment (LTU)* rate shows the share of the labour force that has been unemployed for 52 weeks (one year) or more. LTU matters because people who have been unemployed for a long period of time face greater difficulty finding work due to skill atrophy and loss of motivation, and may be marginalised from the labour market. A high LTU rate may also indicate structural barriers to finding work for some groups, resulting in entrenched disadvantage. Due to the recent strong employment growth and increased opportunities in a tight labour market, many people who were previously unemployed for long periods of time have been able to find work, leading to a decrease in the LTU rate (Chart 2.11).

The *median duration of unemployment* shows how many weeks it typically takes for someone seeking employment to find a job. The median duration has declined recently from 21 weeks to 12 weeks, but remains higher than its pre-GFC levels (Chart 2.12).

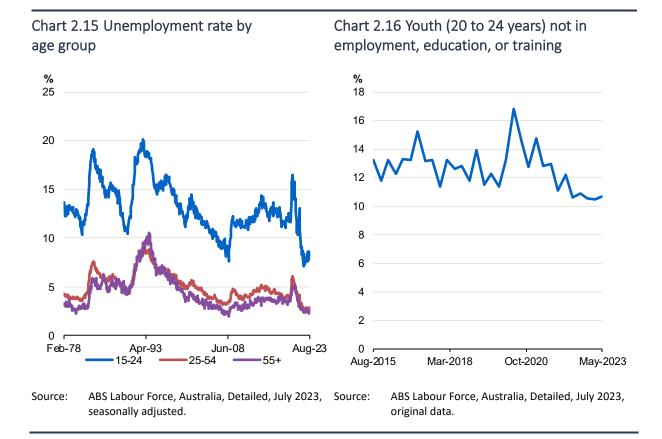


The *gender participation gap* is one indicator of the inclusiveness of the labour force. The gap between men's and women's labour force participation rates has been steadily declining as more women participate in the workforce, reflecting reduced barriers for women over time. However, challenges remain in closing the participation gap, which is still more than 8 percentage points (Chart 2.13 and Chart 2.14).



People aged 15 to 24 years represent a significant share of the population that have persistently higher levels of unemployment than other age cohorts. The youth unemployment rate of people aged 15 to 24 years has recently declined as the labour market has strengthened, however it remains elevated, representing a significant underutilisation of this cohort (Chart 2.15). The opportunities for young people in the labour market are particularly sensitive to the business cycle.

Another measure of the potential for more young people to join the workforce is those who are 'not in employment, education or training' (NEET), which can also reflect entrenched disadvantage (Chart 2.16). While this rate has declined slightly over the past eight years, more than 10 per cent of young people aged 20 to 24 years are not engaged in employment or further study. Young people who are working, in training or education are building their human capital. Young people who are NEET are conversely at risk of not developing the skills needed to gain employment, and risk becoming socially excluded.¹⁷ An intersectional lens shows that First Nations people are more likely to fall into this category, alongside people with low educational attainment.¹⁸

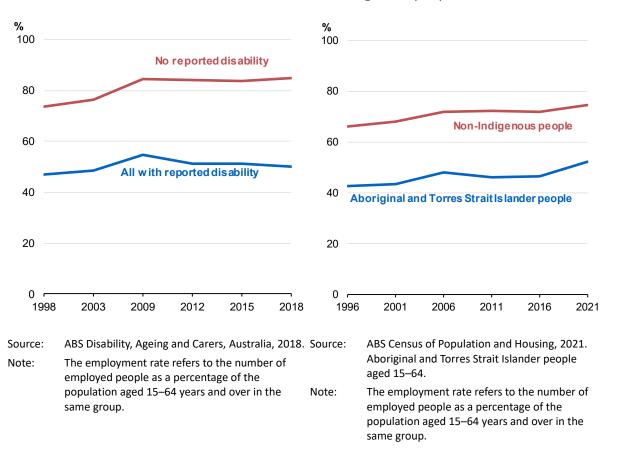


The employment rate for people with disability has been consistently lower than for those with no reported disability, and has shown no improvement since 1998 (Chart 2.17). Illustrative of the data gaps for some cohorts, the latest available data on the employment rates for people with a disability is from 2018. However, administrative data sets associated with Workforce Australia and consultation with stakeholder groups does not suggest that this situation has changed markedly in recent years.

The First Nations employment rate is persistently lower than the rate for non-Indigenous people (Chart 2.18). The gap between the employment rate for First Nations and non-Indigenous people has not closed notably over the past 30 years. The most reliable source of data is extracted from the Census which is only collected every five years, highlighting the data gaps for this cohort.

Chart 2.17 Employment rate for people with reported disability and no reported disability

Chart 2.18 Employment rates of Aboriginal and Torres Strait Islander people and non-Indigenous people



Our vision for full employment includes broadening the benefits of a strong labour market and economic growth across the country. This can be assessed by comparing the regions with the highest and lowest unemployment rate against the national average (Chart 2.19). Over the past 25 years there has always been at least a 5 percentage point difference in the unemployment rate between the regions with the highest and lowest unemployment rates. This highlights the diversity of labour market conditions across our country, and the importance of considering labour market policy at a regional level.

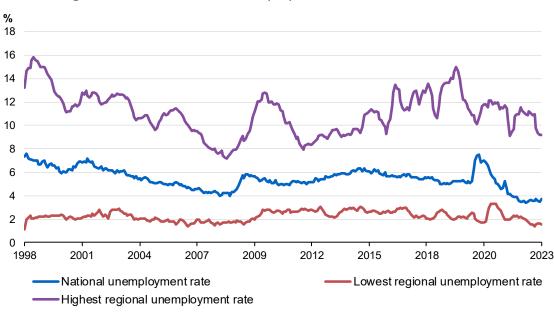


Chart 2.19 Regional differences in the unemployment rate

Source: Treasury; ABS Labour Force, Australia, Detailed, July 2023.

Note: Unemployment rates are 12-month rolling average rates for SA4 regions. The minimum and maximum unemployment rate are the lowest and highest regional rate in each month.

2.3 Achieving sustained and inclusive full employment

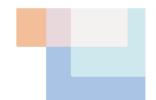
The Government's objective of sustained and inclusive full employment will be achieved using a broad range of policy levers and institutional settings that recognise the constantly changing realities of the modern Australian labour market.

Macroeconomic policy should seek to achieve sustained full employment – bringing employment to its current maximum sustainable level – at any point in time. Achieving sustained full employment mitigates the risk that short-term disruptions to the economy and the labour market become more entrenched.

Sustained full employment lays the foundation for the success of other policies designed to address the causes of structural underutilisation by helping people overcome the barriers to getting decent work. Policies that support people to gain the skills they need throughout their life from early childhood, through the education system, and as adults will also contribute to a more inclusive labour market.

Policies and institutions need to support people and regions to adapt to the forces reshaping the structure of our economy and the nature of work, particularly where the effects on the labour market are fast and concentrated. Ensuring the conditions are in place to grow the industries of the future sets a strong foundation for future employment.

This White Paper is a part of the Government's broader agenda to redefine, refocus and elevate full employment as a policy objective (as discussed in the Roadmap).



2.3.1 Managing the economy through macroeconomic shocks

The importance of achieving sustained full employment by minimising the cyclical fluctuations in the economy has been embedded in strong macroeconomic frameworks since the 1990s. Monetary policy has been the primary tool for managing economic fluctuations over this period, but fiscal policy has also played an important role, especially during crises. As highlighted by the RBA Review, having an independent central bank with a flexible inflation target has served Australia well over several decades. Low and stable inflation and well-anchored inflation expectations contribute to the objectives of price stability and keeping employment close to its maximum sustainable level. They have also provided certainty for households, businesses and investors, supporting long-term investment decisions.

Full employment is also a core part of the Government's Economic and Fiscal Strategy, alongside the objectives of strong, inclusive and sustainable economic growth, growing real wages, ensuring women's economic participation and equality, and improving living standards for all Australians. The Government will continue to ensure that our economic institutions remain fit for purpose and well equipped to meet the challenges we face now and into the future.

Monetary policy

While Australia's monetary policy framework has served Australia well, the recent RBA Review has identified how it can be strengthened. The Government is retaining an operationally independent RBA and flexible inflation targeting framework and implementing the recommendations of the RBA Review to ensure we have the best policy frameworks to meet current and future challenges. This includes clarifying that the RBA's dual mandate for monetary policy is price stability and full employment.

The full employment objectives of the RBA and the Government are distinct but complementary. Monetary policy is most effective at influencing aggregate demand, and has limited capacity to affect the longer-term productive capacity of the economy except through maintaining a stable economic environment. Reflecting this, the RBA focuses on the narrower objective of sustaining full employment as close as possible to the current maximum level at any point in time that will not add to inflationary pressures given the existing structure of the economy. The RBA has independence in how it will meet its objectives, including what measures it uses to assess the level of employment associated with the current maximum sustainable level.

As outlined in Section 2.2.1, the Government has a broader objective of delivering sustained and inclusive full employment, which includes supporting the economy to achieve the current maximum sustainable level, but also lowering the structural level of unemployment over a longer period of time, using the much broader range of policy levers the Government has at its disposal.

Fiscal policy

Fiscal policy includes government spending and taxation. It covers a range of policies, such as the provision of education and health services, infrastructure and defence. Many of these grow the productive potential of the economy, while others ensure a fair distribution of opportunities and access to services in a way that is fiscally sustainable. While monetary policy is the primary tool for managing normal cyclical fluctuations in the level of demand for goods and services in the economy, it is important that fiscal and monetary policy work together to best support good economic outcomes.

Well designed fiscal policy can play a helpful role in managing the economic cycle at the same time as it pursues broader structural objectives. For example, our progressive income tax system and unemployment benefits automatically support the economy when economic conditions are weak,

although this is not their primary purpose. These automatic stabilisers play an important counter-cyclical role supporting monetary policy. The Government has explicitly embedded the principle of allowing automatic stabilisers to work through its commitment to bank the majority of revenue upgrades when they occur. This ensures that monetary and fiscal policy are working together when growth prospects are sound.

Discretionary fiscal policy interventions can complement the role of automatic stabilisers and play an important role in limiting the costs of significant adverse economic shocks on the economy, businesses and labour markets. There may be a more important role for fiscal policy to help manage economic shocks during times of severe contractions in aggregate demand, when monetary policy is at its limits or its transmission channels are constrained. This is more likely to be relevant, for example, during times of acute crisis or in the event of adverse supply shocks. Fiscal policy can also be more targeted than monetary policy.

Fiscal policy interventions should be tailored to the nature and magnitude of a downturn. Recent experience has demonstrated the important role fiscal support measures can play, such as during the Global Financial Crisis (GFC) and COVID-19 pandemic. During the GFC, as part of a global response, Australia's policy response was targeted at supporting the banking system and using fiscal policy to provide payments to households to support consumption, and measures to support housing and infrastructure construction. ¹⁹ In contrast, the COVID-19 pandemic health response, which included border closures and activity restrictions, led to a sharp reduction in demand. The fiscal response in this case was focused on measures to mitigate the effects of the activity restrictions on the labour market. ²⁰ While each crisis is different, lessons from recent experience have underscored the importance of fiscal policy interventions being *timely*, *targeted and temporary*.

Frameworks around fiscal policy also play an important role in preserving macroeconomic stability. These include credible and transparent fiscal frameworks, medium-term fiscal strategies that anchor fiscal policy, and robust budget procedures, operational rules, and institutions. Rebuilding fiscal buffers in good times, as set out in the Government's Economic and Fiscal Strategy is important for ensuring fiscal sustainability, allowing a policy response to future shocks when they occur.²¹

2.3.2 Addressing structural sources of underutilisation

A range of fiscal policy tools can also be employed to achieve longer-term increases in the level of full employment that can be sustained over time. Government has a role in supporting people through their lifecycle to ensure they have the skills needed, and reducing the barriers to employment they face, to finding and maintaining decent work. Ensuring we have the right educational and labour market systems has long-term positive spillovers in raising the productive capacity of the economy, supporting fiscal sustainability, as well as improving individual wellbeing.

An education system that builds foundation skills

Early childhood education and care (ECEC) provides the building blocks to support cognitive growth and development of children. However, children from disadvantaged backgrounds are less likely to access ECEC, despite being the ones who will benefit the most. Improving equity and participation in the ECEC system can help support children to build the foundational cognitive and social skills needed in schooling and beyond.

Australia's schooling system aims to provide equitable access to education, but has not done so for everyone (Chapter 6). Students from lower socioeconomic backgrounds may not be reaching their full potential as seen by their relatively worse NAPLAN outcomes. Improving quality, access and equity



within the schooling system provides the foundation skills our future labour force needs to thrive in the modern workplace. This can help improve overall productivity of the labour force, as it delivers outsized benefits for workers who are marginally attached or are not in the labour force.

The schooling system provides foundation skills, such as language, literacy, numeracy, digital and technical skills. These skills provide the basis from which students can navigate the labour market and adapt to changing labour market needs. Building on foundation skills by supporting students to strive for Year 12 completion can set people up for better labour market outcomes. As we shift to a more highly skilled and highly educated workforce, it is likely that basic skills learned through the education and training system will become more important. This is discussed in detail in Chapter 4.

Ensuring workers have the necessary skills

Workers will be better able to manage changing labour markets where they have strong foundation skills, robust and broad occupational training or expertise, and the ability to update and develop their skills and knowledge over their lifetime.

The role of the higher education and VET system is to build on the foundation skills developed in school while also equipping people with relevant specific skills, knowledge, and capabilities to be part of a productive economy. With these strong foundations people are better able to build further capability and secure well-paid work in a changing labour market. The Government is focused on the quality and effectiveness of tertiary education and will ensure these systems are preparing people for the workforce of the future. The policy settings required to fill skills needs and build our future workforce are discussed in more detail in Chapter 5.

Improving access to the labour market

A more inclusive labour market means broadening opportunities for people to participate.

People often face complex and intersecting barriers to achieving their potential in the labour market. Barriers might include discrimination or varying levels of health, and educational challenges. Lack of secure and affordable housing, and fewer transport options, can also prevent workers taking up new employment opportunities (housing is addressed in Chapter 3). These barriers can be compounded when work is insecure and does not provide a decent wage.

The breadth of barriers to work for some people requires a broad system of supports. The Government can partner with communities to combat entrenched disadvantage, while businesses can create inclusive workplaces that are suitable for more people. An effective employment services system can help build the capabilities and skills of workers to improve their employment pathways. Improving incentives within the tax and transfer system can help people to take up these opportunities. Employers have a role in providing safe, inclusive workplaces that foster opportunities that are within reach of people from all walks of life, which can not only support diverse employment but also break down occupational gender segregation and the gender pay gap. This broader system that supports workers to participate in the labour market is discussed in Chapter 6.

2.3.3 Supporting regional resilience and adaptability

The ability of workers and communities to adapt differs depending on the nature of the change, and the capacity of our institutions, businesses, and people to respond. One way of conceptualising adaptive capacity is the resources regions and people draw upon when navigating change, including human, financial, physical, natural, and social capital.²² There is variation in the levels of adaptive

capacity across Australia (Figure 2.2), with metropolitan areas tending to have higher adaptive capacity than regional areas.

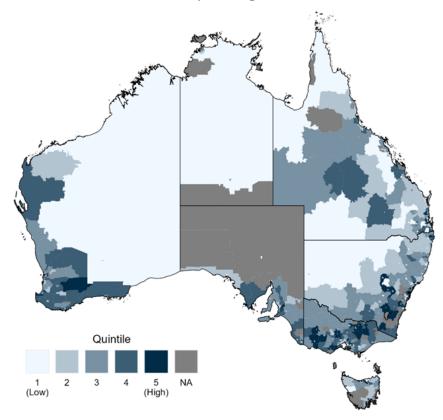


Figure 2.2 Index of relative resilience by SA2 region

Source: Treasury.

Note: The resilience index provides a relative measure of a region's potential ability to adapt to and recover from an external shock. SA2 regions that have a low number of households for any of the underlying data are excluded

from the analysis and reported as not available (NA).

The forces reshaping our economy will require workers to update their skills, and businesses and regional labour markets to adapt to changing needs. People and businesses are generally best placed to make their own decisions to support their wellbeing and adapt to change. Markets are central to this adaptation. They help signal to businesses how to meet the evolving demand of consumers through price changes, and over time can point to where more labour is needed through shifts in wages.

However, there is also an important role for government in creating an environment that enables people and business to plan and flexibly respond to changing circumstances. This is relevant to a range of structural changes, including the rise of data and digital technologies. It is especially important where structural change is geographically concentrated. One important example of this is the net zero transformation, which is expected to have concentrated regional impacts, often in areas with lower industrial diversity.²³

Large shifts in industry composition can disrupt local labour markets. Equipping workers with the tools they need and supporting them into new opportunities can minimise these disruptions, and are



particularly important for regions that have a narrow economic base. Clearly articulating long-term policy objectives can also help the private sector invest with confidence, and workers to plan for their future and to invest in their skills. Coordination between workers, all levels of government, businesses and unions can result in better support for people to find future employment opportunities.

Many of the changes occurring in the Australian and global economies present huge upside opportunities for Australian regions and their workforces. However, it will be important that policy settings enable and support the growth of these future industries. The Government's approach to supporting regional resilience and adaptability is discussed further in the Roadmap.

2.3.4 Grasping opportunities in industries of the future

Our changing economy presents opportunities to broaden and deepen our industrial base and create more well-paid jobs. Delivering on this potential requires an enabling environment in which business can take risks, invest, and realise areas of emerging comparative advantage.

Global action to deliver net zero emissions is catalysing one of the most significant global economic shifts since the Industrial Revolution. The forces shaping Australia's economy are changing the value of countries' natural endowments, disrupting trade patterns, creating new markets, rewarding innovation and giving fresh prominence to industrial strategy. The changing geopolitical environment has highlighted the importance of diversifying and de-risking supply chains and boosting development in critical technologies and industries. This will build resilience and reinforce Australia's economic potential while ensuring we continue to benefit from integration with the global economy.

Our market-based economy has supported the development of a diverse set of industries. Open trade has boosted competitiveness, and encouraged investment into areas of comparative advantage. The provision of core infrastructure, clear signalling of industry priorities, and investments in skills and innovation have helped Australia build specialised expertise and scale, and contribute to global value chains. Promoting a good environment to do business and establishing effective regulation has also been essential for attracting capital, creating and shaping markets, mitigating risks and maintaining trust.

It is important that we build diversity in our economy and leverage areas of comparative advantage. While our rich endowment of resources and ability to produce high-quality agricultural goods have been essential to our growing national wealth, the economic complexity of our exports is low and has fallen in the last two decades.²⁴ In this time alone manufacturing has halved as a share of our economy, falling from 12 per cent to 6 per cent of the value of our output. Broadening Australian industry and diversifying supply chains will improve our resilience to shocks and change.

Australia's approach to industry policy has changed over time, responding to changing industry and trade dynamics, and improved understanding of best practices. For example, compared to the 1970s, tariffs have declined in relevance as a form of assistance, and industry assistance has decreased dramatically in the manufacturing and agriculture sectors.²⁵ Assistance has evolved to address contemporary challenges, such as those associated with COVID-19 and decarbonisation.

The recent shifts in the global economic environment have raised new questions about how industry policy should be applied in the current context. Significant new policies internationally have focused on capturing synergies between industrial, environmental and geostrategic objectives. ²⁶ There has also been increased focus on externalities in the context of technology change, and understanding opportunities to promote adoption of technology in a way that complements workers, business and

society, such as through investment in skills, privacy protection, sound regulation, competition policy and shaping market incentives.²⁷

Australia needs a strategic industry policy fit to meet the challenges ahead. As a small, open economy, Australia stands to benefit from leveraging comparative advantages and actively participating in trade. We are setting a clear vision and creating the conditions for investment and growth, to move higher in global value chains, and to develop key industries and capabilities in the national interest. The Government's approach to investing in national priorities and managing economic risks is discussed further in the Roadmap.

2.4 The path forward

Full employment means everyone who wants a job can get one without having to search for too long. The Government is ambitious about achieving its objective of sustained and inclusive full employment and is using a range of policy levers, from macroeconomic management to tailored support for people to bring us closer to this objective. The Government's approach is set out in the Roadmap.

Maintaining sound and effective macroeconomic policy frameworks that promote strong and sustainable economic growth can help sustain the current maximum level of employment and limit the adverse impact that economic downturns can have on employment.

The Government's agenda is also focused on addressing the sources of structural underutilisation. This effort is aligning many systems around the full employment objective, including improved regional planning, education and migration systems, and setting out reform directions to improve key enablers like employment services, and affordable and accessible child care and housing. We are equipping the workforce with the skills needed for the jobs of the future, enhancing the ability of individuals and businesses to adapt to the modern labour market, breaking down barriers affecting people's ability to participate in the labour market, and backing people and regions through transformation and promoting adoption of productivity-enhancing technologies.

Endnotes

- 1 Australian Bureau of Statistics (Commonwealth of Australia), Labour Force Explained, (3 April 2023), https://www.abs.gov.au/websitedbs/d3310114.nsf/home/labour+force+explained#:~:text=The%20ABS%20 defines%20people%20as,be%20compared%20with%20other%20countries, accessed 17 April 2023.
- Australian Bureau of Statistics (Commonwealth of Australia), 'Detailed Table 14b. Unemployed persons by Duration of job search and Sex – Trend, Seasonally adjusted, and Original', Labour Force, Australia, July 2023, cat. no. 6291.0.55.001 (24 August 2023), https://www.abs.gov.au/statistics/labour/employmentand-unemployment/labour-force-australia-detailed/latest-release, accessed 24 August 2023.
- Australian Bureau of Statistics (Commonwealth of Australia), Disability, Ageing and Carers, Australia: Summary of Findings, (24 October 2019), https://www.abs.gov.au/statistics/health/disability/disabilityageing-and-carers-australia-summary-findings/latest-release, accessed 31 March 2023.
- Australian Bureau of Statistics (Commonwealth of Australia), Disability, Ageing and Carers, Australia: Summary of Findings, (24 October 2019), accessed 31 March 2023; Australian Institute of Health and Welfare, (2022, October 27). People with disability in Australia, (27 October 2022), https://www.aihw.gov.au/reports/disability/people-with-disability-inaustralia/contents/employment/employment-participation-needs-and-challenges, accessed 31 March 2023.
- Organisation for Economic Co-operation and Development, OECD Family Data Base LMF1.3. (2020), https://www.oecd.org/els/family/database.htm, accessed 28 April 2023.
- Australian Bureau of Statistics (Commonwealth of Australia), General Social Survey: Summary Results, Australia, 2020, (29 June 2021), https://www.abs.gov.au/statistics/people/people-andcommunities/general-social-survey-summary-results-australia/latest-release, accessed 14 March 2023.
- Australian Bureau of Statistics (Commonwealth of Australia), 'UQ2a Unemployed persons by Industry division of last job (ANZSIC), Reason left or lost last job and Sex, February 1991 onwards', Labour Force, Australia, Detailed, May 2023, cat. no. 6291.0.55.001 (22 June 2023), https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australiadetailed/may-2023, accessed 22 June 2023; seasonally adjusted by Treasury (Commonwealth of Australia).
- Suppa, N., Unemployment and subjective well-being, (Global Labor Organization 2021), https://www.econstor.eu/bitstream/10419/228706/1/GLO-DP-0760.pdf, accessed 28 March 2023.
- Borland, J., 'Scarring effects: A review of Australian and international literature'. Australian Journal of Labour Economics, 23(2), (2020, November), 173-187, http://ftprepec.drivehq.com/ozl/journl/downloads/AJLE232borland.pdf, accessed 5 May 2023.
- 10 Cassidy, N. et al, Long-term Unemployment in Australia. (Reserve Bank of Australia, 2020). https://www.rba.gov.au/publications/bulletin/2020/dec/long-term-unemployment-inaustralia.html#:~:text=The%20longer%20a%20person%20is,and%20leave%20the%20labour%20force, accessed 27 February 2023.
- 11 Richardson, S., What is a skill shortage?, (2007), https://www.ncver.edu.au/research-andstatistics/publications/all-publications/what-is-a-skill-shortage, accessed 7 March 2023.
- 12 Ellis, L., Watching the Invisibles. (Reserve Bank of Australia 2019), https://www.rba.gov.au/speeches/2019/sp-ag-2019-06-12-2.html, accessed 7 March 2023.
- 13 Australian Government, Review of the Reserve Bank of Australia, (2023), https://rbareview.gov.au/finalreport, accessed 24 April 2023.
- 14 Bishop, J., Gustafsson, L. & Plumb, M., 'Jobs or Hours? Cyclical Labour Market Adjustment in Australia'. RBA Research Discussion Papers, (2016). https://www.rba.gov.au/publications/rdp/2016/pdf/rdp2016-06.pdf, accessed 13 April 2023.

- 15 Australian Bureau of Statistics (Commonwealth of Australia), *Potential Workers, February 2023*. (30 June 2023), https://www.abs.gov.au/statistics/labour/employment-and-unemployment/potential-workers/latest-release, accessed 30 June 2023.
- 16 National Skills Commission, *State of Australia's Skills 2021: now and into the future*, (2021). https://www.nationalskillscommission.gov.au/reports/state-australias-skills-2021-now-and-future/chapter-2-australian-labour-market-2020/long-term-unemployed, accessed 22 February 2023.
- 17 Organisation for Economic Co-operation and Development, *Youth not in employment, education or training* (NEET), (2023), https://data.oecd.org/youthinac/youth-not-in-employment-education-or-training-neet.htm, accessed 1 September 2023.
- Organisation for Economic Co-operation and Development, *Adolescent Education and Pre-Employment Interventions in Australia*, (2023), https://www.oecd-ilibrary.org/sites/3daede8d-en/index.html?itemId=/content/component/3daede8d-en#, accessed 1 September 2023.
- 19 Kennedy, S., 'Australia's response to the global financial crisis', A Speech to the Australia Israel Leadership Forum, (24 June 2019), https://treasury.gov.au/sites/default/files/2019-03/Australia_Israel_Leadership_Forum.pdf, accessed 23 May 2023.
- 20 Kennedy, S., 'A tale of two crises: reflections on macroeconomic policy responses to the GFC and the pandemic'. *The 2022 Sir Leslie Melville Lecture*, (27 July 2022). https://treasury.gov.au/speech/2022-sir-leslie-melville-lecture, accessed 23 May 2023.
- 21 Australian Government, 'Budget Paper No. 1: Budget Strategy and Outlook' & 'Budget Paper No. 3: Federal Financial Relations', (Canberra: 2023), https://budget.gov.au/content/documents.htm, accessed 25 May 2023.
- 22 Productivity Commission, *Transitioning regional economies: Productivity Commission Study Report*, (2017), https://www.pc.gov.au/inquiries/completed/transitioning-regions/report/transitioning-regions-report.pdf, accessed 10 July 2023.
- 23 Price, F., 'Regional Variation in Economic Conditions'. RBA Bulletin March 2020, https://www.rba.gov.au/publications/bulletin/2020/mar/regional-variation-in-economic-conditions.html, accessed 27 June 2023; Department of Climate Change, Energy, the Environment and Water (Commonwealth of Australia), Annual Climate Change Statement 2022, https://www.dcceew.gov.au/sites/default/files/documents/annual-climatechange-statement-2022.pdf, accessed 22 June 2023.
- 24 Harvard Kennedy School Growth Lab, 'Country & Product Complexity Rankings', *The Atlas of Economic Complexity*, https://atlas.cid.harvard.edu/rankings, accessed 3 August 2023.
- Productivity Commission. *Trade and assistance review 2021-22*, (July 2023), https://www.pc.gov.au/ongoing/trade-assistance/2021-22/tar-2021-22.pdf, accessed 3 April 2023.
- 26 Sullivan, J., Remarks by national security advisor Jake Sullivan on renewing American economic leadership at the Brookings institution, (The White House 27 April 2023), https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/04/27/remarks-by-national-security-advisor-jake-sullivan-on-renewing-american-economic-leadership-at-the-brookings-institution/, accessed 5 May 2023.
- 27 Acemoglu, D., & Johnson, S., Power and progress: Our thousand-year struggle over technology and prosperity. Public Affairs. (2023).

Promoting job security and strong, 3 sustainable wage growth

Main points

- The Government will seek to promote a labour market with jobs that are safe, secure, fairly paid and provide mutually beneficial flexibility.
- Real wage growth is a key element of increasing living standards. In the long-term, it depends on the combination of productivity growth, a dynamic and competitive labour market and effective wage-setting institutions. A system of minimum wages, bargaining and a culture of genuine workplace cooperation can support both higher productivity and higher wage growth for workers.
- The benefits of productivity growth must be shared fairly. The workplace relations safety net includes minimum terms and conditions of employment including the National Minimum Wage, Modern Awards and the National Employment Standards, but these protections do not cover all low-paid workers.
- Labour market dynamism, characterised by job switching and labour mobility, is important for employers and workers who both benefit from better job matches. Job switching promotes higher wage growth, while mobility more broadly plays an important role in ensuring we can adjust to structural change.
- Not all workers are fairly paid. The gender pay gap remains an ongoing challenge, and some groups are more impacted by exploitation. The Government wants all workers to benefit from fair pay for the work they do.

3.1 Our objective is promoting decent jobs with strong and sustainable wage growth

Australians have one of the highest levels of median wealth in the world, access to high-quality jobs, and incomes well above the OECD average. This has benefited generations of workers and has helped attract people from across the globe. Australia's skilled workforce and business environment have enabled productive industries to grow, supporting growth in secure jobs and lifting living standards.

Those in paid work generally experience lower mortality rates, better physical and mental health, and better subjective wellbeing than the unemployed.² However, lower quality work – for example, work that is unsafe or insecure – does not offer the same benefits. Jobs with low or irregular pay, or that have unpredictable working hours, reduce the capacity of a person to plan their lives. These jobs can also significantly impact workers' financial security, including making it more difficult to access finance. This limits workers' ability to deal with financial shocks, their ability to start a business and has

implications for their standard of living in retirement. Employers can also find the turnover and productivity of their workforce suffers when workers are employed through insecure arrangements.³

Several factors contribute to the quality of work. The OECD's framework for measuring and assessing 'job quality' includes earnings, labour market security and the working environment. This is similar to the International Labour Organization's definition of 'decent work' which includes fair income, security in the workplace, opportunities for productive work, personal development and social integration. While there is some variation in what matters most to people, safety, security and fair pay are fundamental components of job quality.

3.1.1 Safety and treatment in the workplace

The safety of work in Australia has improved significantly over time. Since 2000–01, serious injuries per million hours worked have decreased by 31 per cent, and serious injuries per thousand employees have decreased by 35 per cent. These outcomes are consistent with the long-term concerted effort from businesses, unions and governments to improve workplace safety through regulation, training and technology adoption. As discussed in Chapter 4, embracing new technologies can make workplaces safer as well as more productive, with routine or dangerous tasks replaced by automation.

Safety at work is more than avoiding physical injury. Workplace sexual harassment continues to be an unacceptable feature of Australian workplaces, driven by the power disparities caused by gender inequality. Between 2017 and 2022, 41 per cent of women and 26 per cent of men experienced sexual harassment at work.⁴ Gender inequality intersects with other forms of discrimination and disadvantage to compound the risk of harassment. Young people, Aboriginal and Torres Strait Islander people, people who identify as LGBTIQA+, and people with disability all face a disproportionate risk of sexual harassment.

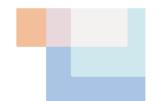
Safe and inclusive workplaces are free from discrimination and enable people to be themselves at work. A 2022 report found that one in two First Nations people had experiences of exclusion or discrimination at work in a 12-month period. This is over twice the rate for non-Indigenous people. Discrimination is also high for people with disability and LGBTIQA+ people, with 45 per cent facing exclusion or discrimination.⁵

3.1.2 Security and flexibility of work

Job security has a critical impact on workers' financial security, as well as their experience at work. Cross-disciplinary studies in epidemiology, psychology and economics have shown a strong connection between job insecurity and poor physical and mental health, and therefore job performance and firm productivity. Further, the mental health benefits associated with moving into employment are lower if the job is not secure. The evolution of Australia's labour market to become more flexible has challenged the existing protections that seek to provide workers greater security at work.

Aspects of job security

Job security is broadly understood as encompassing a worker's reasonable certainty about tenure of employment, pay, and conditions. By contrast, a worker lacks security if they do not have tenure, experience irregular pay, have unpredictable work patterns, and have limited or no entitlement to leave and redundancy payments. A worker's perception of job security can also be influenced by



broader economic or industry conditions, which can affect the probability of retrenchment or termination, and the ability to find new work if they become unemployed.

While workers have not become more likely to lose their job, many workers are aware the nature of work is changing at a rapid pace, and they are unlikely to stay with their current employer for their whole career. By 2040, nine out of ten Australians between 21 to 65 years of age are expected to have changed occupations at least once.8

Job security varies across different forms of employment, in accordance with the rights and entitlements provided to workers, and the ease with which an employer can change conditions or terminate employment. Permanent jobs are the most secure form of employment because they guarantee a base salary and entitlements to workers, including leave and redundancy payments.

Forms of employment have become more diverse in recent decades, including the emergence of new, less-secure forms of work. The 1980s and 1990s saw significant growth in casual work. The proportion of employees in casual work increased by 41 per cent between 1986 and 1996, before stabilising in the late 1990s. In 2023, around 19 per cent of workers were in casual work. The growth of casual work occurred at the same time as growth in services industries, and as young people increasingly combined work and study and more women entered the workforce.

Casual arrangements align with the preferences of some workers. For example, some young people value the flexible hours and loading that comes with casual employment where it helps them balance work and study, or if they do not intend to stay in the job for long. For workers with caring responsibilities, casual work can also facilitate extended absences, for example over school holiday periods. However, while the flexibility of casual roles has allowed some people to find work more suitable for them, it also means a significant proportion of the labour force does not have the guarantee of regular work patterns, entitlement to paid leave, or compensation if retrenched.

More recently, the rise of the gig-economy and online platform-based work has resulted in a step change increase in flexibility, and reduced security for some workers. While estimates vary, around 7 per cent of workers are estimated to have offered work on a digital platform at some point in 2019, a significant increase on the 0.5 per cent of workers in 2015.9 For 97 per cent of gig workers, platform-based work is not their only source of income. 10 The highly flexible nature of gig work is particularly suited to second jobs because it gives workers the ability to work on-demand, and may have facilitated the 22 per cent increase in people holding multiple jobs over the last decade (from 5.4 per cent to 6.6 per cent).

By intermediating between gig workers and their customers, digital platforms have introduced a new pattern of work. Gig workers are typically engaged as independent contractors, without the rights and entitlements of 'employees' or autonomy over their work and freedom to set their own prices that independent contractors traditionally have. Minimum standards are necessary to ensure gig workers are not left vulnerable to exploitation and unsafe work, and the benefits of the model are better shared with workers. The Government is acting to allow the Fair Work Commission to set minimum standards for employee-like workers via digital labour platforms who have low bargaining power, low authority over their work and are paid less than employees performing similar work.

Labour hire arrangements (2.3 per cent of workers in 2023) can provide legitimate and reasonable flexibility for employers to meet business demands. For example, a business may use labour hire to meet a short-term increase in demand. This time-limited use can be appropriate. However, when labour hire arrangements are used on an ongoing basis for non-specialist roles, they can undermine the bargaining position and undercut the conditions of permanently engaged workers.

More broadly, 8.3 per cent of workers, including skilled tradespeople and professionals, are in independent contracting arrangements, which provide these workers with more control over their workload and greater agency in choosing the work they do. While the proportion of independent contractors has remained stable, between 2014 and 2022, the number of people working under these arrangements has grown considerably in the education and training (32 per cent), transport (36 per cent), and health care and social assistance industries (95 per cent).¹¹

Issues arise when employers use less secure forms of employment for purposes for which they were not intended. For example, while some people prefer casual work because it allows greater flexibility, 60 per cent of casual workers work regular hours. Labour hire arrangements also have scope to be misused when positions are ongoing. Misuse of casual, gig, labour hire and/or independent contracting work arrangements is more likely to occur when workers have little agency in deciding how they are engaged, which increases the importance of ensuring workers have opportunities to convert to more secure forms of work if it is their preference. To promote secure work where appropriate, the *Fair Work Act 2009* restricts the use of insecure work arrangements in some circumstances by providing a mechanism for casual employees to convert to permanent employment, and limiting employers' ability to offer rolling fixed-term contracts.

The workers with the lowest self-perceived job security – younger workers, casual workers, and non-union members – are often those most exposed to emerging forms of insecure work. Migrants are more likely to be in labour hire roles than people born in Australia, and gig workers in the transport industry are more likely to come from a non-English speaking background. Women are more likely than men to be in jobs without leave entitlements, and young people (15 to 24 years old) have the highest share of non-permanent employment out of all age groups. The concentration of these cohorts in less secure forms of work reinforces the importance of strong protections, as well as mechanisms to convert these arrangements so more workers can access secure work.

Access to flexible work

Over recent decades, the Australian economy has transformed to become more services-oriented, with more part-time roles available, and more people engaging in flexible forms of work. About 60 per cent of employees have flexible start and finish times, and around half can work from home. These forms of flexibility can give workers agency and are positively associated with job satisfaction. They have allowed more people to find employment that better suits their needs, in particular, people with reduced capacity to undertake full-time work. These arrangements allow businesses to access a broader talent pool, supporting increased hiring diversity and firm productivity. Flexibility built into job design, such as job sharing, can facilitate greater labour force participation of workers with caring responsibilities, many of whom are women. It can also support participation of First Nations workers who have cultural responsibilities, and help people manage their disability. However, these changes have also introduced new challenges to ensuring jobs provide adequate security and people have equitable access to flexibility.

Not all jobs can offer all forms of flexibility. However employers should consider providing equal access to flexibility when designing roles. Workers in white collar jobs such as managers and professionals, who typically have higher incomes and education levels, are more likely to be able to work flexibly. About 10 per cent of jobs advertised on Seek in August 2023 offered a working from home option, and this option was offered for around a third of roles in some professional industries such as insurance, superannuation, consulting and ICT. 14

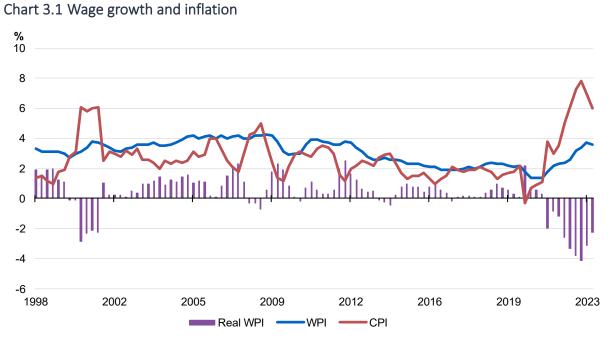
As flexibility becomes more common, it will be increasingly important for the workplace relations framework to support mutually beneficial arrangements. In some instances, flexibility is used to

describe insecure work, where employers unilaterally control conditions such as rosters and hours without providing employees any say over their working arrangements. These arrangements can lead to unpredictable schedules and highly variable incomes, which makes it more challenging for employees to balance work and other demands on their time.

Opportunities to work flexibly also vary. For some workers, access to flexible work arrangements can come with an implicit trade-off of slower career advancement, less access to professional development and lower pay (discussed further in Section 3.3). For workers who need access to flexible work arrangements, this differential treatment limits their earnings and career potential. For many men, an inability to access flexible work (whether because of the type of job, social expectations, or refusal of requests for flexibility) can limit their ability to participate in caring responsibilities, which further compounds the gendered division of paid and unpaid work across Australia. This uneven split is a key barrier to closing the gender pay gap and increasing women's workforce participation (discussed further in Section 3.3 and Chapter 6).

3.1.3 Promoting wage growth and ensuring fair pay

Wage growth in Australia has been subdued over the past decade, though the beginnings of stronger wage growth have recently emerged. Chart 3.1 shows that, prior to the COVID-19 pandemic, wage growth averaged 2.7 per cent a year from 2010 to 2020 compared to an average of 3.7 per cent in the 10 years prior. Real wages have been declining since 2020 and are lower than their level a decade ago. Several factors contributed to lower real wage growth over the past decade, including lower productivity growth, an extended period of spare capacity in the labour market resulting in lower bargaining power for workers, ¹⁵ as well as high inflation, and lower enterprise bargaining coverage.



Source: ABS Wage Price Index, Australia, June 2023; ABS Consumer Price Index, Australia, June 2023.

Wage growth has picked up over the past year to be at its highest level in a decade. This has been driven by competition for workers in a tight labour market and the Government's advocacy to the Fair Work Commission to provide a pay rise for aged care workers and the largest ever increase in minimum and award wages. The Government allocated \$11.3 billion to fund the Fair Work Commission's interim increase of 15 per cent to award wages for many aged care workers in the 2023–24 Budget. Real wage growth is forecast to be positive from 2023–24, as inflationary pressures are expected to continue to subside and wage growth remains strong. 16

Labour market institutions support wage growth

Australia's labour market institutions are designed to ensure all workers share fairly in the benefits of economic growth and productivity improvements, and are entitled to minimum standards. The National Minimum Wage and the Modern Awards system provide a safety net of minimum standards for wages.

In recent years, increases to the rates of pay in Modern Awards and the National Minimum Wage have been larger than wage rises in the broader economy. These increases have applied directly to the 23 per cent of the workforce that earn award wages, and have indirectly informed pay rises for many other workers, particularly those at the lower end of the pay distribution. This has contributed to stronger nominal wage growth for workers at the bottom of the wage distribution over the past decade. All the stronger has been decaded to the pay distribution over the past decade.

The 11 National Employment Standards (NES) guarantee minimum conditions for all employees, covering maximum weekly hours, leave, holidays, redundancy pay, as well as rights to request flexible working arrangements, unpaid parental leave, and permanent employment. Modern Awards provide industry and occupation-specific minimum conditions beyond those specified in the NES. However, workers engaged outside an employment relationship (including care, transport and rideshare workers in the platform economy) lack access to nearly all the protections of the safety net.

Effective bargaining can support wages and productivity

Bargaining at the workplace level can provide higher wages and conditions, and more productive workplaces. By allowing workers to seek wages and conditions above the safety net and facilitating agreements that enhance work and management practices, bargaining can support more productive businesses. Collective bargaining can also promote more cooperative employee and employer relations. This in turn can facilitate innovation, greater acceptance of new technology and fostering of skills growth for employees – all of which enhance productivity.

Enterprise agreements standardise pay structures within businesses and reduce variance in pay for similar roles. Collective agreements reduce pay differences among workers doing the same work, through greater pay transparency which makes it more costly to treat workers differently.¹⁹

Broadening access to collective bargaining can help narrow gender inequalities in pay structures. Disparities between men and women within occupations are smaller when both genders have their pay set out in a collective agreement.²⁰ This is because individual forms of pay setting, such as individual contracts, result in worse salary outcomes for women.²¹

i Where workers are not covered by enterprise or individual agreements, their working conditions are set by the minimum standards provided under Modern Awards and the National Employment Standards.



Chart 3.2 Method of setting pay, proportion of employees 50 40 30 20 10 0 2012 2021 2004 2006 2008 2010 2014 2016 2018 Award only Collective agreement Individual arrangement Owner manager of incorporated enterprise ABS Employee Earnings and Hours, Australia, May 2021. Source:

Productivity growth is the key driver of sustainable wage growth

Productivity growth benefits Australians by supporting higher real wages and increased international competitiveness, and lower prices for goods and services. Over the last 30 years, growth in labour productivity has accounted for around 70 per cent of growth in real gross national income (GNI) per person in Australia (Chart 3.3). Labour productivity is projected to be the main driver of growth in real GNI per person in the future. However, as discussed in more detail in Chapter 4, labour productivity growth has slowed over recent years, which has in turn contributed to lower real wage growth.

Bargaining plays an important role in promoting workplace productivity by facilitating negotiation of ways of working that are mutually beneficial. To achieve strong and sustainable wage growth, this needs to be complemented by productivity-enhancing decisions outside the immediate employment relationship, such as investments in new capital, research and development, employee education and skills, management capabilities, and effective competition and dynamism in the business environment.

ppts 3.0 2.5 2.0 1.5 1.0 0.5 0.0 -0.5 1980s 1990s 2000s 2010s 2020s 2030s 2040s 2050s Labour productivity Other factors Gross National Income

Chart 3.3 Real GNI per person growth contribution from productivity and other factors

Source: ABS Australian National Accounts: Income, Expenditure and Product; ABS Labour Force Survey; unpublished ABS data; and Treasury.

Note: 'Other factors' include the terms of trade, labour utilisation and net foreign income.

3.2 Competition and dynamism can support wage growth

When the economy is running at close to full employment, businesses will compete for workers based on the wages offered, as well as work conditions such as flexibility or career progression. Therefore, a competitive and dynamic labour market is a key determinant of matching efficiency (discussed in Chapter 2), and results in higher productivity growth in the long term (discussed in Chapter 4).

This section discusses several aspects of labour market dynamism:

- Job switching: the rate at which workers change jobs (also sometimes called job-to-job transitions or job mobility). It is usually reported as the percentage of workers who have changed jobs over the year.
- Geographic mobility: the ability of workers to move (whether short or long distance) for employment reasons. It can also include workers who commute long distances for work.
- Occupational mobility: a subset of job switching, representing how many workers not only change jobs, but also change occupations.



3.2.1 Job switching

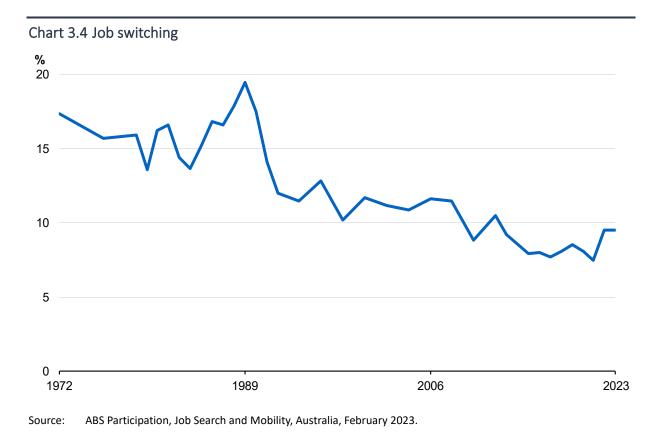
Job switching is an important indicator of a well-functioning, competitive and dynamic labour market. Higher rates of job switching improve the matching of employees with employers which, in turn, contributes to improved productivity for employers, and higher wages and job satisfaction for workers. Higher job switching rates are associated with higher wage growth in local labour markets, not only for those who change jobs but also for other workers, who benefit from increased bargaining power in more dynamic labour markets.²² They are also an indicator of a well-functioning labour market, as job switching increases when labour market conditions are stronger and employees are more confident that they will be able to switch to better-paid jobs, with better conditions, including security.

Australia has seen a long-term decline in job switching, as have other advanced economies, notably the United States and the United Kingdom.²³ There are several reasons why job mobility may have declined. A less dynamic labour market with fewer job switches can indicate that businesses are having difficulty attracting workers to the places where they are needed. Declining labour reallocation may account for as much as a quarter of the slowdown in productivity growth in Australia between 2002 and 2016.²⁴

However, the tight labour market that followed the COVID-19 pandemic has led to an increase in the rate of job switching, which is now at its highest level in 10 years at 9.5 per cent (Chart 3.4). This means that almost one in 10 workers changed jobs over the past year. There are indications that much of this switching has been beneficial for workers, with many leaving one job for a better job.

Job switching rates tend to be higher for younger workers, reflecting higher mobility during the early part of a worker's career. Healthy rates of job switching are particularly important for young job seekers. Economic conditions at graduation affect the quality of matching in their first job, meaning it can take longer to move up the occupational ladder. Job switching is an avenue to mitigate these impacts.²⁵ People who graduate during a downturn earn less during the early part of their career, with women experiencing more persistent labour market scarring, possibly due to lower job switching rates.²⁶ However, the job switching rate for 15 to 24 year olds in Australia has dropped from around 20 per cent in the 1990s to only 13 per cent by 2020 and has since increased to 15 per cent in 2023.

Women tend to change jobs less frequently than men, particularly during child-raising years.²⁷ This reflects that women's job switching is more constrained by family responsibilities because of the gendered nature of care, and concerns around access to flexible work options.²⁸ Women may also be less likely to change jobs if it limits or delays their access to parental leave or accumulated carer's and personal leave, or if they perceive that new jobs will not be sufficiently secure. The probability of job switching, promotion and being a manager fall in the lead up to and after the arrival of a child.²⁹ Policies that promote more even sharing of care responsibilities, such as more affordable child care and paid parental leave, can facilitate greater job mobility for women.

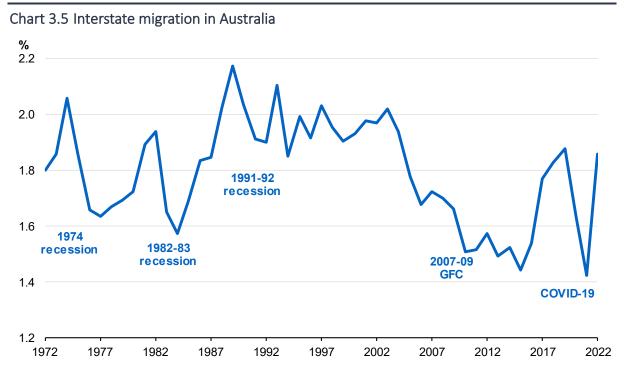


There is emerging evidence that non-compete clauses in workers' employment contracts may be hampering job mobility, innovation and wage growth in industries where their use is prevalent. Non-compete clauses are used in employment contracts to prevent employees working for a competitor or starting a competing business for a set period. While there is uncertainty around enforceability of individual contracts in Australia, non-competes may nonetheless deter workers from switching jobs. In Australia, initial survey evidence suggests that up to 22 per cent of Australian workers may be subject to non-compete clauses, ranging from child care workers to management consultants.³⁰

3.2.2 Geographic mobility

Barriers that restrict the ability of people who want to move for work from doing so impede job mobility and can limit job choices and earning potential. In 2019–20, around 12 per cent of households had moved at least once in the previous year, and more than 40 per cent had moved in the previous five years. While Australian residential mobility is relatively high by international standards, only a minority of moves are for employment reasons.³¹

The rate at which Australians move longer distances has declined over time, a trend seen in other countries such as the United States and Canada. The rate of interstate migration is volatile (Chart 3.5) but has declined from an average of 1.8 per cent per year in the 1970s and 80s to 1.6 per cent in the 2010s. This decline is due in part to the ageing of the Australian population, as older people tend to be less geographically mobile. However, this demographic trend has been somewhat counteracted by increases in the share of tertiary-educated people, renters and singles, who are comparatively more geographically mobile.³²



Source: ABS National, state and territory population, December 2022; ABS Historical Population, 2016. Data prior to 1982 is for the year ending 31 December, other data is for the year ending 30 June. Note:

Employment is an important driver of mobility, particularly for younger age groups, with around 10 per cent of 15 to 34 year olds moving for employment reasons.³³ Employment is an even more important motivator for mobility for longer distance moves – accounting for around half of moves greater than 50 kilometres for 18 to 24 year olds."

Of the roughly 10 per cent of Australian workers who change jobs each year, about one in 20 of these are required to move interstate.³⁴ The seasonal and location-specific nature of some types of work means that worker mobility is even more important in some industries including mining, construction and the accommodation and tourism sectors.³⁵

The long-term decline in interstate mobility is of concern if it indicates that workers are finding it harder to move, which could have consequences for job matching. The ability to move for work, even locally, can be impeded by barriers such as the difficulty finding appropriate and affordable housing (Box 3.1).

Treasury analysis of HILDA data.

Box 3.1 Secure and affordable housing can enable employment

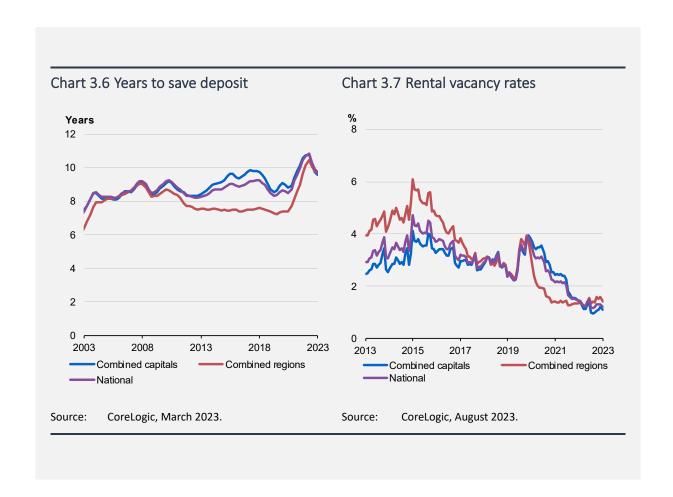
Secure and affordable housing is a basic human need and an important part of finding and maintaining employment. It is critical to the economy and labour market that we have an adequate supply of affordable housing where it is needed – closer to where opportunities are being created, as well as transport and other services. However, the supply of housing has not kept pace with demand for those seeking to either buy or rent. The number of homes per person in Australia is among the lowest in the OECD.

Our cities and suburbs play a critical role in the broader economy, with around 72 per cent of Australians living in major cities.³⁶ A well-functioning housing market, particularly for private rentals, is important for labour market mobility as it allows workers to move for new jobs without needing to purchase property. This can reduce barriers to people being employed in jobs for which they are more productive. Chart 3.6 shows that for people looking to buy, it now takes longer to save for a deposit than it did in 2003. Chart 3.7 shows rental vacancy rates faced by renters have tightened over the past 10 years.

Tighter vacancy rates have translated to rising rents. Advertised rents measure the asking price for currently vacant rental properties and while volatile, can provide a snapshot of pressure in the market. The market continues to tighten from its long-run average with advertised rents growing nationally by 9.0 per cent through the year to August, though annual growth has eased marginally from its record high of 10.2 per cent in the twelve months to December 2022. CPI rents, which lag advertised rents, have grown by 6.7 per cent through the year to June 2023.

For growing regions, a lack of housing options is a barrier to attracting workers. White Paper submissions highlighted the need for adequate and affordable housing to attract and retain workers in regional areas.³⁷ For industries such as tourism that experience significant seasonal peaks, particularly in regional areas, the inability to house seasonal workers has led to businesses reducing their operating hours and days.

Housing instability can make it more difficult to participate in the labour market – income support recipients who moved once in the previous year are predicted to have an employment rate nearly four percentage points lower than those who did not move.³⁸ The Government's housing policies are discussed further in the Roadmap.



3.2.3 Occupational mobility

Occupational mobility is another key determinant of job mobility. Almost half of workers who changed jobs in the previous year also changed their occupation.³⁹ Occupational mobility can be limited by different skill or educational requirements across occupations. Even moving between occupations of a similar skill level will usually require some retraining. The benefits of lifelong learning to allow workers to move between occupations and industries are explored in Chapter 5.

Gender segregation across occupations can limit labour mobility, even in tight labour markets. This in turn exacerbates labour shortages in heavily gendered industries. 40 Around 65 per cent of occupations experiencing workforce shortages have workforces that are over 80 per cent men or women. 41 This is particularly relevant in the female-dominated care and support economy, which is experiencing growing demand. Women remain under-represented in STEM (27.0 per cent), and there is strong future demand expected for engineers and programmers.⁴² Addressing gendered expectations about the suitability of men or women for certain occupations will improve labour market dynamism by giving employers a more diverse recruitment pool. It will also contribute to reducing the gender pay gap, as women are over-represented in low-paying occupations and industries.

Occupational and geographic mobility is particularly important during periods of rapid structural change. These periods are characterised by sudden increases in demand for workers in a particular industry or region. For example, during the mining boom of the 2000s and early 2010s, demand for mining and construction workers in Western Australia and Queensland rose sharply and high wages were used to attract workers from all over the country and overseas. This encouraged workers to change occupation or industry in many cases.

In the case of the mining boom, as with any structural change, labour mobility allowed workers to benefit from new economic opportunities. These opportunities have significant ongoing impacts: children born to poorer families in the mining regions of Queensland and Western Australia have a much higher expected income than their parental income would predict.⁴³

A labour market that is dynamic, in which workers can easily move between jobs when they want to, supports higher wages and productivity growth, and encourages the creation of better jobs. A strong economy helps create more opportunities for better and more highly paid work, across more parts of the country. Labour market flexibility and mobility will be particularly important as industries adapt to a net zero economy, with workers increasingly moving into green jobs.

3.3 Addressing unfair pay

To prevent exploitation of workers, Australia has enshrined legal protections for its workers, and funds strong enabling institutions to enforce them. While this is important, it is not sufficient to ensure fair pay outcomes for all workers. Some cohorts experience structural pay gaps, reflecting a range of barriers to equal opportunity in the labour market (discussed in Chapter 6). For example, First Nations people have lower employment income than non-Indigenous, even accounting for measurable factors such as education levels.⁴⁴ Some people from culturally and linguistically diverse backgrounds, particularly recently arrived migrants, face wage and promotion gaps.⁴⁵

In addition, as discussed in Section 3.1.2, regulatory gaps in the safety net mean that workers in novel work arrangements, such as the platform or gig economy, currently lack minimum standards, such as rates of pay. Labour hire arrangements, which involve a regular relationship between host businesses, labour hire firms, and workers, also can be used as a legal means to avoid rates of pay set through enterprise bargaining for particular types of work. Although data are limited for many cohorts, the gender pay gap has been well-studied, and highlights the complex drivers of pay gaps.

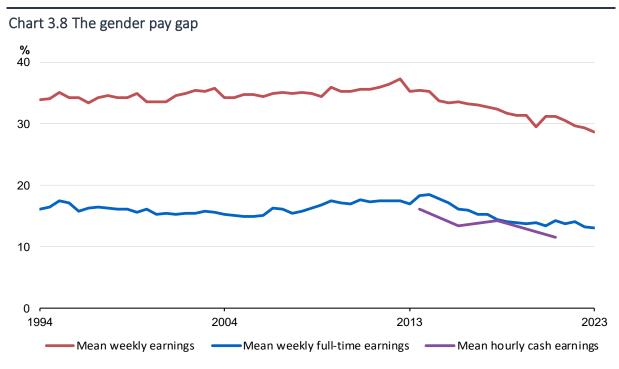
3.3.1 Australia's persistent gender pay and earnings gap

The national gender pay gap measures the difference in base salary earnings between women and men in full-time work. It stands at 13.0 per cent (May 2023). Chart 3.8 shows the gender pay gap is now at the lowest level on record. While the 3.1 percentage point decline in the full-time gender pay gap since 1994 is welcome, the gap remains significant. Women working full time earn, on average, \$252.30 less per week than men working full time — a difference of around \$13,120 per year.

In addition to being paid less on a full-time equivalent basis, when comparing all workers – full-time and part-time – and including all earnings, overtime and salary sacrifice, on average, women receive 28.8 per cent less than men. This earnings gap reflects the combined effect of the gender pay gap, as well as the fact that Australia has one of the highest rates of women in part-time employment in the OECD, behind only the Netherlands, Switzerland and Japan. The significant and long-term adjustments women typically make to their paid employment following the arrival of children are a key driver of these different patterns of employment, while men's employment remains largely unchanged following the arrival of children.



Even after controlling for differences in hours worked between women and men, by looking at hourly earnings, a gap remains. On average, men earned \$46.60 an hour, compared to \$41.20 an hour for women. This is a difference of \$5.40 an hour, or an hourly pay gap of 11.6 per cent. Chart 3.8 shows different ways of measuring the gender pay gap, and the different results. Considered together it reveals that, on average, women earn less than men across all measures and regardless of hours worked.



ABS Average Weekly Earnings, Australia, May 2023. ABS Employee Earnings and Hours, Australia, May 2021. Source: For further information, the ABS Gender pay gap guide explains the many approaches to measuring the gender Note: pay gap.

Over time, lower hourly and weekly earnings compound to become lower lifetime earnings, lower superannuation balances and less economic security in retirement. In 2020–21, the median superannuation balance for women aged 60 to 64 years old was \$159,000, compared to \$212,000 for men, a difference of \$53,000. 48 This difference is narrowing over time as women's workforce participation increases and the superannuation system matures. However, as long as women have lower workforce participation, and lower incomes than men, a gender gap in superannuation balances will remain.

The gender pay gap is driven by a range of factors, including:

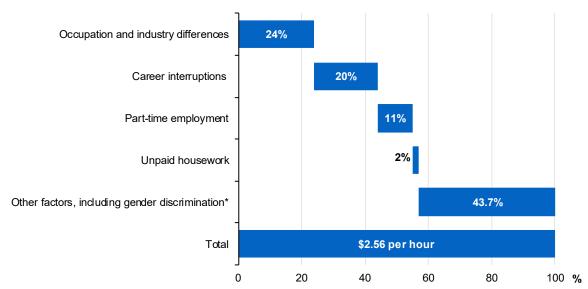
- differences in gender representation and remuneration across industries and occupations
- the impact of caring responsibilities on patterns of work
- gender discrimination and bias.

The drivers of the gender pay gap are difficult to disentangle because they are interrelated. For example, gender discrimination and bias affect education and career decisions, which drive workforce segregation. One estimate suggests the biggest contributions to the hourly gender pay gap in 2020

were: industrial and occupational segregation (24 per cent), years not working due to career interruptions (notably caring for children but also periods of study or unemployment) (20 per cent), and part-time employment (11 per cent). Unpaid work, proxied by hours of housework undertaken each week, contributed 2 per cent. The remaining 43.7 per cent gap in hourly wages was attributed to other measurable or unexplained factors, including gender discrimination (Chart 3.9).⁴⁹

Closing the gender pay gap is essential to achieving economic equality between women and men, ensuring women have equal choice and access in relation to education and training, labour force participation, career progression and financial independence.

Chart 3.9 Factors contributing to the hourly gender pay gap in 2020



Source: KPMG, She's Price(d)less report, 2022; KPMG analysis of the Household, Income and Labour Dynamics in Australia Survey, Release 17 and 20, Wave 17 and 20.

Note:

Results may add to more than 100 per cent due to rounding. The total gender pay gap has been derived from the difference between the average hourly wage for male and female wage earnings, with the decomposition undertaken for selected variables only. WGEA Gender Equality data was used to supplement the findings of the HILDA data, particularly at the industry level. Results are adjusted for inflation and presented in 2021 dollars.

*The 'other factors, including gender discrimination' category is comprised of the remaining factors that can be explained (7.7 per cent) and unexplained factors (36 per cent) which captures gender discrimination. The unexplained factors are the residual that was not able to be explained by other variables, such as occupation and industry and unpaid care.

Gender segregation across industries and occupations

The gender pay gap can, in part, be explained by the different types of jobs men and women do in Australia, and the concentration of women in industries and occupations with lower pay. These patterns are the result of structural drivers such as persistent gender stereotypes, the need for flexibility to balance caring responsibilities, barriers to leadership for women and the undervaluing of many female-dominated jobs, for example, work in the care sector.

Gender bias and stereotypes influence education and job choice, which can limit women and men to certain industries and occupations. Although it is possible to break away from gender stereotypes,



people face obstacles along the way. When gender segregation is high across industries and occupations, limited choices mean people may not be best matched to jobs that align with their talent, skills, or capability, at the cost of productivity. There is a need to challenge these gender norms from early education onwards, and support people to choose education and career pathways that suit their abilities and ambitions.

In Australia, work was highly gender segregated in the post-war period as young men entered trades and worked in primary industry and manufacturing, while young women typically worked in clerical and office jobs before exiting the workforce once married to raise children. The increase in women's participation has not translated into an equal distribution of employment across occupations and industries, and high levels of gender segregation have persisted over time. Women are more likely to work in the health care and social assistance industry (where they account for 76.5 per cent of workers) and the education and training industry (71.5 per cent). Women are under-represented in construction (12.8 per cent), mining (19.4 per cent), transport, postal and warehousing (23.3 per cent), manufacturing (29.1 per cent), and electricity, gas, water and waste services (29.8 per cent). In 2021, women made up 27 per cent of the STEM workforce across all STEM industries. In addition, only 23 per cent of all managers in STEM industries were women, and only 8 per cent of women were in CEO positions.

A gender pay gap is present across all industries. The female-dominated health care and social assistance industry has a full-time gender pay gap of 21.0 per cent. Within STEM fields, machinery and equipment repair and maintenance had the largest full-time gender pay gap at 24.0 per cent, or a difference of \$34,000 in total remuneration each year. Oil and gas extraction had a full-time gender pay gap of 22.0 per cent, which in dollar terms is around \$63,000 a year.⁵³

The differences in industry and occupation choices mean that even if men and women were paid the same within every business, occupation and industry, a gender pay gap would still exist overall. This is because women are overrepresented in lower-paid industries and occupations. Highly-feminised industries and occupations attract below-average pay. The care and support sector is one example of a highly-feminised workforce where wages and conditions may not reflect the true value of the work performed.

As demand for care services continues to grow, ensuring care sector workers receive fair and competitive wages that reflect the value of their work is a priority. One issue is that productivity, which is a key driver of wages, is difficult to measure in the non-market sector (covering education, health and care services). For example, feeling heard and empowered by health service staff can deliver meaningful improvements in a patient's quality of life, but is not captured in standard productivity measures.⁵⁴ This makes it harder for workers to advocate for higher wages based on productivity improvements.

Even within female-dominated industries, women are over-represented in lower paying roles (such as administration) and under-represented in higher paying roles (such as management). In June 2023, there were only 21 women CEOs leading ASX200 companies. ⁵⁵ While this is an increase from 10 women CEOs in June 2022, progress towards gender balance in leadership remains slow. The representation of women in leadership continues to decline with seniority.

Over the past 35 years, some common occupations, such as early childhood educators, receptionists, and primary school teachers, have become even more female-dominated. In contrast, construction managers and software and applications programmers have proportionally fewer women than they did in 1986–87. Although gender segregation is not unique to Australia, it is a major barrier to addressing Australia's skills shortages in critical occupations such as aged care, early childhood education and care, teaching, and technicians and trade workers. Gender segregation restricts the talent pool for

businesses to draw from and may impede future productivity growth in the care and support economy, technology workforce and clean energy sector.

To narrow the gender pay gap, greater gender balance needs to be achieved in every industry and occupation. This would involve increasing the share of men working in health care and social assistance, and education and training, and of women working in construction, mining, manufacturing, information services, transport, and wholesale services. It would also involve a better gender balance across occupations, with more women in leadership positions from executive manager through to CEO, and more men in community and personal service roles.

The contribution of caring responsibilities and career interruptions

Women tend to take on a larger share of unpaid work in households, and this gap widens when children arrive. To balance these responsibilities, women typically reduce their paid work hours or exit the labour force. Treasury research finds that women's earnings are reduced by an average of 55 per cent in their first five years of parenthood, and this fall in earnings remains significant a decade into parenthood. Fathers' work patterns remain unchanged on average, with no significant long-term impact on earnings.⁵⁷

Women's disproportionate performance of unpaid care not only contributes to lower workforce participation, but also influences career decisions. After having children, women tend to choose occupations and employers that offer more flexibility or shorter commutes to accommodate caring responsibilities, even when these are lower paid.⁵⁸

The need for flexibility means women undertaking caring and other responsibilities often feel unable to take on jobs that pay a premium for working long or inflexible hours, further contributing to the gender pay gap.⁵⁹ The gender gap in hourly wages is larger in firms where there are high rewards for working long and inflexible hours. These types of jobs reinforce stark gender divisions by creating a disincentive for families to share paid and unpaid work evenly. For example, if both partners equally share the unpaid work of their household, this may preclude them both from holding a highly paid but inflexible job, which can reduce overall household income. This uneven split is a key barrier to increasing women's participation and lifting labour supply (discussed in Chapter 6).

Lack of flexibility constrains choices for both men and women. Support for flexibility is less common in male-dominated sectors, which can make it more difficult for fathers to share caring responsibilities. For example, access to employer-provided paid parental leave is more common in female-dominated industries than male-dominated industries.⁶⁰ This gender bias discourages mothers from working in these sectors and disadvantages fathers who wish to take a more active role in raising their children.

Career breaks can also lead to a loss of some work-related skills, lost professional networks and a lack of confidence navigating the workplace – even though women continue to acquire valuable skills while outside the paid labour force. ⁶¹ Time out of the labour force can also contribute to the gender pay gap because wages and promotions tend to increase with years of work-related experience.

The costs of career breaks and flexibility contribute to women on average earning less than men within firms, occupations, and industries. Chart 3.10 shows the pay gap between full-time women and men for all non-managerial occupations. Community and personal service workers have the largest gender pay gap at 25.9 per cent.

Historically, care work has been systematically undervalued because it was seen as 'women's work' and was often unpaid and unmeasured. Recognising the value of care work, including unpaid care, is a critical first step to correcting this historic inequality. The Government has committed to funding the ABS Time Use Survey as an ongoing and regular collection. The survey provides accurate estimates of

time spent on paid and unpaid work and care and reveals gender gaps. Based on these data, Treasury estimates that the replacement value of unpaid care work in 2020–21 was around \$165.1 billion, equivalent to 7.9 per cent of measured GDP.

Labourers

Sales workers

Community and personal service workers

Clerical and administrative workers

Technicians and trades workers

Machinery operators and drivers

Professionals

Chart 3.10 Full-time employees, average weekly earnings by occupation and sex

Source: ABS Employee Earnings and Hours, Australia, May 2021.

Managers

0

Note: Data are full-time non-managerial employees paid at the adult rate, average weekly total cash earnings. It includes non-managerial professionals and some employees with management or supervisory responsibilities.

500

1.000

1,500

2,000

2,500

3.000

Gender discrimination and bias

Differences in pay between women and men within businesses and types of job remain even after accounting for educational attainment, work arrangements and work history. This indicates that gender discrimination continues to exist. ⁶² Gender discrimination interacts with race, age, disability, and sexual orientation. Women with diverse backgrounds may receive fewer opportunities for career progression.

Workplace sexual harassment is unacceptable and rates remain high. As discussed in Section 3.1.1, over two in every five women experienced sexual harassment at work between 2017 and 2022. Male-dominated workplaces have a higher prevalence of sexual harassment. This is attributed to a range of factors, including an unequal gender ratio in the workforce and senior leadership, and workplace cultures that are not supportive of women. Gender discrimination and feeling unsafe in certain environments can lead women to avoid male-dominated industries and workplaces, further contributing to industrial and occupational segregation.

Further, industry gender segregation and employee bias can restrict the ability of women and men to move between jobs or choose careers that best suit them. Both men and women report that pursuing a non-traditional occupation can increase the risk of harassment or discrimination.⁶⁴ For example, even when qualifications and experience are identical, women are less likely to be offered interviews in

male-dominated occupations, and men are less likely to be offered interviews in female-dominated occupations.⁶⁵

Part of addressing gender segregation is attracting more women to male-dominated sectors, but retaining women, and ensuring workplaces are safe, is equally important. Poor workplace culture, limited access to appropriate facilities or equipment (for example, no women's toilets on a construction site) and a lack of flexibility can drive women to exit some sectors. Men can also face discrimination from managers or colleagues for requesting flexible work arrangements. It is important for all employers and industries to ensure a safe workplace for all, work to prevent discrimination, and support workers – including men – with caring responsibilities.

Reducing gender segregation is key to addressing the pay gap and building a more resilient labour force

Reducing gender segregation will deliver greater opportunities for women to switch jobs, seek promotion and access a wider range of career pathways. It will deliver opportunities for men to work in more flexible occupations and industries, to better balance their caring responsibilities. It will also deliver returns to the economy.

More women in leadership is good for business and for the economy. Research from the Workplace Gender Equality Agency (WGEA) and the Bankwest Curtin Economics Centre found an increase of 10 percentage points or more in the share of women in key management personnel was associated with a 6.6 per cent higher market value of ASX-listed companies. This is worth the equivalent of \$104.7 million for the average company. Across all industries, men are over-represented in management roles, and the difference is even starker in male-dominated industries. Businesses are missing out on the positive effects of women in leadership. Gender segregation also limits the pipeline of future workers for those sectors.

Flexibility is important for both men and women. Flexibility should be embedded in job design where possible, to encourage a more even split of caring responsibilities between women and men (discussed further in Section 3.1). Flexibility is also crucial for increasing the number of women in leadership. When women are supported to work how they want or need, outcomes improve.⁶⁷ In addition, women leaders are significantly more likely than men to leave their job because they want more flexibility or because they want to work for a company that is more committed to employee wellbeing and diversity, equity and inclusion.⁶⁸ Equally, flexibility in leadership ranks would provide more choices for men to balance their work and care responsibilities, and to balance care within households – a key factor in supporting women's workforce participation.

Gender norms also influence study and career choices. Differences in education and training choices between women and men become apparent in secondary school and continue into higher education. These decisions can be influenced by parents, role models, and peers, as well as gender stereotypes. One way to counteract the effect of norms is to provide students with better information on emerging career opportunities. Young people are more likely to aspire to roles that are familiar to them. Often the occupations of family members and the people around them are very influential. Without better information, early career aspirations can be constrained by traditional expectations and stereotypes.⁶⁹

Reducing gender segregation requires action on multiple fronts. It involves encouraging young people to follow their aspirations and not be restricted by gender stereotypes. It needs a focus on retention, including through eliminating discrimination in hiring and promotions, and providing safe workplaces for all. It requires sharing unpaid care more evenly within households and encouraging job design which allows flexibility for both men and women (discussed in Chapter 6). And we need to value



traditionally female-dominated sectors and see more women in high-paying roles. A recent Australian study found shifting gender norms to be more egalitarian could eliminate three-quarters of the gender gap in employment, reduce the gender pay gap by up to two-thirds, and lead to higher overall life satisfaction for Australian women. 70

3.3.2 Preventing exploitation

Despite Australia's prosperity overall, wage underpayment and employer non-compliance continues to affect many workers. The Grattan Institute estimates between 3 and 9 per cent of all employees were paid below the National Minimum Wage in 2022. 71 Similarly, HILDA survey data indicates that 7.9 per cent of adult employees appeared to be paid less than the National Minimum Wage in 2021.⁷² The Grattan Institute report found payment below the National Minimum Wage was more likely for migrants, younger employees, casuals, part-time workers and those working in agriculture and hospitality.

Wage underpayment, including deliberate wage theft, is unacceptable to the Australian community, and creates an uneven playing field for businesses, between those who comply with their legal obligations and those who do not. The Fair Work Ombudsman (FWO) plays an important role in protecting workers by enforcing workplace laws, as well as providing information and education.

The ability of workers to voice reasonable concerns with their employers, including through association with unions, is an important countervailing pressure against underpayment. Unions can play a complementary role in educating workers about their entitlements and assist in addressing issues. This has been recognised in the design of the Pacific Australia Labour Mobility scheme, which mandates that employers of migrants under the scheme invite the FWO and unions to brief workers on their workplace rights upon arriving in Australia. Unions and individual workers also have standing to bring claims under the Fair Work Act to address contraventions by employers, including to recover unpaid entitlements.

Supporting young people

Young workers can be particularly susceptible to exploitation and wage theft due to their lack of experience in the labour market, higher unemployment and underemployment rates, and because they are more likely to be employed in lower paying casualised industries. In 2022, more than half (54.6 per cent) of young employees (15 to 24 year olds) were casual employees, more than double the rate for all employees (23.3 per cent). Additionally, 43.4 per cent of young workers were employed in either the Accommodation and Food Services or the Retail Trade industries. These are two of the lowest paid industries, with average earnings of \$23.00 and \$24.60 per hour respectively.

Research has found that 20 to 30 year olds are almost six times more likely than 30 to 40 year olds to be paid less than the National Minimum Wage by more than \$3 an hour.⁷³ These conditions can have a detrimental effect on young workers' standard of living, general wellbeing and mental health.

Insecure employment inhibits young workers from asserting themselves against workplace exploitation and can allow employers to undermine the rights and entitlements of young workers. Although many employers treat young workers fairly, the power imbalance created by the instability of their employment enables unscrupulous employers to exploit them by withholding wages and subjecting them to unsafe working conditions.⁷⁴

Preventing the exploitation of migrants

Although many of the drivers of exploitation are similar for migrants and non-migrants, elements of the migration system, such as restrictive temporary visa conditions, as well as language proficiency can lead to worker vulnerability. Recent migrants are also less likely than non-migrants to understand their rights in the workplace. According to some estimates, between 9 and 16 per cent of recent migrants are paid less than the minimum wage, which is higher than the rate for all Australians. Around one-quarter of underpaid migrants who had not sought to recover unpaid wages cited migration consequences as a consideration. The overlap of these visa conditions and industries with a higher prevalence of low-wage jobs is a particular concern. The Government acknowledges this exploitation and has developed a series of measures to mitigate migrant worker exploitation, including the Government's commitment to implement the recommendations of the Migrant Worker Taskforce. Measures announced in June 2023 include new enforcement tools to combat migrant worker exploitation, and support those who are exploited to speak out.

Ensuring fair pay for people in supported work

Having a meaningful job with fair and equitable pay can promote the inclusion and independence of people with disability and support their right to live free from violence, abuse, neglect and exploitation. Supported employment refers to jobs where people with high support needs (namely those who, because of their disabilities, need substantial ongoing support to obtain and/or keep paid employment) can receive extra support while they are at work. Supported employment – and Australian Disability Enterprises more specifically – play an important role in supporting 16,000 people with disability to contribute and connect to their local community through employment. The Government is assisting to further evolve the supported employment sector to better meet community expectations and provide more diverse employment opportunities for people with disability that have a high level of support needs.

3.4 Improving access to secure, fairly paid jobs

Secure, fairly paid jobs are the foundation of a well-functioning labour market. As Australia's labour market has evolved, forms of employment have become more varied, bringing about new opportunities for mutually beneficial flexibility. The Government is taking action to ensure labour market institutions evolve alongside the nature of work, including enabling minimum standards to be developed for some 'gig workers' on digital platforms, and preventing labour hire arrangements from being used to reduce pay and job security.

The workforce has also become more diverse, but pay inequities persist. Progress has been made on closing the gender pay gap, but with women still paid 11.6 per cent less per hour, there is significantly more that needs to be done. Closing the pay gap will require broadening opportunities to work in male-dominated sectors and more equal distribution of care, as well as further action on discrimination, women in leadership and supporting safe and inclusive workplaces. The Government has amended the Fair Work Act to add job security and gender equality to the objectives of the Fair Work Commission, and will take further action through the National Strategy to Achieve Gender Equality.

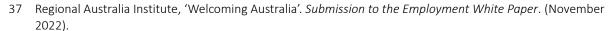
The Government is committed to delivering strong and sustainable wage growth. To achieve this, a system of minimum wages, bargaining and a culture of genuine workplace cooperation needs to be partnered with a dynamic and competitive labour market and sustained productivity growth. Initiatives to improve labour market dynamism such as investigating the use of non-complete clauses will work alongside the Government's productivity agenda to get wages moving again.

Endnotes

- Organisation for Economic Co-operation and Development (OECD). Better Life Index, Australia. (2020). 1 https://www.oecdbetterlifeindex.org/countries/Australia, accessed 19 September 2023.
- De Witte, H., 'Job insecurity and psychological well-being: review of the literature and exploration of some unresolved issues', European Journal of Work and Organizational Psychology (1999), 155-177; Butterworth, P. et al., 'The psychosocial quality of work determines whether employment has benefits for mental health: results from a longitudinal national household panel survey', Occupational and environmental medicine, (2011), 806-812.
- Lisi, D., & Malo, M. A., 'The impact of temporary employment on productivity'. *Journal for Labour Market* Research (2017), 91-112.
- Australian Human Rights Commission, Respect@Work: Sexual Harassment National Inquiry Report, (2020).
- 5 Diversity Council of Australia. DCA Inclusion@Work Index: The Business Case for Inclusion in Australian Workplaces, (2021), https://www.dca.org.au/inclusion-at-work-index, accessed 30 August 2023.
- Green, F., Health effects of job insecurity, (IZA World of Labor 2020), 1-11; De Angelis, M., Mazzeti, G. & Guglielmi, D., 'Job Insecurity and Job Performance: A Serial Mediated Relationship and the Buffering Effect of Organizational Justice', Organizational Psychology vol 12, (2021).
- 7 Butterworth, P. et al., 'The psychosocial quality of work determines whether employment has benefits for mental health: results from a longitudinal national household panel survey', (2011).
- AlphaBeta, Future Skills, (Google Australia 2023), https://accesspartnership.com/wpcontent/uploads/2023/03/google-skills-report.pdf, accessed 19 September 2023.
- McDonald, P. et al., Digital platform work in Australia: Prevalence, nature and impact, (Queensland University of Technology, The University of Adelaide, University of Technology Sydney, November 2019), https://eprints.qut.edu.au/203119/19/Report of Survey Findings 2020 002 doi.pdf, accessed 1 March 2023; Minifie, J., Peer-to Peer Pressure – Policy for the Sharing Economy, (Grattan Institute 2016), https://grattan.edu.au/wp-content/uploads/2016/04/871-Peer-to-peer-pressure.pdf accessed 7 September 2022.
- 10 McDonald, P. et al., 'Digital platform work in Australia: Prevalence, nature and impact', Report commissioned by Victorian Department of Premer and Cabinet (2019).
- 11 Australian Bureau of Statistics (Commonwealth of Australia), Working arrangements, (August 2022), https://www.abs.gov.au/statistics/labour/earnings-and-working-conditions/working-arrangements/latestrelease, accessed 20 February 2023.
- 12 Treasury (Commonwealth of Australia) analysis of 2021 HILDA data.
- 13 Productivity Commission. 'Working from Home'. Research Report. (2021).
- 14 Seek, unpublished research, (2023).
- 15 Bishop, J., & Cassidy, N., 'Insights into Low Wage Growth in Australia', Reserve Bank of Australia Bulletin (March 2017), https://www.rba.gov.au/publications/bulletin/2017/mar/2.html, accessed 19 September 2023.
- 16 Commonwealth of Australia, Budget Paper No. 1, May 2023, page 6.
- 17 Fair Work Commission (Commonwealth of Australia), 'Decision', Annual Wage Review 2022-23 (C2023/1), (2 June 2023), https://www.fwc.gov.au/documents/resources/2023fwcfb3500.pdf, accessed 19 September 2023.
- 18 Fink, M., Hambur, J., & Majeed, O., 'Using new data sources to understand and monitor changes in prices, wages and incomes', Underneath the headlines: understanding price change in the Australian economy [Conference paper], (May 2023), https://www.abs.gov.au/about/consultation-and-

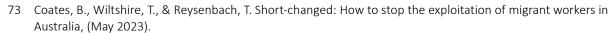
- conferences/conferences/underneath-headlines-understanding-price-change-australian-economy#conference-papers, accessed 19 September 2023.
- 19 Denk, O., Garnero, A., Hijzen, A. & Martin, S., The role of collective bargaining systems for labour market performance, (2019).
- 20 Sobeck, K., 'Greedy jobs, labour market institutions, and the gender pay gap', *Tax and Transfer Policy Institute Working Paper 15/2022*, (Crawford School of Public Policy December 2022), https://taxpolicy.crawford.anu.edu.au/sites/default/files/publication/taxstudies_crawford_anu_edu_au/202 2-12/complete_gpg_k_sobeck_dec_2022_0.pdf, accessed 19 September 2023.
- Biasi, B. & Sarsons, H., 'Information, Confidence, and the Gender Gap in Bargaining', American Economic Association Papers and Proceedings Vol.111, (May 2021), 174-178.
- Deutscher, N., 'Job-to-job transitions and the wages of Australian workers'. (Treasury 6 December 2019), https://treasury.gov.au/publication/p2019-37418b, accessed 19 September 2023.
- 23 Debelle, G., 'Employment and Wages'. Address to Australian Council of Social Service (ACOSS) National Conference, (Reserve Bank of Australia 26 November 2019), https://www.rba.gov.au/speeches/2019/sp-dg-2019-11-26.html, accessed 19 September 2023; Davis, S. J., & Haltiwanger, J., 'Labor market fluidity and economic performance', Working paper 20479. (National Bureau of Economic Research 2014); Gittleman, M., 'Declining labor turnover in the United States', Monthly Labor Review, (2019), pp. 1-19.
- Andrews, D., & Hansell, D., 'Productivity-Enhancing Labour Reallocation in Australia', *Economic Record*, 97(317), (June, 2021). 157-169.
- de Fontenay, C., Lampe, B., Nugent, J., & Jomini, P., Climbing the jobs ladder slower: Young people in a weak labour market, Productivity Commission Staff Working Paper, (July 2020).
- Andrews, D., Deutscher, N., Hambur, J., & Hansell, D., *The Career Effects of Labour Market Conditions at Entry*, (Treasury Working Paper, 2020).
- 27 Deutscher, N., *Job-to-job transitions and the wages of Australian workers*, (Treasury 2019), https://treasury.gov.au/publication/p2019-37418b), accessed 28 March 2023.
- Baird, M. et al, *Women and the Future of Work*, (University of Sydney 2018), https://ses.library.usyd.edu.au/handle/2123/21254, accessed 19 September 2023.
- 29 Treasury (Commonwealth of Australia) analysis of 2021 HILDA data.
- Andrews, D., & Jarvis, B., The ghosts of employers' past: how prevalent are non-compete clauses in Australia?, (e61 Institute 19 June 2023).
- 31 Productivity Commission (Commonwealth of Australia), *'Geographic Labour Mobility'*, Research Report, (Canberra 2014).
- 32 Kalemba, S. V. et al., 'Decline in internal migration levels in Australia: Compositional or behavioural effect?'. *Population, Space and Place*, 27(7), e2341, (October 2021), https://onlinelibrary.wiley.com/doi/abs/10.1002/psp.2341, accessed 19 September 2023.
- 33 Australian Bureau of Statistics (Commonwealth of Australia), *Housing Mobility and Conditions*, 2019-20, (29 July 2022), https://www.abs.gov.au/methodologies/housing-mobility-and-conditions-methodology/2019-20, accessed 14 April 2023.

 https://www.abs.gov.au/statistics/people/housing/housing-mobility-and-conditions/latest-release
- D'Arcy, P., Gustafsson, L., Lewis, C. & Wiltshire, T., 'Labour Market Turnover and Mobility', Reserve Bank of Australia Bulletin (December 2012), https://www.rba.gov.au/publications/bulletin/2012/dec/pdf/bu-1212-1.pdf, accessed 19 September 2023.
- 35 Productivity Commission (Commonwealth of Australia), Geographic Labour Mobility, (Canberra 2014).
- 36 Centre for Population (Commonwealth of Australia), *Profile of Australia's population*, (Australian Institute of Health and Welfare 6 June 2023), https://www.aihw.gov.au/reports/australias-health/profile-of-australias-population, accessed 19 September 2023.



- Productivity Commission, *Housing assistance and employment in Australia*, (April 2015), https://www.pc.gov.au/research/completed/housing-employment/housing-employment-volume1.pdf, accessed 19 September 2023.
- 39 Australian Bureau of Statistics (Commonwealth of Australia), *Job Mobility, February 2023*, (30 June 2023), https://www.abs.gov.au/statistics/labour/jobs/job-mobility/latest-release#change-in-occupation, accessed 6 July 2023.
- 40 Committee for Economic Development of Australia, 'Occupational Gender Segregation', *Employment White Paper Submission*, (2022), https://www.ceda.com.au/ResearchAndPolicies/Research/Workforce-Skills/Employment-white-paper-submission, accessed 5 April 2023.
- Jobs and Skills Australia, 'Could a more even gender and age composition of a workforce help with skill shortages?', *Australian Labour Market Research Workshop*. (2022).
- 42 National Skills Commission, *Skills Priority List*, (2022), https://www.nationalskillscommission.gov.au/topics/skills-priority-list, accessed 6 July 2023.
- Deutscher, N., & Mazumder, B. 'Intergenerational mobility across Australia and the stability of regional estimates'. *Labour Economics*, (2020). 101861.
- Birch, E., & Marshall, D., 'Revisiting the earned income gap for Indigenous and non-Indigenous Australian workers: Evidence from a selection bias corrected model'. *Journal of Industrial Relations*. (2017).
- 45 Breunig, R., Hasan, S., & Salehin, M., *The Immigrant Wage Gap and Assimilation in Australia: Does Unobserved Heterogeneity Matter?*, Crawford School SPI Working Paper 02/2013, (2013), https://crawford.anu.edu.au/publication/crawford-school-working-papers/9925/immigrant-wage-gap-and-assimilation-australia-does, accessed 16 September 2023.
- 46 OECD, *The Role of Firms in Wage Inequality,* (OECD 9 December 2021), https://www.oecd.org/employment/the-role-of-firms-in-wage-inequality-7d9b2208-en.htm, accessed 19 September 2023.
- 47 Bahar, E., Bradshaw, N., Deutscher, N. & Montaigne, M., *Children and the Gender Earnings Gap: Evidence for Australia*, (Treasury 2023), https://treasury.gov.au/sites/default/files/2023-03/p2023-372004.pdf, accessed 19 September 2023.
- 48 Australian Tax Office (Commonwealth of Australia), Taxation Statistics 2020–21.
- 49 KPMG, 'She's Price(d)less' report, July 2022.
- 50 Rumbens, R., *Breaking the norm: Unleashing Australia's economic potential* (Deloitte 16 November 2022). https://www.deloitte.com/au/en/services/financial-advisory/blogs/breaking-the-norm-unleashing-australias-economic-potential.html, accessed 19 September 2023.
 - Hickson, J. & Marshan, J., 'Land of the (Un)Fair Go? Peer gender norms and gender gaps in the Australian labour market.' Tax and Transfers Institute Working Paper, 9/2023 (2023). https://taxpolicy.crawford.anu.edu.au/sites/default/files/publication/taxstudies crawford anu edu au/202
 - https://taxpolicy.crawford.anu.edu.au/sites/default/files/publication/taxstudies_crawford_anu_edu_au/2023-07/complete_wp_hickson_marshan_july_2023.pdf
- 51 Committee for Economic Development of Australia, *Employment White Paper Submission: Gender.* CEDA. (2022), https://www.ceda.com.au/ResearchAndPolicies/Research/Workforce-Skills/Employment-white-paper-submission, accessed 5 April 2023.
- Department of Industry, *STEM equity monitor report*, (2023), https://www.industry.gov.au/sites/default/files/2023-07/stem-equity-monitor-data-report-2023.pdf, accessed 8 August 2023.
- 53 Department of Industry, STEM equity monitor report, (2023).
- Productivity Commission (Commonwealth of Australia), Things you can't drop on your feet: An overview of Australia's services sector productivity. (2021).

- 55 Kwan, C. & Patten, S., *Women run one in four of Australia's biggest companies*, (Australian Financial Review 9 June 2023), https://www.afr.com/work-and-careers/careers/women-run-one-in-four-of-australia-s-biggest-companies-20230605-p5ddzl, accessed 9 June 2023.
- Borland, J., *Australian women are largely doing the same jobs they've always had, latest data shows*, (The Conversation 2022), https://theconversation.com/australian-women-are-largely-doing-the-same-jobs-theyve-always-had-latest-data-shows-195014, accessed 8 March 2023.
- 57 Bahar, E., Bradshaw, N., Deutscher, N. & Montaigne, M., *Children and the Gender Earnings Gap: Evidence for Australia*, (Treasury 2023).
- Petrongolo, B., & Ronchi, M. 'Gender gaps and the structure of local labor markets'. Labour Economics. (2020).
- 59 Sobeck, K. Greedy jobs, labour market institutions, and the gender pay gap. Canberra: ANU Tax and Transfer Policy Institute. ANU Crawford School of Public Policy, accessed December 2022. https://taxpolicy.crawford.anu.edu.au/sites/default/files/publication/taxstudies_crawford_anu_edu_au/202 2-12/complete_gpg_k_sobeck_dec_2022_0.pdf, accessed 19 September 2023.
- Workplace Gender Equality Agency. Australia's Gender Equality Scorecard 2021-22, (December 2022). https://www.wgea.gov.au/sites/default/files/documents/WGEA-Gender-Equality-Scorecard-2022.pdf, accessed 19 September 2023.
- 61 Gilfillan, G., & Andrews, L., *Labour Force Participation of Women Over 45*, (Productivity Commission December 2010), https://www.pc.gov.au/research/supporting/women-over-45/women-over-45.pdf, accessed 19 September 2023.
- Blau, F. D., & Kahn, L. M. 'The gender wage gap: Extent, trends, and explanations. Journal of economic literature', (2017). 55(3), 789-865.
- 63 Australian Human Rights Commission 'Respect@Work: National Inquiry into Sexual Harassment in Australian Workplaces'. (2020). https://humanrights.gov.au/our-work/sex-discrimination/publications/respectwork-sexual-harassment-national-inquiry-report-2020, accessed 19 September 2023.
- 64 Tradeswomen Australia Group, *Submission to the Australian Government Employment White Paper Scope and Themes*, (November 2022), https://tradeswomenaus.com/wp-content/uploads/2022/12/TradeswomenAustraliaGroup_AustralianGovernment_TOR_EmploymentWhitePaper-_FINAL_30112022.pdf, accessed 19 September 2023.
- Adamovic, M., & Leibbrandt, A. 'A large-scale field experiment on occupational gender segregation and hiring discrimination'. Industrial Relations: A Journal of Economy and Society, (2023). 62(1), 34-59.
- 66 Cassells, R., & Duncan, A., 'More women at the top proves better for business', BCEC|WGEA Gender Equity Series, Issue #5, (2020).
- 67 McKinsey and Company. 'Women in the Workplace 2022'. (2022). https://www.mckinsey.com/featured-insights/diversity-and-inclusion/women-in-the-workplace#/, accessed 19 September 2023.
- 68 McKinsey and Company. 'Women in the Workplace 2022'. (2022).
- 69 Archer, L. et al. 'Not girly, not sexy, not glamorous': Primary school girls' and parents' constructions of science aspirations. *Pedagogy, Culture & Society*, (2013). 21(1), 171-194.
- Hickson, J. & Marshan, J., 'Land of the (Un)Fair Go? Peer gender norms and gender gaps in the Australian labour market.' *Tax and Transfers Institute Working Paper. 9/2023*, (July 2023), https://taxpolicy.crawford.anu.edu.au/sites/default/files/publication/taxstudies_crawford_anu_edu_au/2023-07/complete_wp_hickson_marshan_july_2023.pdf, accessed 19 September 2023.
- 71 Coates, B., Wiltshire, T., & Reysenbach, T., *Short-changed: How to stop the exploitation of migrant workers in Australia*, May 2023, https://grattan.edu.au/wp-content/uploads/2023/05/Short-changed-How-to-stop-the-exploitation-of-migrant-workers-in-Australia.pdf, accessed 19 September 2023.
- 72 Department of Employment and Workplace Relations (Commonwealth of Australia) analysis of 2021 HILDA data.



- 74 Foundation for Young Australians; Tomorrow Movement; Young Workers Centre;. Secure, safe, and meaningful work for young people, https://www.fya.org.au/app/uploads/2021/09/2021-Senate-Inquiry-intothe-Fair-Work-Amendment-FYA-YWC-TM-Joint-Submission-1.pdf, accessed 19 September 2023.
- 75 Coates, B., Wiltshire, T., and Reysenbach, T., Short-changed: How to stop the exploitation of migrant workers in Australia, (Grattan Institute 2023).
- 76 Farbenblum, B., & Berg, L. Wage Theft in Silence: Why Migrant Workers Do Not Recover Their Unpaid Wages in Australia. (UNSW Law Research Paper No. 19-1, 2018), 61.

Reigniting productivity growth 4

Main points

- · Productivity growth is the key driver of real wage growth and rising living standards over the long term, but it has been slowing around the world, and in Australia, since the mid-2000s.
- Our productivity challenge is also changing. We need to leverage these changes as opportunities to drive future productivity growth by:
 - delivering quality improvements in service delivery, particularly the care and support sector
 - harnessing the opportunities of the transformation to net zero
 - increasing the adoption of new digital and advanced technologies.
- This will require a greater focus on investment in human capital growth, increased technology diffusion and adoption across the economy, and greater levels of economic dynamism to help allocate resources more efficiently.
- The Government is taking action to boost productivity through a five pillar productivity agenda.

Our objective is to reignite productivity growth 4.1

Productivity growth is the key driver of improvements in living standards over the long term. Labour productivity – the quantity of goods and services produced per hour of work – has been the most important source of real income growth in Australia over the past 30 years and is projected to remain the most important source in the future. Improving productivity also lowers prices, increases the range and quality of goods and services for consumers, and grows profits for businesses.

However, since the mid-2000s, productivity growth has slowed in Australia and in other advanced economies. Australia's productivity growth over the decade to 2020 was the slowest in 60 years.² This lower productivity growth has contributed to slower real wage growth (discussed in Chapter 3). Turning this trend around will be critical to achieving full employment, strong and sustainable real wage growth, and boosting living standards over time.

While several long-standing factors have contributed to the productivity slowdown, including reduced dynamism and competitive pressures, and slower technological innovation and diffusion, we also face new and emerging headwinds due to changes in our industrial base.³ How well we respond to, and position, for these changes will increasingly influence our future productivity. Improving the quality and productivity of the care and support economy will become even more important as the sector grows. Climate change creates headwinds as changes in temperature, climate and natural hazards weigh on productivity growth, but the net zero transformation also creates new opportunities to support firm innovation, improve production processes, and leverage productivity in new clean energy industries. However, it will take time to establish high-productivity clean energy industries. Increased adoption of digital and advanced technologies also has the potential to drive significant gains through changes in how we work, deliver higher-quality care and support services, and facilitate a smooth transformation to net zero.

People need to be at the centre of this response. To reignite productivity growth and promote job security and strong, sustainable wage growth, Australia needs to invest in people and technology. This means better equipping workers and businesses with the skills and knowledge to adopt technological advances and adapt to change, and creating conditions that support dynamism and the diffusion of innovation. This will be particularly important in the growing care and support economy and the transformation to net zero, and to grow advanced manufacturing and achieve more value-adding from a broader and deeper industrial base.

4.1.1 Recent trends in Australia's productivity growth

Productivity growth in Australia has slowed over the past decade. The average productivity growth over the past 30 years was around 1.5 per cent while the 20-year average has slowed to around 1.2 per cent.⁴ This has contributed to lower wage growth. Australia is not alone in experiencing a slowdown in productivity, suggesting some common global factors are at play (Chart 4.1). This slowdown in productivity growth has also been broad-based across sectors of the economy.⁵

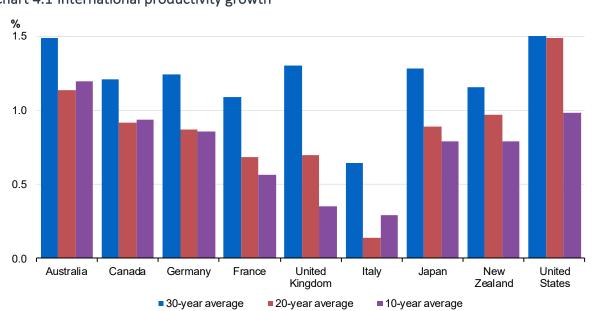


Chart 4.1 International productivity growth

Note: Averages calculated to 2021.

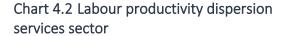
Source: Treasury; OECD GDP per hour worked, 2023.

Diffusion of technology and innovative practices

The slowdown in productivity growth in Australia partially reflects slower diffusion of innovation and uptake of technology. While productivity growth has slowed across most advanced economies, Australian firms lag the most productive firms globally, and that gap has been widening over recent decades. The productivity of firms at the global frontier increased by an estimated 60 per cent between 2002 and 2016, while the productivity of firms at Australia's productivity frontier only increased by 25 per cent over the same period. This suggests that Australian firms have slowed the rate at which they adopt innovative technologies and approaches, which is consistent with declining business investment as a share of GDP in Australia.

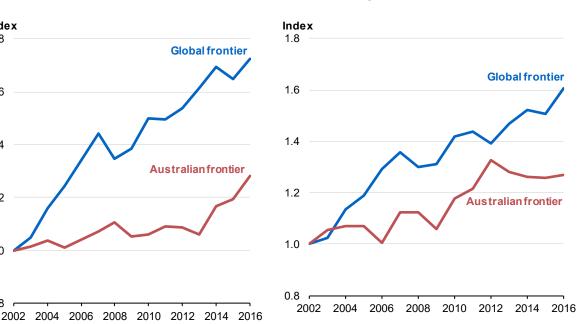
The decline in productivity growth can largely be attributed to a reduction in the overall efficiency with which labour and capital are used together – also known as multifactor productivity (MFP). This means there is an opportunity to deliver productivity gains by improving how our workforce makes use of new technology and machines, underscoring the potential for future gains from increased uptake and better use of new technologies.

Competitive pressures can improve productivity growth through the entry of new firms that are more likely to adopt and invest in newer technologies, and through incumbent firms being forced to improve their production processes or exit the market. The widening productivity gap has been larger in the services sector and less pronounced in the manufacturing sector (Chart 4.2 and Chart 4.3). This suggests that Australian firms, particularly in the services sector, have been slower to adopt cutting-edge technologies and processes, potentially driven by declining dynamism and competitive pressures.⁷



Index 1.8 Global frontier 1.6 1.4 Australian frontier 1.2 1.0 8.0

Chart 4.3 Labour productivity dispersion – manufacturing sector



Source: Treasury.

Note: The frontier is defined as the top five per cent of high-productivity firms for each year.

Dynamism and competition

Boosting dynamism and competition in the economy will be important for reversing slowing productivity growth. Dynamism refers to innovation, adaptation, and growth within an economy and reflects the ability to generate new business opportunities, efficiently allocate resources and adapt to changing circumstances. It can boost productivity growth, lower prices, promote choice and innovation, and raise wages. However, dynamism has declined in Australia resulting in a slower reallocation of resources to more productive firms and tasks, weighing on aggregate productivity growth and wage growth.⁸

Declining firm entry and exit rates are important indicators of declining dynamism (Chart 4.4). New firms breathe life into the economy, by innovating and being more likely to adopt new technologies. While the exit of incumbents that do not respond to this competition can be difficult for the people affected, the firms that go out of business tend to be less profitable and productive. Firm exit allows both labour and capital resources to move to more productive firms, increasing productivity. Australian industries with higher firm entry and exit rates have been found to converge faster to the global productivity frontier. 10

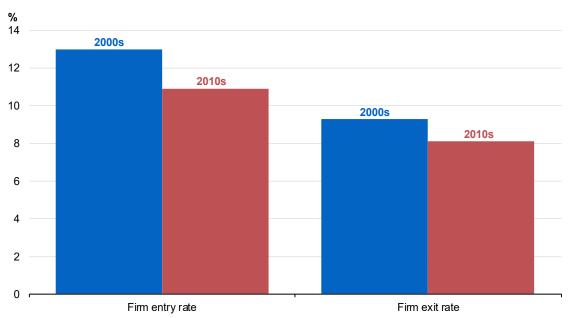


Chart 4.4 Employing firm entry and exit rates

Source: Treasury; ABS Counts of Australian Business data; ABS Labour Force microdata.

Increasing industry concentration and firm mark-ups also point to declining dynamism in Australia. In 2018–19, the largest four firms in each industry made up around 43 per cent of total industry sales on average. Firm mark-ups have increased by around five per cent on average since the mid-2000s. These trends are symptomatic of declining competitive pressures which have also contributed to slowing investment growth, and the slower pace of labour and capital reallocation towards higher productivity firms.



A range of factors will drive future productivity growth 4.2

Australia's productivity has been built up through investments in physical capital stock, human capital and the diversity and dynamism of our industries. To reignite productivity growth, business investment will need to increase and workforce capabilities will need to improve in ways that respond to the changing shape and nature of the economy.

Investments in physical capital are expected to continue to drive Australia's productivity potential. About two-thirds of labour productivity growth since the early 1970s has been due to capital deepening. 14 This is because when the amount and quality of capital available to workers increases, they are generally able to produce more per hour worked. As the industrial mix changes, investment in growing industries and effective adoption of new technologies, including robotics and digital technologies, will be essential.

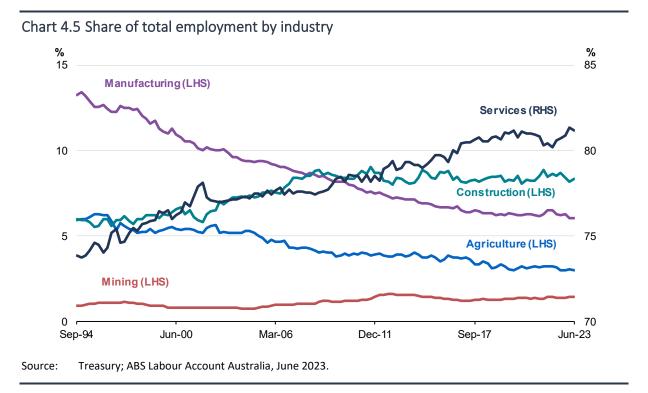
There is also significant scope to boost the skills of the workforce, enabling businesses to work more efficiently, to complete high value-add tasks and innovate. In particular, the education system does not equip all Australians with foundational capabilities in literacy, numeracy and digital skills. Improvements to the quality and equity of the education system can make a significant contribution to the stock of human capital, and position people to invest in relevant skills throughout their careers. Migration is not a substitute for investing in the skills of Australians but can play a key role connecting Australia with global best practices and complementing the skills of the existing workforce.

Continual improvement in the effectiveness and ingenuity of businesses can enable Australia to get more out of these investments over time. Innovation, the diffusion of best practices and the adoption of new technologies will contribute to these gains. Dynamic and competitive markets allow highly productive firms and industries to grow, amplifying the impact of firm-level productivity gains. A wide range of factors contributes to establishing these market conditions, including effective regulation and tax and financial systems, integration with global markets and efficient provision of public infrastructure. We must continue to build on this success by investing more in our people and technology, while pursuing reforms to improve competition in the Australian economy and encourage greater uptake of new and innovative ways of work.

Realising our productivity potential will require finding approaches to promote these enduring drivers of productivity growth in ways that will be effective in Australia's current economic circumstances. This will require responding to the opportunities presented by the changing economic structure, and tailoring efforts to boost investments in physical capital, skills and innovation to the prevailing challenges in these areas.

Maximising opportunities from our changing industrial base 4.2.1

The productivity challenges and opportunities that we will face in the future will be different to what we have seen in the past. Improving productivity in the large and growing services sector will be increasingly important, as it will have an outsized impact on Australia's overall productivity outcome (Chart 4.5). But beyond this, the changes underway in the economy, like the potential to generate low-cost renewable energy, also present new avenues to improve productivity. Rather than simply repeating previous waves of reforms, Australia's productivity agenda needs to respond to current economic circumstances and identify modern strategies to advance enduring policy goals.



Productivity gains from better-quality care and support services

The growth in the care and support economy, including its workforce, will make improving productivity in this sector more important for national productivity growth. However, achieving productivity gains in the services sector, particularly in non-market services such as care and support, has been difficult historically. Innovative approaches and technology that change models of care can improve both patient outcomes and productivity.

These technological opportunities take many forms. They include reducing the time carers need to spend on administrative tasks, allowing them to focus on the irreplaceable human aspect of care work. Technology can also increase choice and access to care and support such as facilitating in-home aged care and online consultations for those that prefer this form of care. Further, it can widen access to care and monitoring for people living in regional and remote Australia, while not compromising on fair wages and high-quality care.

Productivity improvements in the care and support services sector can also be driven by increased adoption of innovative work practices. Innovation can take the form of better models of care and support, and best practice processes and techniques. For example, coordination and integration of primary care services can improve health outcomes and reduce costs by preventing unnecessary hospitalisations. Regulatory settings in the care and support sector are vital for ensuring quality of care and efficient administration of these standards can improve opportunities for innovation and quality service delivery.

Increasing the quality of care and support services is also likely to be a key source of productivity growth in the future. Improved mixes of staff, qualifications and skills offer the opportunity to deliver better outcomes for patients. However, delivering productivity gains through improved life outcomes and quality aren't easily measured.



Harnessing opportunities from the net zero transformation

The economic transformation involved in achieving net zero will accelerate investment in innovation, capital and communities, creating new opportunities for productivity growth. In addition to reducing emissions, transitioning the economy towards renewable energy has the potential to lower costs for many business activities and households.

As new industries emerge and global trade patterns are reset, there is also a significant opportunity for Australia to diversify its industries, move up value chains and build new strengths in clean energy industries. Growing new industries in green metals, clean energy exports, and critical minerals presents opportunities to boost productivity growth. The acceleration of clean energy businesses may also increase competition, support the diffusion of green technology, and increase dynamism.

The energy transformation, together with industrial decarbonisation, will require significant investment that could improve Australia's international competitiveness. Australia has the potential to harness mineral reserves and abundant sources of renewable energy to supply critical minerals, hydrogen and green metals needed for modern, sustainable economies and to materially affect global climate trajectories. The Australian Industry Energy Transitions Initiative estimates that an additional \$225 billion of investment is required by 2050, above business-as-usual levels, to transition the energy system to renewable generation and decarbonise heavy industries. Ensuring markets and investors are well-informed about the financial risks and opportunities presented by climate change and about the impact of investments on the climate will better place them to finance this investment.

Improved adoption of digital and advanced technology

The ongoing technological and digital transformation of the economy presents an opportunity to target investments at areas of workforce shortages, ensuring businesses are connected to best practices and workers are being trained to use new technology. Harnessing new technology will have significant potential to improve Australia's productivity performance. New technologies can reduce business costs, allow workers to focus on higher-value tasks, and improve product quality and consumer choice.

Productivity improvement for most businesses involves the wider adoption of established, even dated, technologies and practices. New-to-the-world innovation is performed by only 1 to 2 per cent of Australian firms. 15 For the remaining 98 per cent, the adoption and diffusion of innovation is the key to driving productivity growth. Investment in broad-based adoption of these technologies and equipping workers with the skills required to work with these technologies is key to realising this opportunity for productivity growth.

We are already witnessing businesses beginning to make this transformation. Since 2013 there has been considerable growth in demand in the Australian labour market for advanced digital skills related to artificial intelligence (AI), IT automation and the internet-connected physical infrastructure which makes up the internet of things (Chart 4.6). Notably, these technologies can be applied in ways that enhance the capabilities of workers or automate repetitive or time-consuming tasks, rather than replace jobs. This will allow workers to focus on activities with significantly higher value add such as problem-solving, interpersonal and other non-routine tasks. They also improve connectivity between regions, providing opportunities for collaboration and knowledge spillovers regardless of location.

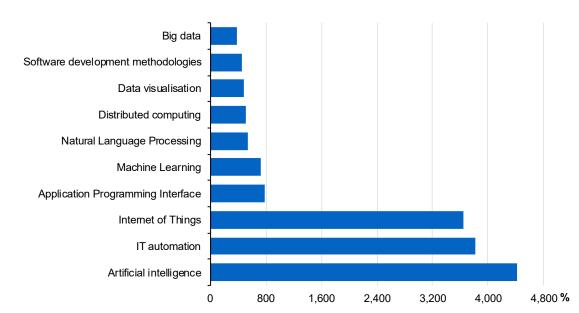


Chart 4.6 Growth of demand for advanced digital skills in Australia between 2013 and 2020

Source: National Skills Commission, State of Australia's Skills 2021: now and into the future, 2021.

4.2.2 The role of capital investment in labour productivity growth

Investments in new assets such as machinery, buildings, software, and new technologies are an important driver of productivity growth and higher real wages. High productivity businesses in Australia have more capital per worker and pay higher average real wages than lower productivity businesses. ¹⁶ Historically, industries like agriculture have achieved step changes in productivity through effective adoption of heavy machinery and other technologies (Box 4.1). Going forward, a broader range of new technologies, as well as the need to modernise existing facilities and expand assets, mean that capital investment will continue to play a key role in driving productivity growth.

Recent trends in business investment

Australia currently has a low level of business investment as a share of GDP compared with other OECD countries.¹⁷ Investment in mining peaked around 2012–13 and has since declined as construction of projects has been completed. Chart 4.7 shows that growth in non-mining investment has declined from the mid-2000s and stagnated over the past decade. More recently, non-mining investment has grown strongly as firms expand capacity. Over the 2010s, the decline in non-mining investment occurred despite declines in interest rates following the Global Financial Crisis (GFC) and the end of the mining boom, which would be expected to have freed up capital for non-mining investment. Not only has investment declined as a share of GDP, but the decline has been larger among more productive firms, meaning capital has also been allocated less productively.¹⁸



Chart 4.7 Non-mining business investment



Source: Treasury; ABS Australian National Accounts: National Income, Expenditure and Product, June 2023.

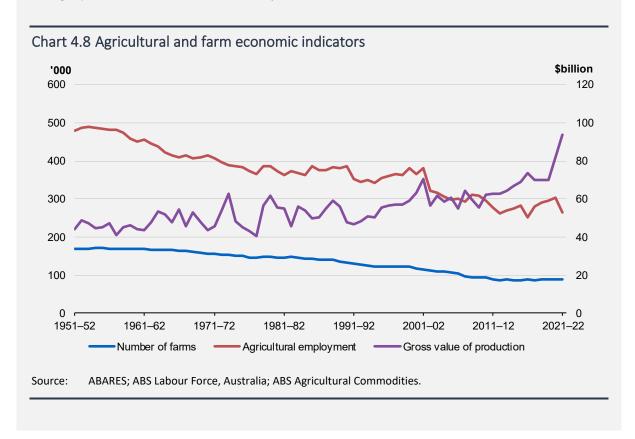
Low investment is likely to reflect a range of factors including perceptions of risk and the degree of market power enjoyed by some firms. The market risk premium – the additional return investors demand from borrowers for taking on more risk – has increased in Australia, particularly since the GFC.¹⁹ This means that for each dollar invested post-GFC, investors are assessing that they require a higher rate of return to compensate for risk. The decline in investment has also been driven in part by a long-term decline in competitive pressures. The increasing market power of some firms has muted their incentives to invest and grow their capital stock, and to innovate and adopt new technologies.²⁰ More work is needed to understand why competitive pressures may be declining and whether this reflects competition policy or other frictions.

The net zero transformation will require significant investment. The Australian Energy Market Operator has estimated that annual electricity consumption from the grid will double by 2050 as transport, heating, cooking and industrial processes are electrified while 60 per cent of current coal generation exits by 2030.²¹ To achieve world-leading green industries, a substantial increase in infrastructure and machinery to provide capital-intensive clean energy will be needed. Delayed action could reduce the competitiveness of some of Australia's industries, given the scale of direct clean energy technology investment in other jurisdictions. Boosting investment will require strong macroeconomic management, a competitive and dynamic economy, clear and stable policy, effective tax and financial systems, and a skilled workforce.

Box 4.1 Increasing worker productivity in the agriculture sector

The transformation of the agriculture sector, using technology to augment work and help workers perform their role better, is an example for how other industries can adapt to persistent worker shortages. Technological progress, underpinned by public and private investment in research and development, has been a key driver of long-term productivity growth in agriculture. This has enabled the sector to deliver a strong productivity performance over the past 20 years, while adapting to significant shifts in the size, composition and characteristics of the agricultural workforce. The gross value of agricultural production has increased significantly while the number of farms has declined, and average farm size has increased (Chart 4.8). This corresponds with international trends, with the United States experiencing a similar transition.

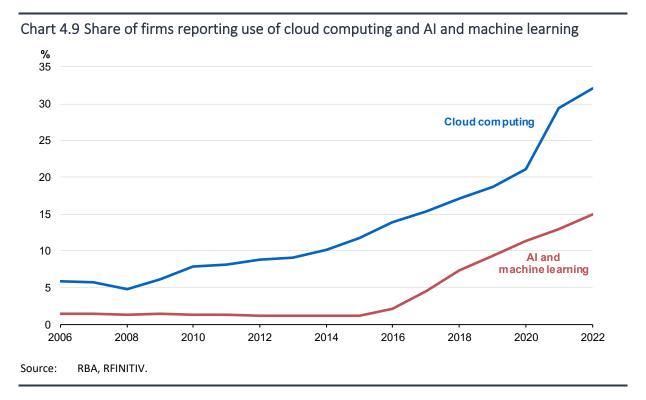
Australia's agriculture sector is a model for how industries can adapt to shifts in labour markets over the long term. Other industries are likely to experience similar pressures over the coming decades, notably the care and support sector. The agriculture sector's experience is that a productivity-focused response with strong capital investment can smooth this adjustment.



Opportunities presented by new technologies

The adoption and diffusion of new technologies are important mechanisms to support widespread productivity growth. New technologies can reduce business production and transportation costs and improve product quality and consumer choice, particularly in the services sector. The benefits of adopting new technologies are pronounced for small businesses. Between 2015 and 2017, small businesses that accelerated technology adoption grew revenue by 3.5 percentage points and employment by 5.2 percentage points per year faster than other small businesses.²²

Although adoption of technology is important for productivity growth, it takes time for productivity benefits to be realised. In the short term, technologies have tended to underperform against expectations. However, this can reverse in the long term. After the invention of the steam engine, it took decades for the first railway lines to be laid. It took many years again before factories were revamped to take advantage of electricity.²³ Today there is a range of emerging technologies such as AI, augmented reality, blockchain, biotechnologies, quantum technologies and robotics. Although these new technologies may have limited applications now, their impact over the next decade may be profound. This will be particularly true in the net zero transformation as emerging technologies transform both global and Australian energy systems. Al and robotics may also have important applications for Australia's changing industry mix and future of work as uptake increases (Chart 4.9).



Digital technology and data use in Australia has steadily increased for most of the past decade. In 2020, more than 70 per cent of Australian businesses with 10 or more employees had purchased cloud computing services.²⁴ However, the uptake of more advanced digital technologies such as Al has lagged most other developed economies. An industry environment characterised by high digital adoption rates is associated with higher MFP growth in the average firm.²⁵

One way to support the dissemination of technology is through encouraging greater competition. A competitive business environment helps rapidly diffuse digital innovations across the economy, allowing businesses with middling productivity to move towards the frontier. 26 Competition policy can also ensure that the benefits of digital and data innovations are shared widely across the community.

Governments have a key role in facilitating the uptake of new technologies. Infrastructure such as the NBN is a key enabler for the diffusion and adoption of new technologies and promotes productivity growth. Switching from the outdated copper wire network to high-speed broadband delivered by fibre or cable-based technology has been found to support firms to become more productive.²⁷

Building the digital and data skills needed to operate new technologies will also be critical. Governments will work to ensure digital and computational thinking skills are embedded throughout all stages of education. Cyber security and the ethical use of technology and data will also be core to building trust and confidence through the technological and digital transformation.

The effect of the technological and digital transformation on productivity growth will also have important implications for lower-skilled workers. Upskilling and reskilling workers into higher productivity occupations and industries will be important to smooth the impacts of this transformation, and is discussed further in Chapter 5.

Making workplaces safer and more efficient with robotics and automation

Robotic and automation technologies have the potential to provide significant economic, social and environmental benefits for Australia. These technologies can help address national challenges, revitalise Australian industries such as manufacturing, and provide safe and fulfilling opportunities for Australian workers.

Productivity gains from robotics and automation technologies have shifted demand away from routine tasks. In the post-war era, agricultural and manufacturing labourers engaging in routine manual work and clerks engaging in routine cognitive work, saw their labour productivity increase, aided by the adoption of new technologies. ²⁸ As a result, employment growth has been concentrated in non-routine work which is less likely to be automated.

The use of robotics and automation technologies has made workplaces safer and more productive. Routine manual tasks often require repetitive physical labour such as lifting, pushing, pulling or carrying. Manual tasks can become hazardous when done with repetitive or sustained force, or if the movement is repetitive and requires a sustained or awkward posture.²⁹ Work-related injuries and illness cost the Australian economy \$28.6 billion per year between 2008 and 2018.³⁰ The use of robotics and automation technologies can reduce the risk and incidence of work-related injury and illness, and contribute to greater productivity. A key example of this is in the mining sector. Australia's world-leading adoption of whole-of-system automation solutions in mining has improved safety for workers by reducing exposure to dangerous environments and the need for people to perform unsafe tasks.³¹ Between 2005–06 and 2021–22, the rate of work-related injury or illness in the mining industry fell from 86 per 1,000 employed people to 32 per 1,000 employed people.³²

Robotics and automation technologies have the potential to boost productivity and safety in Australia's fastest growing industry, health care and social assistance. This industry has been slow to reduce work-related injuries and illnesses.³³ Collaborative robotics can reduce the physical burden on the care and support workforce and minimise the risks of work-related injuries and illness.

From IT to AI: changing the way workers engage with knowledge-based work

Advanced digital technologies can empower workers to be more productive at work by making it easier to access and process information, make decisions and complete administrative tasks. For example, real time AI-generated suggestions for how to respond to customer queries have been found to increase worker productivity and support newer and less-skilled workers to communicate more like high-skill workers.³⁴ Similarly, generative language models, like ChatGPT, have also been found to improve productivity in mid-level professional writing tasks by 37 per cent.³⁵

Effective integration of new technologies into workplaces can increase worker productivity and support overall jobs growth. Al can also expand market opportunities, increasing what a business can produce and achieve, for example using data analytics to reach new customers. Al has the potential to add significant value to the Australian economy, with estimates ranging from \$45 billion to



\$115 billion annually by 2030, generating demand in the economy and the need for high-skilled workers.36

The impact of advanced digital technologies will vary significantly across occupations and skill levels. Technological advancements have resulted in the shift towards non-routine tasks (Chart 1.4). Digital technologies have been able to perform routine cognitive tasks such as those performed in clerical jobs and routine manual tasks like operating basic machinery. These routine tasks are more prevalent in lower-skill occupations which have seen slower employment growth over the last few decades. However, technological advancements like automation are expected to disrupt some tasks of most occupations, rather than automating entire roles.³⁷ The future workforce will therefore need higher levels of ongoing education and on-the-job training to ensure technology complements our workforce in performing higher-skilled and higher-productivity tasks.

The evolution of technology such as AI could have even wider impacts on the tasks and occupations in the economy. There are examples of emerging technologies complementing workers in the delivery of non-routine cognitive tasks. This will change the occupations affected by technological advances, expanding to more service roles. For example, new technologies provide the potential for radiographers who perform x-rays and other medical imaging to leverage AI to complete preliminary assessments of imagery. In the future, AI could support radiographers to provide faster results to patients and free up doctors to focus on more specialised tasks.³⁸

Investing in technologies that improve labour productivity in areas of demand, such as the care and support economy, will be critical to grow productivity and the economy. In order for this new technology to complement the workforce, people will need the right skills to be able to adapt and adopt AI tools effectively. Additionally, training will be required for people to move into adjacent roles that leverage their broader skills in different tasks. Policy settings will need to support business and individuals to engage with and leverage these technologies and develop complementary skills. This includes ensuring training, infrastructure, equipment, and occupational licensing keeps pace with technological change.

Building our human capital 4.2.3

Building human capital is core to how people adapt to the future of work and respond to change in the labour market. It is the skills, knowledge, experiences, and capability of the workforce. It improves people's prospects for a secure, fairly paid job, supports productivity growth and lifts the potential of our economy. Human capital accumulation requires an investment in people to build up not just technical skills and knowledge but also the core transferable skills needed to be resilient and adaptable through structural change.

The future labour market will need more highly skilled people to meet our rising demand for quality care and support, to harness the technological and digital transformation, and to support our net zero transformation. Human capital is particularly important for the services sector and will become increasingly important for future productivity growth as that sector continues to grow.

Skills and knowledge acquisition underpins human capital

Education and training are central to building human capital and lifting productivity growth. People with higher levels of educational attainment engage with the labour market more, have better outcomes and earn more on average than those with lower levels of education.³⁹ Education and training provides people with the skills and knowledge they need to perform tasks efficiently and effectively, with secondary and tertiary education found to improve general cognitive performance.⁴⁰ Increasing the skills of workers in median-productivity firms up to the skills of workers in firms on the productivity frontier could close the productivity gap between these firms by 19 per cent.⁴¹

Building skills and knowledge through education and training also has indirect benefits to productivity by allowing people to be able to realise the productivity gains of other investments in technology and innovative work practices. Increasing the supply of educated workers can lead to greater levels of innovative activity from firms, and education increases the success of entrepreneurs. ⁴² Adoption of technology is just as important as new-to-the-world innovation, and workers with adaptable skills are more likely to adopt new technologies and support the diffusion of innovation. ⁴³

Foundation skills make a critical contribution to productivity. Language, literacy, numeracy and digital literacy, as well as employability skills like creative thinking, problem solving, communication, creativity and teamwork, are all important for enabling productive workplaces. However, not all students are achieving to expectations across these critical areas, with one in three students not meeting NAPLAN expectations in numeracy, reading and writing in 2023. ⁴⁴ Gaps in educational achievement begin even before children start school. Preschool attendance has been found to have a significant relationship with Year 3 NAPLAN scores (Chart 4.10). ⁴⁵ Accessible, high-quality early childhood education and care can therefore have a positive impact on long-term productivity.

Age 3 Age 4 Age 5 Did not attend Mean 370 380 400 450 390 410 420 430 440 score Reading Writing Numeracy

Chart 4.10 Mean Year 3 NAPLAN scores for selected domains by age started in preschool

Source: Treasury; NCVER Longitudinal Surveys of Australian Youth.

Improving tertiary education attainment is also essential for meeting skills needs and enabling Australian businesses to lift productivity growth. Tertiary education builds more specific skills that are required to perform effectively in the labour market and will become increasingly important as skill-biased technological change continues. A high-quality formal education also sets people up to be more productive throughout their lifetime. Educated workers are more likely to participate in further formal and informal on-the-job training, maintaining and improving their skills and productivity over the life course. Getting the people with the right skills for the future economy requires more people to complete tertiary education (discussed in Chapter 5).



A high-quality and more equitable education system will lift the level of human capital in the economy, growing the number of students going into the tertiary system and ultimately contributing to stronger productivity growth. This journey starts early, with the quality of education received early in life having long-term influences on productivity. Improving education outcomes is the first step in ensuring the pipeline of our future workforce. This also includes addressing gendered education outcomes to reduce industry gender segregation (discussed in Chapter 3).

Investing in people and their capabilities through employment services

Employment services also play an important role in building capability and broadening opportunities by connecting job seekers with relevant work experiences, training opportunities and support. There is a significant mismatch between the qualification levels demanded by employers and those possessed by job seekers. The most common barrier for job seekers is an education level below Year 12 attainment. Among job seekers accessing Workforce Australia, this education barrier affected 37 per cent of all job seekers, 43 per cent of youth, mature-age people and people with disability, and 54 per cent of Aboriginal and Torres Strait Islander people. 46 Employment services, alongside foundation skills programs, can help to improve the capabilities of those who were not supported through the education system. The broader barriers faced by job seekers are diverse and discussed further in Chapter 6.

Demand for foundation skills programs is not limited to job seekers. One in five adult Australians have low literacy skills, numeracy skills, or both. 47 Around 40 per cent of callers to the Reading Writing Hotline in 2019–20 were already in employment and 38 per cent of callers were from regional and remote areas despite only making up around 27 per cent of the population at the time. 48 Broad access to foundation skills programs, separate to employment services, can improve the general capabilities and productivity of the workforce.

Migration that supports productivity growth

Skilled migration can support productivity growth by complementing the skills of the domestic workforce, improving connections to international markets and transferring global best practices. Australian firms find more innovative ideas from their own workers than from any other source. 49 Employing skilled migrants brings in knowledge and ideas, including to small businesses. Given the most technologically advanced firms in the world are overseas, this avenue is important for adopting innovation and improving productivity. Migrants have also been found to be more entrepreneurial than non-migrants, and high-skilled migration has a positive effect on patenting activity.⁵⁰

Migration is not a substitute for investing in the skills of Australians, but a well-targeted skilled migration program can have positive productivity benefits for Australian workers, businesses and across the economy. There is an opportunity to enhance the migration system to boost productivity in Australia.

4.2.4 Promoting innovation in workplaces

In addition to investing in Australia's physical and human capital, productivity growth can be advanced by promoting innovation, diffusion of best practices and improved managerial capabilities.

Significant basic research and innovation occurs in Australia each year, especially through Australian universities, with 85 per cent of Australian research rated at or above world standard. Despite Australia's strength in research, Australia underperforms in achieving translation outcomes. Australia ranks last in the OECD for business collaboration on innovation with higher education or government institutions and only 33 per cent of university research income came from industry in 2021.

The diffusion of new and established technologies and ideas across the economy represents a significant opportunity to increase productivity. The widening gap between Australian firms and the productivity frontier implies that there are gains to be made from adopting existing technologies and processes. However, in the two years to 30 June 2021, 60 per cent of Australian businesses did not introduce a new process and almost 80 per cent did not introduce any significant new good or service. Si Given the need to balance day-to-day operations, firms, particularly small businesses, may find it challenging to innovate and position themselves for the future.

Another factor in innovation diffusion is management capability. Firms using advanced management practices have been shown to be more productive across a broad range of countries. ⁵⁴ In Australia, there is a significant positive association between management capabilities and labour productivity, supply chain management and export performance. However, a composite score of overall management capability among Australian businesses shows capabilities are relatively low. ⁵⁵ Across a range of firm characteristics and managerial capability metrics, Australian firms consistently underperform against US firms. ⁵⁶ In the manufacturing industry, lower levels of management capability could account for half of the productivity gap between Australia and the United States. ⁵⁷

Global networks, migration and ongoing workplace training can facilitate the translation of international best practices to Australia. Links with overseas firms through partnerships, trade, foreign direct investment and migration provide Australian businesses with access to information and ideas about innovation from the global frontier. Global connections can improve Australian innovation diffusion through direct investment in firms and research and development, knowledge spillovers from multinational corporations to domestic firms, and spillovers to competing firms in the same industry as those connected to global networks.⁵⁸

Australia can improve the diffusion of innovative practices. Governments can use policy to facilitate investments and diffusion of innovation, but business will also have to proactively identify and adopt these new practices. There are opportunities for Australia if we can improve management practices to support adoption of innovative practices, better harness our research strengths and improve targeting of migrants to support productivity spillovers.

4.3 Productivity agenda

Our future labour market requires investment in people to grow their skills and abilities. Equipping workers with the right skills while ensuring business and workers are dynamic and resilient enough to respond to shifts within the economy is key to driving productivity growth. It also supports innovation and adoption of new technology and practices. Without the right skills and knowledge, mismatches will occur and both our labour and capital resources will be inefficiently allocated. Investment in people needs to start early and continue throughout a person's lifetime. This is at the heart of the Government's approach to lifting productivity.

Increased adoption of new and advanced technology will also complement the skills of workers in the workplace. Digital skills, AI, clean energy and emerging technology are a means to more productive workplaces and better paying, more rewarding work. The Government is focused on ensuring Australia attracts and adopts new capital and cutting edge technology, and applies it in a manner which complements workers and helps them lift their own productivity.

Finally, a more dynamic economy, in which workers are supported to move into high productivity industries, and where they are most needed and will receive the most reward for their skills, and where emerging businesses can employ the workers they need, is central to part of reigniting productivity growth in Australia.

The Government has a broad-based agenda to boost productivity, which consists of five pillars:

- Creating a more dynamic and resilient economy
- Building a skilled and adaptable workforce
- Harnessing data and digital technology
- Delivering quality care more efficiently
- Investing in cheaper, cleaner energy and the net zero transformation.

This is discussed further in the Roadmap.

Endnotes

- The Treasury (Commonwealth of Australia), *The Intergenerational Report*, (2023), https://treasury.gov.au/sites/default/files/2023-08/p2023-435150.pdf, accessed 14 September 2023.
- 2 Productivity Commission (Commonwealth of Australia), PC Producivity Insights: Recent Developments, (2021), https://www.pc.gov.au/ongoing/productivity-insights/bulletins/recent-developments-2021/productivity-insights-2021-recent-developments.pdf, accessed 14 September 2023.
- Durretto, Z., Majeed, O., & Hambur, J., 'Overview: Understanding productivity in Australia and the global slowdown', *Treasury Round Up*, (Oct 2022), https://treasury.gov.au/sites/default/files/2022-10/p2022-325290-overview.pdf, accessed 14 September 2023; Calvino, F., Criscuolo, C., & Verlhac, R., 'Declining business dynamism: structural and policy', *OECD Directorate for Science, Technology and Innovation*, (Nov 2020), https://www.oecd-ilibrary.org/science-and-technology/declining-business-dynamism_77b92072-en, accessed 24 July 2023.
- 4 The Treasury (Commonwealth of Australia), The Intergenerational Report, (2023).
- 5 Durretto, Z., Majeed, O., & Hambur, J., 'Overview: Understanding productivity in Australia and the global slowdown', *Treasury Round* Up, (Oct 2022).
- Andrews, D. et al., 'Reaching for the stars: Australian firms and the global productivity frontier', *Treasury Working Paper No. 2022-01*, (Jan 2022), https://treasury.gov.au/sites/default/files/2022-02/p2022-243535.pdf, accessed 24 July 2023.
- Andrews, D. et al., 'Reaching for the stars: Australian firms and the global productivity frontier', *Treasury Working Paper No. 2022-01*, (Jan 2022)
- 8 Andrews, D., & Hansell, D., 'Productivity-enhancing labour reallocation in Australia', *Economic Record*, 97(317), (Jun 2021), 157-169; Andrews, D., et al., 'Wage growth in Australia: Lessons from longitudinal microdata', *Treasury Working Paper No. 2019-04*, (Jul 2019), https://treasury.gov.au/sites/default/files/2019-07/2019-04_wage_growth_in_australia_lessons_from_longitudinal_microdata.pdf, accessed 18 September 2023.
- Durretto, Z., Majeed, O., & Hambur, J., 'Overview: Understanding productivity in Australia and the global slowdown', *Treasury Round* Up, (Oct 2022); Hambur, J., & Andrews, D., 'Doing Less, with Less: Capital Misallocation, Investment and the Productivity Slowdown in Australia', *Research Discussion Paper*, (Reserve Bank of Australia Mar 2023), https://www.rba.gov.au/publications/rdp/2023/pdf/rdp2023-03.pdf, accessed 24 July 2023; Andrews, D. et al., 'Reaching for the stars: Australian firms and the global productivity frontier', *Treasury Working Paper No. 2022-01*, (Jan 2022).
- Andrews, D. et al., 'Reaching for the stars: Australian firms and the global productivity frontier', *Treasury Working Paper No. 2022-01*, (Jan 2022).
- Day, I., et al., 'Competition in Australia and its impact on productivity growth', *Treasury Round Up*, (Oct 2022), https://treasury.gov.au/sites/default/files/2022-10/p2022-325290-productivity-growth.pdf, accessed 14 September 2023.
- Hambur, J., 'Product market power and its implications for the Australian economy', *Treasuring Working Paper No. 2021-03*, (Jun 2021), https://treasury.gov.au/sites/default/files/2021-06/p2021-177591_product_market_power_implications_0.pdf, accessed 14 September 2023.
- Hambur, J., & Andrews, D., 'Doing Less, with Less: Capital Misallocation, Investment and the Productivity Slowdown in Australia', *Research Discussion Paper*, (Mar 2023); Andrews, D., & Hansell, D., 'Productivity-enhancing labour reallocation in Australia', *Economic Record*, (2021).
- Bogaards, R., 'Australia's productivity challenge', *Parliament of Australia*, https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BriefingBook46p/ProductivityChallenge, accessed 14 September 2023.



- 15 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Innovation for the 98%, (2023), https://www.pc.gov.au/inquiries/completed/productivity/report/productivity-volume5-innovationdiffusion.pdf, accessed 23 August 2023.
- 16 The Treasury (Commonwealth of Australia), Analysis of wage growth, (2017), https://treasury.gov.au/sites/default/files/2019-03/p2017-t237966.pdf, accessed 5 September 2023.
- 17 Treasury (Commonwealth of Australia) analysis of 2023 OECD data.
- 18 Hambur, J., & Andrews, D., 'Doing Less, with Less: Capital Misallocation, Investment and the Productivity Slowdown in Australia', Research Discussion Paper, (Mar 2023).
- 19 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: A competitive, dynamic and sustainable future, (2023), https://www.pc.gov.au/inquiries/completed/productivity/report/productivity-volume3-future.pdf, accessed 3 September 2023.
- 20 Hambur, J., & Andrews, D., 'Doing Less, with Less: Capital Misallocation, Investment and the Productivity Slowdown in Australia', Research Discussion Paper, (Mar 2023); Andrews, D. et al., 'Reaching for the stars: Australian firms and the global productivity frontier', Treasury Working Paper No. 2022-01, (Jan 2022).
- 21 Australian Energy Market Operator, 2022 Integrated System Plan, (2022), https://aemo.com.au/-/media/files/major-publications/isp/2022/2022-documents/2022-integrated-system-planisp.pdf?la=en&hash=D9C31A16AD6BF3FB2293C49AA97FE1EA, accessed 29 August.
- 22 AlphaBeta, 'Australian business investment in innovation: levels, trends and drivers', Department of Industry, Science and Resources (Jan 2020), https://www.industry.gov.au/sites/default/files/2020-02/australianbusiness-investment-in-innovation-levels-trends-and-drivers.pdf, accessed 5 September 2021.
- 23 Leigh, A. (Commonwealth of Australia), Address at the National 'Innovate with NBN' Awards Ceremony (22 Feb 2023), https://ministers.treasury.gov.au/ministers/andrew-leigh-2022/speeches/address-nationalinnovate-nbn-awards-ceremony-canberra, accessed 5 September 2023.
- 24 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Australia's data and digital dividend, (2023), https://www.pc.gov.au/inquiries/completed/productivity/report/productivityvolume4-data-digital-dividend.pdf, accessed 3 September 2023.
- 25 Gal, P., et al., 'Digitalisation and productivity: In search of the holy grail Firm-level empirical evidence from European countries', OECD Economics Department Working Papers No. 1533, (Feb 2019), https://one.oecd.org/document/ECO/WKP(2019)2/En/pdf, accessed 29 August 2023.
- 26 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Innovation for the 98%, (2023); Andrews, D. et al., 'Reaching for the stars: Australian firms and the global productivity frontier', Treasury Working Paper No. 2022-01, (Jan 2022).
- Bureau of Communications, Arts and Regional Research (Commonwealth of Australia), 'Productivity impacts from improved broadband firm-level analysis', Department of Infrastructure, Transport, Regional Development, Communications and the Arts (Mar 2023), https://www.infrastructure.gov.au/sites/default/files/documents/bcarr-research-paper-productivityimpacts-from-improved-broadband-firm-level-analysis-march2023 0.pdf, accessed 29 August 2023.
- 28 Heath, A., Remarks to the Career Education Association of Victoria conference, (Reserve Bank of Australia 1 Dec 2017), https://www.rba.gov.au/speeches/2017/pdf/sp-so-2017-12-01.pdf, accessed 5 September 2023.
- 29 Safe Work Australia, Hazardous manual tasks, (2018), https://www.safeworkaustralia.gov.au/system/files/documents/1905/model-cop-hazardous-manualtasks.pdf, accessed 29 August 2023.
- 30 Safe Work Australia, Safer, healthier, wealthier: The economic value of reducing work-related injuries and illnesses, (2022), https://www.safeworkaustralia.gov.au/sites/default/files/2022-

- 10/final_safer_healthier_wealthier_theeconomic_value_of_reducing_work-relatedinjuries_and_illnesses_-_summary_report%2002.pdf, accessed 29 August 2023.
- 31 Department of Industry, Science and Resources (Commonwealth of Australia), *National Robotics Strategy Discussion Paper*, (2023), https://storage.googleapis.com/converlens-au-industry/industry/p/prj22ef87ebb99eb4fdcf232/public_assets/National-Robotics-Strategy-Discussion-Paper.pdf, accessed 29 August 2023.
- Australian Bureau of Statistics (ABS), Work-related injuries, Australia, 2005-06, cat. no. 6324.0 (20 Dec 2006), https://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/4C1F7A19EF4AEEA9CA2572490018107D/\$File/6 3240_2005-06.pdf, accessed 29 August 2023; ABS, 'Table 4.1 Occupation and industry of job where work-related injury occurred', Work-related injuries, 2021-22, cat. no 6324.0 (15 Feb 2023), https://www.abs.gov.au/statistics/labour/earnings-and-working-conditions/work-related-injuries/2021-22, accessed 29 August 2023.
- 33 Safe Work Australia, *Australian Workers' Compensation Statistics 2019-20*, (2021), https://www.safeworkaustralia.gov.au/sites/default/files/2021-11/Final%20Australian%20Workers%20%20Compensation%20Statistics%202019-20.pdf, accessed 29 August 2023.
- Brynjolfsson, E., Li, D., & Raymond, L., 'Generative AI at Work', *NBER Working Paper 31161*, (2023), https://www.nber.org/system/files/working_papers/w31161/w31161.pdf, accessed 24 August.
- 35 Noy, S., & Zhang, W., 'Experimental Evidence on the Productivity Effects of Generative Artificial Intelligence', MIT Working Paper, (2023), https://economics.mit.edu/sites/default/files/inline-files/Noy_Zhang_1.pdf, accessed 24 August 2023.
- Tech Council of Australia, *Australia's Generative Al Opportunity*, (2023), https://news.microsoft.com/wp-content/uploads/prod/sites/66/2023/07/230714-Australias-Gen-Al-Opportunity-Final-report.pdf, accessed 24 August 2023.
- 37 Arntz, M., Gregory, T., & Zierahn, U., 'The Risk of Automation for Jobs in OECD Countries: A Comparative Analysis', OECD Social, Employment and Migration Working Papers No. 189, (Jun 2016), https://www.oecd-ilibrary.org/docserver/5jlz9h56dvq7-en.pdf?expires=1695028737&id=id&accname=guest&checksum=3E913A91FFD63BB4E42587AAAAED8074, accessed 24 August 2023.
- 38 Lane, M., & Saint-Martin, A., 'The impact of Artificial Intelligence on the labour market: What do we know so far?', OECD Social Employment and Migration Working Papers No. 256, (Jan 2021), https://www.oecd-ilibrary.org/docserver/7c895724-en.pdf?expires=1695028996&id=id&accname=guest&checksum=786AE787BB724310B8E7AE846695ABF9, accessed 24 August 2023; Webb, M., The Impact of Artificial Intelligence on the Labour Market, (2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3482150, accessed 24 August 2023.
- 39 Department of Education (Commonwealth of Australia), 'Benefits of educational attainment', Department of Education (Commonwealth of Australia) (5 Sep 2019), https://www.education.gov.au/integrated-data-research/benefits-educational-attainment, accessed 9 August 2023; Leigh, A., 'Returns to Education in Australia', Economic Papers: A journal of applied economics and policy, 27/3 (2008), 233-249, https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1759-3441.2008.tb01040.x, accessed 9 August 2023.
- 40 Productivity Commission (Commonwealth of Australia), *5-year Productivity Inquiry: From learning to growth,* (2023), https://www.pc.gov.au/inquiries/completed/productivity/report/productivity-volume8-education-skills.pdf, accessed 9 August 2023.
- Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: From learning to growth, (2023).
- 42 Productivity Commission (Commonwealth of Australia), *5-year Productivity Inquiry: From learning to growth,* (2023).



- 43 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: From learning to growth, (2023).
- 44 Treasury (Commonwealth of Australia) analysis of 2023 ACARA NAPLAN national results data.
- 45 Treasury (Commonwealth of Australia) analysis of 2023 ACARA NAPLAN national results data; Wienk, M., 'Year 12 Mathematics Participation Report Card: Enrolments Reach All-Time Low', Australian Mathematical Sciences Institute, (Apr 2022), https://amsi.org.au/?publications=year-12-participation-in-calculus-basedmathematics-subjects-takes-a-dive, accessed 9 August 2023.
- 46 Unpublished Department of Employment and Workplace Relations figures.
- 47 OECD, 'Building Skills for All in Australia', OECD Skills Studies, (Sep 2017), https://www.oecdilibrary.org/education/building-skills-for-all-in-australia 9789264281110-en, accessed 9 August 2023.
- 48 House of Representatives Standing Committee on Employment, Education and Training (Commonwealth of Australia), 'Don't take it as read: Inquiry into adult literacy and its importance', Parliament of the Commonwealth of Australia, https://parlinfo.aph.gov.au/parlInfo/download/committees/reportrep/024806/toc_pdf/Don'ttakeitasread.p df;fileType=application%2Fpdf, accessed 9 August 2023; Treasury (Commonwealth of Australia) analysis of ABS 2021–22 Regional Population.
- 49 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Innovation for the 98%, (2023).
- 50 OECD, 'The Contribution of Migration to Regional Development', OECD Regional Development Studies, (2022), https://www.oecd-ilibrary.org/urban-rural-and-regional-development/the-contribution-ofmigration-to-regional-development 57046df4-en, accessed 7 September 2023; OECD, 'Migrant Entrepreneurship in OECD Countries Part II', International Migration Outlook, (2011), https://www.oecd.org/els/mig/Part%20II Entrepreneurs engl.pdf, accessed 7 September 2023. OECD (forthcoming), 'The impact of migration on local innovation in Australia', OECD Regional Development Papers, No. XX, OECD Publishing, Paris.
- 51 Department of Education (Commonwealth of Australia), 'University Research Commercialisation Action Plan', Department of Education (Commonwealth of Australia), (2022), https://www.education.gov.au/university-research-commercialisation-package/resources/universityresearch-commercialisation-action-plan, accessed 7 September 2023.
- 52 Department of Education (Commonwealth of Australia), 'University Research Commercialisation Action Plan', Department of Education (Commonwealth of Australia), (2022); Treasury (Commonwealth of Australia) analysis of Department of Education (Commonwealth of Australia) Higher Education Research and Development Income time series (Dec 2022).
- 53 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Innovation for the 98%, (2023).
- 54 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Innovation for the 98%, (2023).
- 55 Agarwal, R. et al., 'Development of Management Capability Scores', Research Paper 10/2019, (Sep 2019), https://www.industry.gov.au/sites/default/files/2019-09/development-of-management-capabilityscores.pdf, accessed 7 September 2023.
- 56 Agarwal, R. et al., 'Development of Management Capability Scores', Research Paper 10/2019, (Sep 2019).
- 57 Bloom, N., Sadun, R., & Reenen J., 'Management as a technology?', NBER Working Paper Series, (Oct 2017), https://www.nber.org/system/files/working_papers/w22327/w22327.pdf, accessed 7 September 2023.
- 58 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Innovation for the 98%, (2023).

5 Filling skills needs and building our future workforce

Main points

- Addressing skills shortages and proactively building a strong and skilled labour force will be fundamental to achieving full employment and productivity growth.
- Responding to the challenges of workforce shortages and the significant forces shaping the economy will require substantial growth in the high-skilled workforce.
- Importantly, workforce planning grounded in data and insights from industry and educators can drive a responsive skills and training sector.
- Some industries that are growing rapidly are facing acute skills shortages and require tailored workforce solutions to ensure we can meet future skills needs, including investments in domestic skills and training complemented by targeted migration pathways.
- Building a highly skilled workforce will require more collaboration across higher education, vocational education and training, industry and governments, and a culture of lifelong learning.

Australia's skilled workforce is a competitive advantage for our economy. It has allowed us to build a large, sophisticated services sector and underpinned world-leading mining and agricultural industries. Most importantly it has allowed us to raise living standards over time.

To sustain this success, we need to continue to invest in people's skills so they can adapt to the changing needs of our economy. Workers will need to have strong foundation skills, including interpersonal and problem-solving skills, to meet growing needs for sophisticated soft skills. To respond to the significant forces shaping the economy, we will need to build the workforce required to meet demand for care and support services, realise the opportunity of the net zero transformation and capture the productivity benefits presented by new technologies.

Managing this workforce transition will require a whole-of-government response. Strategic planning is needed to ensure efficient delivery of infrastructure, services and housing as the workforce grows. Factoring in these requirements will facilitate a smoother transition and prepare us to meet our future skills needs.

The Government is focused on building adaptable and resilient systems to respond to forces shaping Australia's economy, and in turn to develop adaptable and resilient people who can continually learn and reskill in order to catch up and keep up with labour market needs. However, this will not be enough. Each of these significant forces will also require their own, targeted response.

5.1 Our objective is to fill skills needs and build our future labour force

The mix of skills required in the labour force is changing as Australia's economy evolves. This reflects the changing nature of work. An adaptable and more highly skilled and educated workforce will be required to meet the challenges and the opportunities of an uncertain future. Workers are likely to change occupations 2.4 times on average over the next two decades.¹ It is also likely there will be more growth in jobs that need higher-level skills, which means workers will require higher levels of post-school education and training.² Projections produced by Victoria University for Jobs and Skills Australia (JSA) show that over the next ten years, more than nine out of ten new jobs expected to be created will require post-secondary qualifications.³ Around 44 per cent of jobs will require a vocational education and training (VET) qualification, and around half (48 per cent) will require a bachelor's degree or higher qualification. In the current labour market, as of May 2023, around 51 per cent of jobs require a VET qualification, while 35 per cent require a bachelor's degree or higher.⁴ The future labour market will demand ongoing rebalancing of the types of skills delivered across the tertiary sector.

An adaptable workforce means workers have both a strong core skillset relevant to all jobs and a well-developed set of specialist skills applicable to emerging work needs. A changing industry mix will demand different specific skills. For example, the net zero transformation will see new industries emerge and grow, while the rising demand for care and support services will drive expansion of the health care and social assistance industry. To upskill for the fast-paced evolution of roles and the changing industry mix, workers need an adaptable skills system which is responsive to demand.

While it is impossible to perfectly predict the exact form of the jobs and tasks of the future, it is possible to anticipate the broad areas where labour demand will grow rapidly, so that targeted solutions can be developed. Labour demand is expected to be strong in areas where significant forces are shaping the economy. Projections produced by Victoria University for JSA show that digital and technology jobs will grow by 21 per cent by 2033, while the care and support economy is expected to grow by 22 per cent by 2033. Projections produced by Deloitte for JSA show that the occupations key to the clean energy workforce will need to increase by around 30 per cent by 2033 to deliver the net zero transformation. This represents an increase of around 213,000 workers. The clean energy supply workforce alone is projected to increase by around 127 per cent.

These forecasts indicate the scale and nature of the skills challenges we need to meet, and demonstrate how central effective workforce development is to Australia's broader objectives. For example, growth in jobs in the care and digital economies will outpace Australia's projected population growth over the coming decade. Meeting this demand will be key to ensuring the provision of high-quality care, and ensuring Australia can seize the productivity growth opportunities digital technologies present. Similarly, the pace at which Australia can develop a clean energy workforce will

Digital and technology jobs are calculated based on the combined growth of 20 occupations identified in Tech Council of Australia's (2022) Australia's Tech Jobs Opportunity report. The projections do not include tech-related jobs which are included in the Government's commitment to 1.2 million tech-related jobs. The care and support economy is calculated by JSA based on 19 occupations in six industries, spanning early childhood education and care, residential aged care and disability and other care.

ii Table 5.1 provides a list of occupations.

iii JSA defines the clean energy supply workforce as the workers whose employment relates directly to the generation of renewable energy and includes hydro-electricity generation, hydrogen, offshore wind generation, wind generation and solar generation.



impact Australia's ability to capture the economic opportunity presented by the net zero transformation. Rising to these challenges will require a strategic approach to growing the overall labour force in priority areas and building supply of specialist skills.

5.1.1 Tertiary education needs to deliver the skilled workers for the jobs of the future

High-quality and responsive education and training systems are pivotal to creating a resilient workforce. Businesses need workers with occupational expertise and strong employability skills who can adapt and shift across tasks as required. To support businesses, the education system must equip people with the capabilities and skills necessary to respond to changes in the labour market. Many of these skills are initially developed in early childhood and developed further through school years, as discussed in Chapters 4 and 6.

In addition to supporting people to develop these core occupational and employability skills, the education system needs to provide the further technical and specialist skills for participation in the future labour market. The following factors will be beneficial:

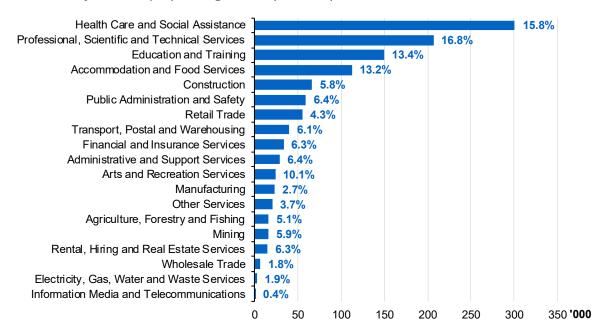
- effective but not overly prescriptive forecasts
- a tertiary system responsive to these needs
- better aligning participation in education and training with skills needs.

5.1.2 Forecasting skills needs helps the tertiary sector respond to changing demands

Predicting exactly which skills will be needed, and where they will be needed, is hard to do with perfect accuracy. Many occupations in the labour force today did not exist 30 years ago. Emerging industries and the spectrum of occupations will continue to expand. For example, in 2015 there were only 450 people employed as data scientists. Just four years later there were 3,210, an increase of nearly 500 per cent.⁵ Telehealth is another example: between 2018 and 2022, the number of internet job listings mentioning telehealth increased by over 600 per cent. Unsurprisingly, there was an increase in job listings mentioning telehealth during the COVID-19 pandemic, but the rate has continued to climb since then. Telehealth has now become an enduring way of people gaining easy access to services and medicines they need regardless of location.

Despite the difficulty of accurately forecasting detailed labour market shifts, there are broad trends that can be identified and there are ways to predict the specific skill sets needed. This is particularly important for beginning the process of educating people in more technical areas that will be in demand. For example, the Department of Employment's projections over the five years to November 2019 accurately forecast that the largest employment growth would come from the health care and social assistance industry, even though the size of the shift was underestimated. National Skills Commission (now JSA) projections to November 2026 (Chart 5.1) show similar expected growth.

Chart 5.1 Projected employment growth by industry, November 2021 to November 2026



Source: National Skills Commission, 2021 Employment Projections.

Note: Bars refer to projected change in employment (thousands). Percentages refer to the percentage growth for

each industry.

It is reasonable to expect continued employment growth in the health care and social assistance industry given the ageing population and rising demand for quality care and support services. It is also reasonable to expect increased use of digital and advanced technologies and the net zero transformation creating large demand for workers. Demand can be predicted with enough confidence to guide planning by businesses, tertiary education institutions and people making education and training decisions. The defence industry is another example where future workforce needs can be predicted with some degree of confidence (Box 5.1).

We are building strong capabilities to do this predictive work through JSA and industry-led Jobs and Skills Councils (JSCs). JSA will play a critical role in providing independent advice and information on current, emerging and future skills needs. JSA's work will provide insights into the direction of growth in certain industries and emerging trends, how the nature of work is changing and what types of skills will be required to capitalise on future labour market opportunities. JSA will work with tripartite stakeholders to shape education and migration policy settings accordingly – an approach often used internationally across a range of policy areas.⁸



Box 5.1 Workforce growth to protect Australia's security and national interests

Skilled workers in Defence and supporting industries underpin the Australian Defence Force's work to protect Australia's national interests and advance our security and prosperity. We will need skilled workers in industry with both vocational and higher education qualifications and some with additional defence-related skill sets. In addition, Defence projects that it will need to grow its workforce by approximately 18,500 personnel by 2040.⁹

Australia's Defence industry will also need to grow significantly to deliver on the priorities included in the Defence Strategic Review. For example, at its peak, building and sustaining nuclear-powered submarines in Australia will support up to 8,500 direct jobs in the industrial workforce. Project management, security, mechanical operations, mechanical engineering, engineering management, electrical engineering, systems engineering, and project cost and scheduling are areas identified as priorities, especially in South Australia.

The SA Defence Industry Workforce and Skills Taskforce is an example of a collaboration between governments and the defence industry that aims to drive implementation of measures to develop the highly skilled defence workforce we need to deliver current and future defence projects.

5.1.3 An education and training sector more responsive to skills needs

When schools, the vocational education and training sector, higher education and other private education providers are effective at meeting skills needs, they expand opportunities for employment and support economic growth. Improving the responsiveness of these systems to industry demand is central to ensuring Australia can realise the opportunities presented by a changing economy.

Vocational education and training

The VET system is a major pathway to deliver the future workforce. To prepare for the significant forces of the rising demand for quality care and support services, increased use of digital and advanced technologies and the net zero transformation, a more coordinated approach to the VET system by government and industry is needed. This includes making sure that students are presented with tertiary education choices that raise awareness of the career opportunities provided by VET pathways. VET and higher education must be presented as options with different but equally rewarding career paths to secure, fairly paid jobs.

States and territories have responsibility for VET delivery, which means training offerings are significantly supported by the states and can vary across the nation. The Australian Government also provides funding to support VET. Better national coordination on VET skills is underway, and shared system stewardship supported by a stronger evidence base through the five-year National Skills Agreement currently under negotiation, will lift the quality and relevance of teaching, increase the supply of workers for priority skills areas and improve student employment prospects.

A major challenge to meeting skills needs is lifting course completion rates, especially for priority cohorts. For students who commenced a VET qualification in 2018, the completion rate for all students was 47.6 per cent. For students with disability, it was 41.8 per cent and for remote students 40.7 per cent. Completion rates for Aboriginal and Torres Strait Islander students were even lower at 34.5 per cent. A dedicated and collaborative national effort is required to trial new approaches to support these priority groups and make sure more people benefit from a tertiary education.

Higher education

While Australia has a quality higher education system, it will need to become increasingly responsive to meet the needs of a changing economy. To ensure graduates are equipped with the most relevant and up-to-date skills, higher education will also need to increase collaboration with industry and business. Evidence highlights the effectiveness of combining formal learning with work-related experience for improving student outcomes. ¹¹ Greater use of work-integrated learning will support this goal as well as improving higher education teaching. A more student-focused approach is needed to ensure students get the full benefit of their education and have the skills they need to enter the labour force. This includes supporting students to make good choices about their education so they can make the best of future opportunities.

Relative prices have not always provided an effective incentive for students to choose one degree over another. The Job-ready Graduates (JRG) package is one example of an ineffective student incentive scheme in higher education. Early evidence suggests the JRG package has had little to no impact on students' degree selection. 12 While student contributions for society and culture degrees more than doubled, applications to admissions centres for these degrees increased by 3.1 per cent in 2021, and direct university applications increased by 63.2 per cent. 13 The JRG package failed to recognise that student interest is one of the major drivers of course selection.¹⁴ While it is difficult to convince students to take courses outside their area of interest, students can be influenced towards different courses within their areas of interest. 15 The 'publicity effect' can impact course selection, through positive or negative media or promotion of future employment prospects. ¹⁶ For example, marketing campaigns in the United States and United Kingdom which promote teaching as a career have proved effective. 17 Given that students' career choices are heavily shaped by parents and those around them, marketing campaigns can influence both the student and those who advise them. 18 Up-front payments to support work and study can also incentivise course choice. For example, bursaries or scholarships have been shown to be an effective incentive for high-achieving school-leavers and mid-career professionals to choose a teaching career. ¹⁹ These methods offer alternative approaches to using course fees as an instrument for shaping student choice.

Helping school leavers make good career choices

High-quality career advice needs to balance supporting students to pursue their interests and aspirations with information about future job and earning prospects. Providing high-quality careers information about emerging labour market opportunities is a more effective way of directing students to gain particular skills. Although predicting what will happen in the future with complete certainty is fraught, articulating national priorities and long-run trends can help people make decisions that align with labour market needs. It will be important that information on future opportunities is accurate to avoid adverse outcomes. For example, considerable attention has been given to the increasing need for STEM skills. However, employment outcomes across STEM fields of study can differ significantly.²⁰

Creating clear pathways into and across tertiary education is an important step towards improving student experiences by helping match courses of study with interests and career aspirations. The information provided by the workforce planning function of JSA will be vital for helping individuals make informed decisions about study and work. Information on available courses and potential labour market outcomes are spread across many platforms and links to careers information are inconsistent.²¹



5.1.4 The migration system can better target skills needs

By complementing domestic skills and training pathways, migration can play a role in addressing short-term skills shortages and bringing new expertise to Australia. To maximise the benefits of skilled migration, we need to select the migrants who can best contribute to lifting long-term prosperity while ensuring that they can effectively match into jobs they have the skills for. In both of these areas, Australia can do better.

There is significant scope to better align migration with domestic skills needs

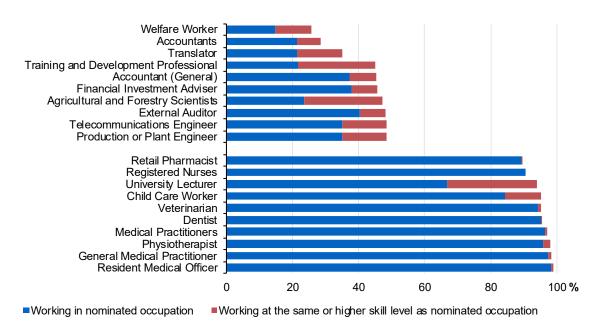
Temporary migrants are concentrated in the lower-skilled portion of the labour market. This is because two of the largest uncapped temporary migration visas are Working Holiday Makers and Students. Together with the Pacific Australia Labour Mobility (PALM) scheme, this skews the industries that migrants work in towards those with a higher proportion of jobs that have low barriers to entry and lower skills requirements.

As a result, temporary migrants selected on a skills basis make up a small proportion of our temporary migration system. Students and New Zealand citizens, who are not selected on a skill-based criteria, make up about 60 per cent of people holding a temporary visa. Australia only actively shapes a very small proportion of its migrant intake, with the overwhelming majority of migrants arriving in Australia for non-work purposes but then participating in the labour market. This creates tension between the objectives of specific visa classes, for instance balancing student work rights with study requirements.

Ensuring Australia becomes the destination of choice for migrants with in-demand skills can be progressed by replacing outdated, inflexible occupation lists that do not meet our skills needs, with an improved new core skills occupation list. Updating Australia's classification of occupations to keep pace with market changes is challenging. It particularly lags new and emerging occupations which are among the most productive and of greatest interest to employers. This leaves gaps when assessing the current and future workforce skills mix. A notable example is the absence of data scientists for many years from the Australian Government's system for classifying occupations — one of the fastest growing occupations in Australia. In the future, constructing a flexible and responsive occupation list offers the opportunity to better reflect the current state of the labour market and identify the skilled migrants that are most needed.

There is also scope to better use the skills that migrants bring to Australia. Nearly a quarter of permanent skilled migrants are working in a job beneath their skill level.²² This could reflect a range of reasons, including challenges navigating licensing systems, completing top-up qualifications, and working through Australian recruitment processes. Discrimination and unconscious bias among employers can also adversely impact migrant employment outcomes.²³ Some occupations exhibit particularly poor results for migrant skills matching. Migrant engineers and accountants stand out among the occupations not matching well into their nominated occupation (Chart 5.2).

Chart 5.2 Share of permanent migrants working in nominated occupations or at higher skill level nominated occupations with highest and lowest shares



Source: Treasury; Home Affairs Continuous Survey of Australia's Migrants, 2023 to 2021.

Note: These values are weighted and include nominated occupations with more than 100 observations over the

sample period.

These occupation-level results are supported by data from the 2016 Census indicating that migrants are more highly qualified than Australian citizens in all eight major occupational categories (Chart 5.3).²⁴ Some of this can be explained by Australian citizens having more years of experience in roles that can compensate for lower qualification attainment. However, the persistence of this trend in all occupation groups highlights the opportunity to better match migrants into jobs. This is reflected by the experience of migrant women, who are more likely to be 'secondary' visa holders and can have greater difficulty getting their qualifications recognised and finding work to match their skills.²⁵

Skills mismatch may also explain some of the significant differences in the performance of specific visa classes. Employer sponsored and skilled independent migrants contribute the most to the economy over their lifetime. Other skilled visa classes, such as the Business Innovation and Investment visa and state nominated visa stream do not perform well.²⁶ To maximise the opportunities of the migration system Australia needs to do better at matching migrants with roles that suit them.

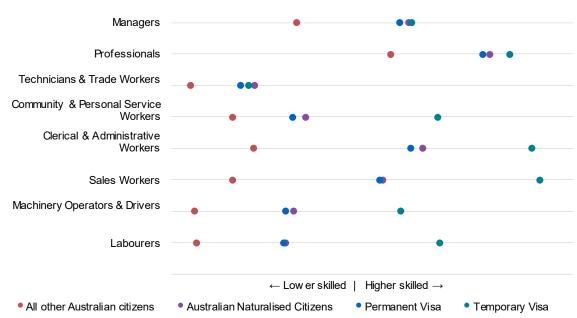


Chart 5.3 Migrant and Australian skill level matching by occupation categories

Flinders University analysis of Multi-Agency Data Integration Project (MADIP), 2023; ABS Census, 2016. Source: Note: Population aged 25 to 54 years old, primary and secondary visa applicants. 2016 data was used for this analysis because of the COVID-19 disruptions caused to migration in 2021.

One improvement to lessen the likelihood of skills mismatches for migrants is better supporting international students transition to in-demand areas of the workforce. Some students transition better than others, and this is influenced by a range of factors, such as visa rules, citizenship status, lack of networks, the skills assessment system, and English language ability.²⁷ Reforms to the migration system to help students better transition out of study into areas of skills shortage and to ensure strong English language skills are likely to improve job outcomes for this cohort.

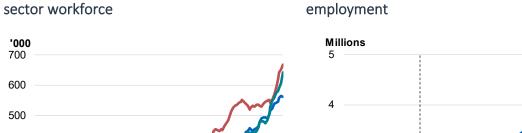
5.2 Taking tailored approaches to critical shortages

The significant forces shaping the labour market will create pronounced demand for workers. A larger care sector workforce will be needed to support the rising demand for quality care and support services. The technological and digital transformation will require more tech and digital skills across the board as well as some highly skilled specialist workforces in fields such as Artificial Intelligence (AI) and robotics. The net zero transformation also presents opportunities as Australia transitions away from high-emissions industries towards renewable energy and low-emissions technology. Each will need a tailored response to effectively build the workforce and respond to future skills needs.

5.2.1 Meeting demand for care services

The care and support economy is rapidly growing

The healthcare and social assistance industry is the fastest growing part of the labour market. Over the past 50 years, the demand for care and support services has grown significantly, and this is reflected in the growth in the care workforce (Chart 5.4). In 1966, 2½ per cent of the workforce was in a care occupation. This has increased to ten per cent of the workforce today and this growth is expected to continue. Victoria University projections for JSA show the share of total employment in the health care and social assistance industry will increase from 15.2 per cent in 2023 to 16.7 per cent in 2033. This is supported by analysis in the 2023 Intergenerational Report, which projects the care and support sector will almost double as a share of GDP over the next 40 years, increasing from around eight per cent of GDP today to around 15 per cent in 2062–63. Were employment to grow in line with the sector's GDP share, then the workforce will also double over the next 40 years (Chart 5.5). The sector of the sector's GDP share, then the workforce will also double over the next 40 years (Chart 5.5).



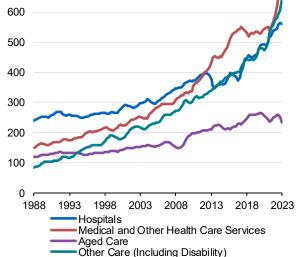


Chart 5.4 Growth in the care and support

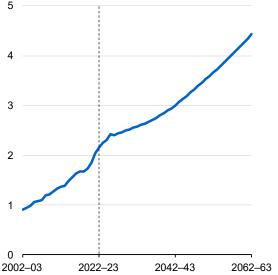


Chart 5.5 Care and support sector

Source: Treasury; ABS Labour Force, Detailed, Australia,

Note:

May 2023.

Employment groupings based on the ANZSIC subdivisions for the Health Care and Social

Assistance division. Annual moving average applied to quarterly data.

Source: Treasury; ABS Labour Force, Detailed, Australia,

May 2023.

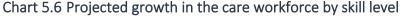
Note: Assumptions for modelling are listed in the 2023

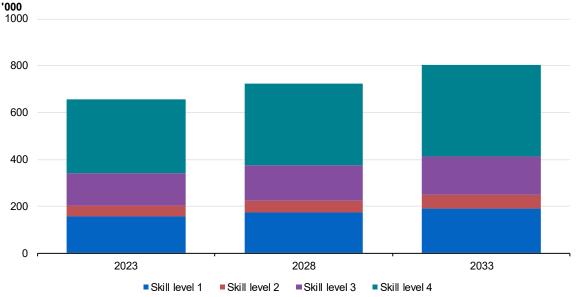
Intergenerational Report (IGR).

v The 2023 Intergenerational Report uses a different methodology from JSA to calculate the care and support sector.

Analysis undertaken by JSA shows that the care workforce is broad. In May 2023 there were around 657,200 paid care and support workers employed across 19 occupations and six industries. The care and support workforce spans early childhood education and care, residential aged care and disability and other care. The largest occupation within the care workforce is personal care workers, followed by child carers. ³²

The size of the growth of the care workforce over the coming years is therefore likely to be a significant challenge. Over the last five years, growth in the paid care and support workforce has been three times faster than total employment across the economy. Australia's ageing population and increased uptake of formal care services are contributing to increased demand. Analysis based on Victoria University projections indicates that the care and support workforce will grow from around 657,200 workers today to 801,700 workers by 2033. The demand for workers is likely to be higher than this. In particular, strong demand is likely for workers with Skill Level 4 qualifications, commensurate with a Certificate II or III, who already make up half the workforce (Chart 5.6). The significant opportunities for lower-skilled workers will benefit those looking to enter the labour market, re-enter the labour market, or shift sectors. This is because the training required for entry for many roles is likely to be less onerous than other higher skill level occupations.





Source: Victoria University projections for Jobs and Skills Australia, 2023.

Note: Skill Level 1 is commensurate with a Bachelor's degree or higher qualification; Skill Level 2 is commensurate with an Advanced Diploma or Diploma; Skill Level 3 is commensurate with a Certificate IV or III (including at least two years' on-the-job training); Skill Level 4 is commensurate with a Certificate II or III; Skill Level 5 is commensurate with a Certificate I or secondary education.

v JSA analysis of the care and support workforce includes the following occupations: child carers, child care centre managers, early childhood (pre-school) teachers, education aides, welfare support workers, personal care workers (formally classified as aged and disability carers), nursing support and personal care workers, diversional therapists, enrolled and mothercraft nurses, Indigenous health workers, social professionals, registered nurses, nutritional professionals, occupational therapists, physiotherapists, podiatrists, audiologists and speech pathologists, nurse managers and health and welfare service managers.

However, there will remain a significant number of higher-skill roles within the care and support sector that will need trained workers. This will require greater collaboration between the higher education and VET sectors, as well as leveraging on-the-job training. Targeted education is needed to support workers to be continuously upskilled throughout their careers. This allows them to adjust to changing care needs but also to allow them to grow their career within the sector and take advantage of the diverse roles and opportunities it offers. The early educators, health and human services JSC, HumanAbility, is working to ensure the needs of the care industry are reflected in qualifications and training packages.

To meet this demand, a wide range of actions will need to be taken, including improving attraction and retention in the sector, expanding training opportunities, and investing in technology and new models of care to enable carers to spend more of their time on care. Government has a significant role to play in aligning the training, education and migration systems with this workforce goal, as well as evolving the way it engages in the funding and procurement of care services.

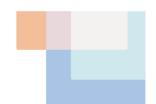
Improving attraction and retention

The starting point for building the future care workforce is ensuring the jobs are secure and fairly paid. Turnover in the care workforce is high. For example, for personal care workers, 59 per cent spent three years or less in the occupation.³³ Turnover is higher for young people, with 24 per cent of personal care workers aged 44 and under spending just one year in the occupation.³⁴ This is due to a range of factors, including high workloads, concerns about service quality, pay, work conditions and concerns about career progression opportunities. To address retention issues and encourage workers who have left the sector to re-enter, the care workforce needs to create jobs which offer safe workplaces, secure work and opportunities for a rewarding career.

Ensuring pay and conditions reflect the value of care and support work is critical. In May 2018, 95 per cent of care and support workers earned pay rates below the Australian average. vi,35 Lower pay reflects the gendered undervaluation of work by women in the care and support economy. ³⁶ In the 2022–23 Annual Wage Review decision, the Fair Work Commission (FWC) identified significant issues concerning the potential gendered undervaluation of work in female-dominated industries and occupations. The FWC will undertake work to identify occupations and industries where there is potential pay inequity and gender undervaluation of work to underpin consideration of issues in the 2023–24 Review. ³⁷ In addition, to address lower rates of pay in aged care, in November 2022 the FWC granted a 15 per cent interim wage increase for aged care workers. This decision helps recognise the value of the care sector and helps make it more attractive for future workers.

Training to enter care professions needs to be accessible and attractive. Training places should be readily available, especially in regional areas and for in-demand specialities. Further, opportunities need to be available for on-the-job learning and for qualifications to be gained with practical experience. However, before prospective workers even enter the profession, they face financial barriers to participation. Many qualifications in the care workforce require workplace placements or practicums which are unpaid. Additional upfront costs such as transport, child care, and forgoing unpaid work during placements can result in students changing courses or withdrawing from study entirely.

vi Note this statistic uses an older definition of the care and support economy used by JSA.



Demand for care and support workers has been met overwhelmingly by women. The care and support workforce is highly gender segregated, with women accounting for 76.5 per cent of employment in the health care and social assistance industry. Attracting more men and diverse cohorts into care and support professions will also be important to address shortages in the sector. In addition, the draft National Care and Support Economy Strategy highlights the importance of delivering culturally appropriate care for all people. An increasingly diverse Australian population will require a diverse workforce, as this enhances capability in meeting the varied needs of patients.

Managing regional workforces

Attracting more workers is particularly important to address the growing demand for quality care in the regions. The ageing population in regional areas, combined with thin markets, means tailored solutions need to be developed to meet growing care needs. It will be critical to attract more workers to regional areas, deliver more training in regional locations and enable people who can and want to work more hours in regional areas to do so. There are also opportunities to make more efficient use of existing care and support workers, by allowing them to deliver more multidisciplinary care. In addition, technology-enabled service delivery such as telehealth is an effective way of improving access to healthcare professionals in regional areas. While not the single solution to address delivery gaps, telehealth can support increased access to services such as mental health.

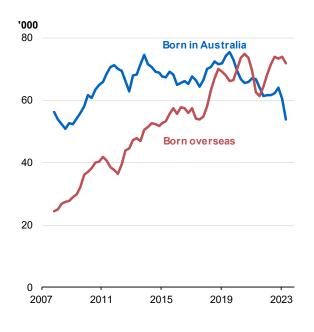
Using migration to complement the local care workforce

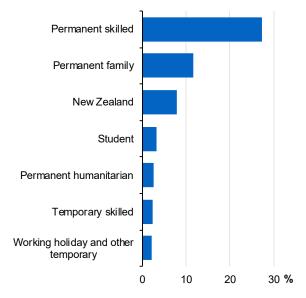
Well-designed migration settings can complement the domestic workforce in the care sector. Migrants make up large portions of the care workforce, especially in aged care (Chart 5.7).³⁸ Occupations with a higher share of new entrants to the care and support economy who were born overseas include registered nurses in aged care (40 per cent), nurse managers (34 per cent), personal care workers (31 per cent) and nursing support and personal care workers (30 per cent).³⁹ Overall the health sector is an example of successful permanent skilled migration.

A large proportion of migrants working in the health care and social assistance industry are on skilled visas.⁴⁰ However, large numbers of migrants in other visa categories also contribute to this workforce, with 19.4 per cent of migrants in the industry on family or New Zealand visas, and eight per cent on student, working holiday, humanitarian or other temporary visas (Chart 5.8).

Chart 5.7 Migrant status of care workers in residential aged care

Chart 5.8 Share of migrants in health care and social assistance





Source: Treasury analysis of ABS Labour Force,

microdata, May 2023.

Note: Four quarter average. In 2021, 85 per cent of

residential age care workers born overseas arrived in Australia aged 18 years or older:

Treasury analysis of 2021 Census.

Source: Mackey, W., Coates, B. & Sherrell, H., Migrants in

the Australian workforce, (Grattan Institute 2022).

Remaining share arrived before 2000 or were born in Australia. Permanent visa group are those who held a permanent visa between 2000 and 2016. Data on visa group is not available for

migrants who arrived before 2000.

There is scope to improve how we bring migrants into the care sector. Currently, there are significant regulatory barriers to recruiting skilled migrants. Common feedback from internationally qualified health practitioners is that the process is lengthy, burdensome, complex and expensive. For example, the Medical Board of Australia only recognises six competent authorities in five countries, while New Zealand recognises 23, the United Kingdom over 30 and Canada eight. 41

Note:

Processes are repetitive and information is difficult to find. Those who wish to work in the Australian healthcare industry must be registered with the relevant health practitioner board. These boards oversee the registration processes for physicians, pharmacists, nurses, midwives, physiotherapists, and other health professionals – independent of the skilled visa assessment process. It can take an international health graduate looking to come to Australia over a year, often longer, to register.

Better using the available workforce

The high prevalence of casual work and multiple job holders in the care sector adds complexity to skills shortages and has implications for delivering quality care. In February 2021, around 28 per cent of the care and support workforce were casual workers, compared with 19 per cent of the total Australian workforce. ⁴² Aged care, disability support and veterans' care workers are nearly twice as likely as other workers to hold multiple jobs. ⁴³ This can limit job security for some workers who would prefer more stable work and has flow-on impacts for attraction and retention in the sector. Casual work and the prevalence of working multiple jobs can also have an adverse impact on the efficiency



with which the care workforce is used, particularly when there are shortages. For example, there are challenges with rostering when there is a mix of part-time permanent and casual staff, often working at multiple care facilities to earn a living wage.44

Care and support markets have unique drivers and competitive forces, which have significant implications for the care sector labour market. In 2021–22, the National Disability Insurance Scheme had over 500,000 participants and around 325,000 workers.⁴⁵ In the aged care sector, the Commonwealth Home Support Program has around 840,000 users and 76,000 staff, home care had over 216,000 users and 80,000 staff, and residential aged care supported around 245,000 residents and over 277,000 total staff. 46 These different parts of the care sector often demand the same skills and can compete for the same workers. To ensure different parts of the care sector can grow together, the Government must be careful to consider the care workforce as a whole when setting policy, to ensure best use of the available workforce.

Improving care delivery models

When care is delivered more efficiently, it expands the service capacity of the available workforce. Improving integration and coordination of primary care services can improve health outcomes and reduce costs by preventing unnecessary hospitalisations. In aged care, effective home care services can be a high productivity approach to delivering care, as living independently for longer can result in lower labour requirements and lower costs than residential aged care, as well as greater benefits to patients.

Better integration of technology and use of data in existing care settings also presents an opportunity to improve the quality of care. One example is My Health Record, which is a comprehensive data sharing system spanning the whole health and care sector. My Health Record ensures carers have up-to-date and readily accessible information about their clients to deliver more tailored and timely care. By reducing time spent on administrative tasks, technology can free up workers to spend more time with their patients. This improves quality of service, allowing workers to add value where their skills are needed most, especially as 23.8 per cent of occupations in the care and support workforce require a bachelor's degree or above. 47 Training workers to use new technologies will be crucial to help capture quality-enhancing productivity gains.

The Government makes significant investments into the care economy, spending over \$160 billion on aged care, NDIS and health expenses in 2022–23.⁴⁸ The way the Government buys these services has a large impact on access, service quality and choice for consumers, and wages and job quality for workers. The different sectors of the care economy are accessed, funded and regulated separately, with some providers delivering similar services under different regulatory regimes. Opportunities to purchase services in a way which encourages efficiency can help improve overall care delivery models. There are also opportunities to improve the delivery of care through regulatory harmonisation, especially in removing barriers to moving between different parts of the care system. For example, different worker screening arrangements across sectors and states make it difficult for workers to work across different sectors including aged care, disability support and veterans' care. 49

5.2.2 Building the workforce we need for the net zero transformation

Building a clean energy workforce is a critical enabler of Australia's net zero ambitions. Reducing emissions by 43 per cent by 2030 and achieving net zero by 2050 will reshape the skills needed in our economy. The pace at which Australia can develop and efficiently deploy a clean energy workforce will also be key to unlocking the industrial opportunities and potential productivity growth presented by this economic transformation. Building the clean energy workforce also forms part of a broader strategy to build a nature positive economy.

Demand for clean energy workers

The net zero transformation is accelerating. By April 2021, the pipeline of new clean energy projects committed to and underway alone was estimated to require 28,649 full-time equivalent jobs. ⁵⁰ Shortages are also being reported as a key challenge in the sector. ⁵¹ Between 2012 and 2020, job ads for roles in wind and solar industries increased nearly four-fold in Australia. ⁵² This indicates significant potential for further growth in clean energy jobs as the net zero transformation progresses. Globally, the rate of transition from emissions-intensive to non-emissions intensive jobs has increased nearly 10-fold since 2005. ⁵³

JSA analysis has found that to reach net zero, a mix of critical clean energy jobs and supporting jobs will be required. Deloitte projections for JSA show that the specific clean energy supply workforce is projected to increase from around 15,000 workers in 2023 to 34,000 workers in 2033. VII.54 The net zero transformation is also increasing demand for workers in a wide range of related industries, beyond core clean energy jobs. For example, employment in the National Electricity Market is forecast to increase by 19,000 jobs from 2023 to reach 63,000 jobs in 2039. Deloitte projections for JSA show occupations key to the clean energy workforce will need to increase by around 30 per cent, or around 213,000 workers, by 2033 (Table 5.1). We will need almost 43,000 more electricians in the next ten years alone.

JSA defines the clean energy supply workforce as the workers whose employment relates directly to the generation of renewable energy and including hydro-electricity generation, hydrogen, offshore wind generation, wind generation and solar generation.

Table 5.1 Projected change in employment by occupations key to the clean energy workforce, 2023 to 2033

Occupation	Growth, level	Growth, %
Telecommunications Trades Workers	19,000	100
Electronics Trades Workers	19,000	73
Electrical Engineering Draftspersons and Technicians	7,000	58
Agricultural and Forestry Scientists	3,000	33
Structural Steel Construction Workers	8,000	33
Construction Managers	38,000	31
Airconditioning and Refrigeration Mechanics	9,000	29
Urban and Regional Planners	5,000	28
Other Engineering Professionals	4,000	27
Electricians	43,000	26
Plumbers	26,000	26
Industrial, Mechanical and Production Engineers	9,000	23
Electrical Engineers	5,000	17
Civil Engineering Professionals	13,000	17
Engineering Managers	5,000	17

Source: Deloitte projections for Jobs and Skills Australia, 2023.

To meet demand for clean energy workers, Australia will need to attract new and more diverse workers to the sector and broaden the talent pool. Women are underrepresented in the clean energy workforce, as are First Nations people and people with disability. ⁵⁶ This reflects in part the lower participation rates of these groups in overall trade occupations. Targeted action is needed to bring in more workers from these groups to address critical shortages and ensure all Australians can benefit from the transformation to net zero. Migrants will also form a significant part of this transformation, with the acceleration of the renewable transition requiring Australia to attract global expertise.

Occupational transitions and the demand for new skills

In combination, the growth in sectors involved with decarbonising the Australian economy, such as solar and wind farms, will provide opportunities for workers in emissions-intensive occupations to change jobs or upskill. Many of the skills needed to decarbonise already exist in our economy. Trades, technicians and other workers needed to support the net zero transformation are already employed in other sectors of the economy, such as in mining and construction. In a majority of emissions-intensive occupations, workers already have the skills to transition to clean industry jobs.⁵⁷ In fact, compared to many other countries, Australia has high levels of clean energy skills in the workforce, and a high share of emissions-intensive jobs that are able to effectively transition to clean energy jobs.⁵⁸

While there will be opportunities to transfer skills to new clean industries, some form of training will often be required to ensure the workforce is equipped with the specialist knowledge to be safe and productive. Skilling the clean energy sector will require diverse qualifications across the tertiary system. Most jobs will require existing broad-based qualifications that teach fundamental or core skills (for example Certificate III in Electrotechnology or a Bachelor of Electrical Engineering). To deliver specialist knowledge, 'top-up' or elective courses may be required, whether through post-graduate qualifications or short courses. Finally, new qualifications may be needed for emerging occupations

where a larger range of specialist skills will be required. Powering Skills Organisation is one of the new JSCs responsible for the energy, gas and renewables sector. The organisation will bring a strategic industry perspective to the development of training products and help to address these workforce challenges.

Finding skilled VET teachers to teach new energy qualifications is an additional challenge. Wages need to be competitive with those offered by industry, and industry experts face additional training requirements to teach and assess in VET. In addition, the existing TAFE teacher workforce is older than the general workforce, with 27 per cent of public sector VET teachers aged 60 years or over. ⁵⁹ Workforce challenges will need to be resolved in the education sector itself, for it to effectively support the broader labour market.

The transformation to net zero provides an opportunity for specific collaboration across the tertiary sector and with industry and governments. Dual-sector tertiary providers and the TAFE Centres of Excellence, proposed under the upcoming National Skills Agreement, are two mechanisms for addressing the net zero transformation collaboratively. Centres of Excellence could develop deep expertise in wind, solar, smart energy systems or hydrogen, and build partnerships with industry to develop innovative training courses. The pace of the transformation means new models of course design and new types of qualifications should be prioritised. The forthcoming JSA Clean Energy Capacity Study will look at how different transition scenarios affect future workforce needs, and how these opportunities can be shared across regions and all cohorts in society. It will also identify the education, training and migration pathways required for the transformation to net zero.

Changes in regional opportunities

Much of the transformation to net zero will be concentrated in regional areas. Eighty per cent of facilities covered by the Safeguard Mechanism are located in just eight regions, reflecting the significant regional concentration of decarbonisation and clean energy growth opportunities. Many of these regional areas have lower industrial diversity, a higher concentration of related emissions-intensive industries and lower adaptability, so may be more exposed to adjustment risks. JSA projects that growth in employment from the net zero transformation is likely to be stronger in regional Australia than metropolitan Australia. The Net Zero Authority will ensure that highly impacted regional areas receive targeted support to ensure they benefit from the transformation.

Clean energy projects have already demonstrated they can play an important role in driving regional economic transition and renewal. For example, following the closure of South Australia's last brown coal-fired power plant, the Leigh Creek coal mine, and the Atrium steel mill in 2016, the areas of Port Augusta, Whyalla and Port Pirie responded by pursuing renewable energy projects in solar power and wind.⁶⁰

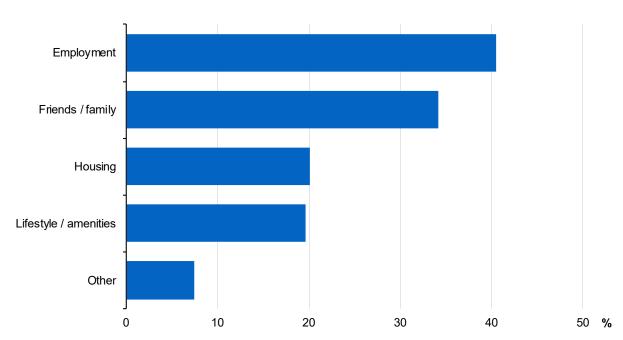


Chart 5.9 Main reasons for moving between regions

Source: Treasury analysis of HILDA waves 2 to 21.

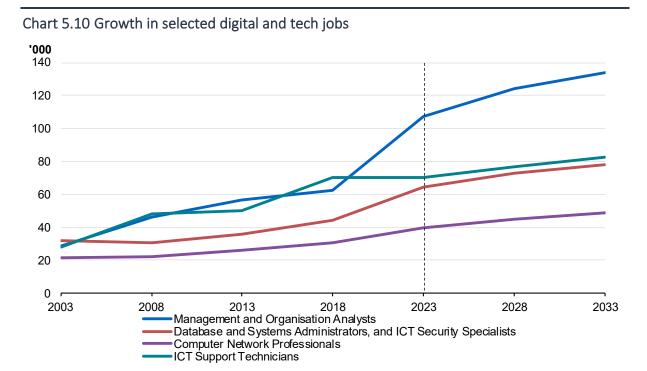
Note: Moving between regions is defined as moving 50km or more. Respondents can select more than one reason. Moving for housing reasons includes voluntarily moving properties, as well as involuntarily moving.

Some workers may choose to move to these regions for new employment opportunities – moving for employment is the most common reason people chose to move between regions (Chart 5.9). However, we also need to invest in all regions' ongoing prosperity. Many people living in regional areas working in emissions-intensive industries want to continue living in those communities. Supporting the continued strength of these regions will require a strategic plan and a more coordinated, location-specific and proactive approach. This includes encouraging different industries to operate in the regions, ensuring dynamic supply chains and a flow of new investment. Workers will also need adaptable skills and access to employment and training support to take advantage of new clean energy industries. In addition, there is a need for Government to work with employers in emissions-intensive industries to ensure clear planning and support for workers.

5.2.3 Expanding digital expertise

Digital and tech skills are becoming increasingly important to the Australian economy. Now embedded in most jobs, they are essential for creating an adaptable workforce and supporting productivity growth. They expand opportunities for regional workers and connect Australia with global markets. Access to the right digital and tech skills also unlocks innovative improvements to business operations, allows Australia to produce world-leading digital products, and ensures Australia has the skills required to support its strategic and security interests.

To realise these benefits, the Government and the Tech Council of Australia have a shared commitment to achieve 1.2 million people in tech-related jobs by 2030.⁶¹ Victoria University projections for JSA show tech occupations will grow by 12 per cent over the next five years to 2028, and by around 21 per cent over the ten years to 2033. Particularly strong five-year growth rates are projected for occupations such as management and organisation analysts (16 per cent), computer network professionals (14 per cent) and database and system administrators, and ICT security specialists (13 per cent) (Chart 5.10).



Note: Figures for 2003–2018 are ABS May quarter employment. Figures from 2023 onwards are Victoria University projections for JSA. Projections are not based on the historical series presented in this chart.

Source: ABS Labour Force, Australia, Detailed, May 2023; Victoria University projections for Jobs and Skills Australia, 2023.

Australia's education and training system will need to evolve to support this demand for digital and tech skills. Businesses reported in 2019–20 that a lack of skills and knowledge was one of the top barriers to adoption of digital technology. Encouraging people to make mid-career transitions into tech roles will be an important part of addressing gaps in the skilled labour force. People move into technology roles from a range of different occupations, but most commonly from information and organisation professions. Attracting skilled migrants from overseas with relevant digital and technology skills will also help to grow Australia's technology workforce.

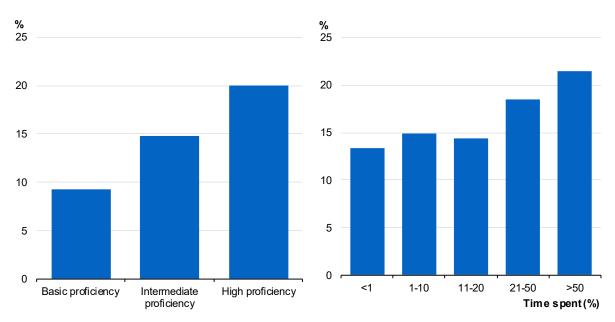
New forms of education and training will be required to build digital and tech skills in the workforce and address immediate skills needs. For example, the New South Wales Institute of Applied Technology — Digital is a partnership between government, industry, universities and TAFE to develop skills across the in-demand areas of big data, cyber security, cloud computing, software development and AI. A purpose-built facility at the Meadowbank TAFE is designed to deliver short courses in IT that respond to industry's fast-evolving needs.

viii Note JSA tech occupations do not include tech-related jobs which are included in the Government's commitment to 1.2 million tech-related jobs.

Improving our understanding of the digital and tech skills required for different jobs and understanding what digital skills every worker should have will be essential to meet the needs of industry. JSA's Australian Skills Classification shows digital engagement is required at various levels of complexity and importance.⁶⁴ Occupations requiring a high proficiency in digital engagement are projected to increase by a greater proportion than occupations requiring intermediate or basic proficiency (Chart 5.11). JSA analysis also identified that occupations that spend more than 50 per cent of their time on data and digital tasks are projected to grow at a faster rate than all other occupations (Chart 5.12). This is driven by growth in ICT Support and Test Engineers and Computer Network Professionals which are projected to be some of the fastest growing occupations over the next five years.65

Chart 5.11 Average projected employment growth of occupations by digital engagement occupations by time spent on data and proficiency levels

Chart 5.12 Average employment growth of digital skills



Jobs and Skills Australia Employment Projections, Source: Source:

2023; Australian Skills Classification, 2022; JSA

Analysis.

Note: Projections are average 10-year employment

growth, 2023 to 2033.

Jobs and Skills Australia Employment Projections, 2023; Australian Skills Classification, 2022; JSA Analysis.

Projections are average 10-year employment growth, 2023 to 2033.

To meet future workforce demands, training programs for digital and tech skills will need to get better at attracting diverse high-school graduates. For information technology subjects, girls make up less than a quarter of total Year 12, undergraduate university and VET enrolments.⁶⁶ This is why the Government's Diversity in STEM Review has been tasked with looking at what barriers diverse cohorts face in pursuing STEM qualifications at university. It is also examining what can be done to improve attraction and retention of diverse cohorts of Australians to tertiary STEM courses, including through increasing collaboration between universities, VET and industry.

Note:

Given the rapid pace at which digital and tech skills needs evolve, education and training providers need to continue to engage effectively with industry on the focus and design of relevant courses. Equipping students with foundation problem solving and analytical skills, irrespective of specialisation, is an important part of building resilience and adapting to technological change. The Future Skills Organisation, one of the newly established JSCs, is working with employers and training providers in the finance, technology and business sectors to make training more relevant, agile and responsive. The Future Skills Organisation will be supported by workforce analysis undertaken by JSA. Supplementing the expertise of JSCs with evidence from JSA will best ensure future course design is matched to labour market need.

5.3 Improving education system outcomes

The education system is central to our goal of meeting skills needs and building our future labour force. Lifting the level of educational attainment across the Australian population requires action across all levels of the education life cycle. To increase the number of people with post-school qualifications, students must be set up by an effective school education to succeed and complete their tertiary qualifications. The tertiary system must also adjust to meet future workforce needs, by providing greater support for disadvantaged students and increasing collaboration with industry and with other parts of the tertiary system. Finally, a culture of lifelong learning, supported by greater workplace training, will ensure people are equipped with the training to take advantage of future opportunities in the labour market.

5.3.1 School education opens pathways into further learning and work

The importance of school education, and in particular completing Year 12, is clear. Completing Year 12 provides a 30 per cent earnings boost, the most significant annual earnings increase for an additional year of education. ⁶⁷ Completing Year 12 also raises the likelihood of being employed (Chart 5.13) and facilitates pathways into tertiary education, which will become increasingly important for the jobs of the future. However, Year 12 or equivalent attainment is not achieved equally across society. Some groups such as First Nations people and people with low English proficiency are less likely to have finished Year 12, limiting their skills development and their ability to gain a secure, fairly paid job (Chapter 6). The importance of school and post-school further education pathways for future productivity is discussed further in Chapter 4.

Participation rate (%) Postgraduate Degree 90 Bachelor Degree 80 Year 12 attainment lifts people up into Certificate III/IV Graduate this cluster of labour force Diploma/Graduate 70 engagement Certificate ear 12 or equivalent / 60 Year 11 or 50 equivalent Year 10 or 40 equivalent 30 Below Year 10/No 20 educational attainment 10 0 10 20 30 40 50 60 70 80 90 Employment to population ratio (%)

Chart 5.13 Participation rates and employment to population ratios for different levels of educational attainment, February 2023

Source: ABS Labour Force, Australia, Detailed, May 2023.

There is an opportunity to lift the educational attainment of Australians who face historical, cultural and systemic barriers that hinder their ability to reach their full learning potential. Supporting additional learning needs of disadvantaged students and schools can improve student outcomes. Addressing this disadvantage at the schooling stage will support greater numbers of students to progress to tertiary education and take advantage of the higher skilled jobs of the future.

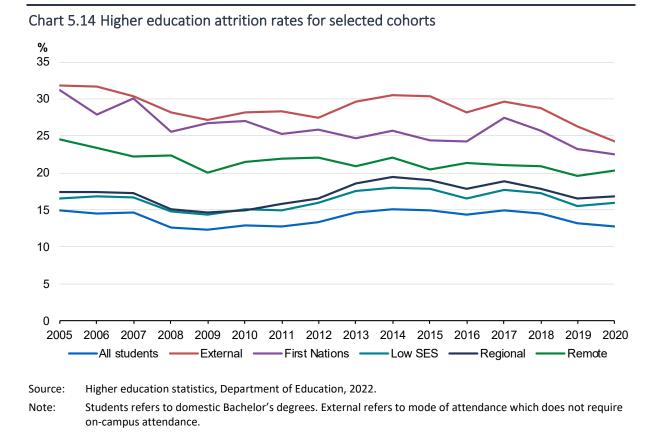
5.3.2 Growing the workforce of the future

As highlighted earlier in this chapter, more than nine out of ten new jobs created in the next ten years are expected to require a post-school qualification. Almost half of the new jobs will require a bachelor's degree or higher qualifications, and 44 per cent will require a VET qualification. ⁶⁸
However, the gains from tertiary education are not being shared equally among the population. While 44.6 per cent of Australians aged 25 to 34 had a bachelor's degree or above in 2022, and 73 per cent had a Certificate III or above, this is not true for all cohorts.

People from major cities are more than twice as likely to attend university as those in regional and remote areas.⁶⁹ The proportion of people with disability aged 20 or over with a bachelor's degree is only 17 per cent despite 34 per cent having completed Year 12 or equivalent.⁷⁰ Among all Australians aged 15 and over, only 7.4 per cent of First Nations Australians, 15.2 per cent of regional and remote Australians and 17.3 per cent of Australians in low socioeconomic areas (SES) have a bachelor's degree or above.⁷¹

The attrition rate for underrepresented groups also tends to be higher than the total population, particularly for people who study off-campus and First Nations students (Chart 5.14). The goal of higher education reform must be 'growth for skills through greater equity'. ⁷² To increase tertiary

education attainment rates, reforms must address challenges such as attracting more students from backgrounds currently underrepresented in higher education and improving quality of teaching and learning.



Setting ambitious targets for tertiary attainment

The future labour force will require significant growth in the tertiary educated workforce. In 2008, the Bradley Review set a target that 40 per cent of Australians aged 25 to 34 should have a bachelor's or higher degree, and a participation target that 20 per cent of undergraduates should be from low SES backgrounds. The first target has been met, but the second has not, with participation rates for low SES students barely increasing since the target was set.⁷³ As part of the National Agreement for Skills and Workforce Development, the Government also set targets for attainment in VET. These were to halve the proportion of Australians aged 20 to 64 without a Certificate III or above, and to double the number of diploma and advanced diploma completions.⁷⁴ Neither of these have been met.⁷⁵

To meet the tertiary qualification needs of the future workforce, we will need a different focus which better reflects the skills needs of the future. We also need new approaches to ensure Australia can meet targets for low SES students and other groups underrepresented in higher education. This will require a mix of VET and higher education delivery. The Australian Universities Accord Panel is considering new attainment targets which recognise that more of the jobs of the future will require post-school qualifications, and targets which support greater access and participation for students from underrepresented backgrounds.

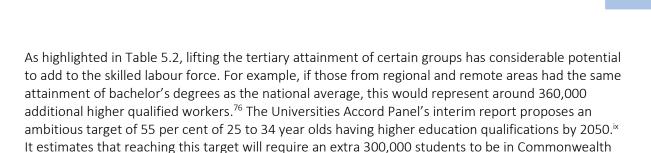


Table 5.2 Approximate number of people from underrepresented groups which would need a higher level of qualification to reach the national average

supported places by 2035 and an extra 900,000 students in Commonwealth supported places

	Regional/remote	First Nations	Low English levels
Bachelor's degree	360,000	70,000	60,000
Bachelor's degree or higher	590,000	100,000	110,000
Certificate III & IV or higher	390,000	100,000	210,000
Year 12, Certificate III or equivalent attainment or above	800,000	120,000	90,000

Source: ABS Census, 2021.

by 2050.77

Note: These figures are rounded and based on indicative calculations intended to demonstrate scale. Cross-over

between the different population groups has not been taken into account.

A significant share of increased tertiary attainment will need to be met through an increase in enrolments by students from underrepresented backgrounds. In 2021, around 17 per cent of total domestic undergraduate students were from a low SES background, around 19 per cent were from regional and remote areas and two per cent were First Nations students. x78 All of these groups remain underrepresented in higher education. 79 To achieve 55 per cent higher education attainment and parity across underrepresented students, the Universities Accord Panel's analysis found that 60 per cent of the additional students in the system will need to be from low SES backgrounds, while 46 per cent will need to be from regional areas, seven per cent from remote areas and 11 per cent from First Nations communities.80

Elevating VET pathways

Meeting workforce needs will also require an increase in the number of people with VET qualifications. VET is a crucial source of skills in the labour market. Analysis from JSA shows that over the year to May 2023, 52 per cent of total employment growth has been in skill level two to four occupations where VET qualifications are the primary pathway. 81 The expected increase in higher education as a proportion of the tertiary sector has not diminished the central role of VET.

However, perceptions and attitudes about VET pathways and lack of awareness about rewarding career pathways can contribute to people choosing higher education over a vocational qualification. This has consequences for students whose expected returns to training would be greater from VET than higher education, and for shortages of in-demand vocational occupations.⁸² The VET pathway is

These targets were informed by analysis from Oxford Economics Australia.

Low SES uses SA1 (2016 SEIFA) classification, regional and remote uses 2016 ASGS classification.

often not seen as equal to a university pathway, and students are often not provided with enough information or encouragement to undertake VET in Year 11 or 12 or post-school.⁸³

Providing VET pathways in schools is one way to connect students to opportunities and elevate its attractiveness as an educational pathway. School-mediated work-based learning helps students gain important career insights and empowers them in a way that cannot be replicated by off-the-job training. State VET in schools has been associated with a 14 percentage point increase in school completions and a 13 percentage point increase in the probability of pursuing further VET studies followed by entry into the labour market earlier than people pursuing other pathways. States

As well as elevating VET as a pathway, we can help to address critical shortages by ensuring students are completing their qualifications. Completion rates for apprenticeships have been declining steadily over time. Only 55.8 per cent of the 2018 national apprenticeship and trainee cohort successfully completed their apprenticeship. Small and medium-sized businesses in particular can find it difficult to commit to and support an apprentice or trainee due to a lack of resources compared to large employers. Group training organisations (GTOs) — whose role is to employ apprentices and trainees and place them with host businesses — can play a critical role in supporting both apprentices and small and medium-sized employers. Apprenticeship and traineeship completion rates from GTOs are generally higher compared to apprentices and trainees hired directly by small and medium employers.

Attracting more students to VET is of particular importance for trade qualifications, as labour market shortages are most common for technician and trade workers occupations, with 47 per cent of occupations in shortage in 2022. JSA also found that shortages of technicians and trades workers are often persistent over time.⁸⁸ However, completion rates for trade apprenticeships are low – for 2018 commencements, trade completion rates were 53.4 per cent.⁸⁹ Completion rates in trades are even lower for women (46.2 per cent), people with disability (42.6 per cent) and First Nations people (42.6 per cent).^{xi, 90}

While student enrolment and commencement is important, relatively high attrition rates highlight that students facing disadvantage will need greater support to complete their studies. Education and training providers have an important role to play in supporting students. To successfully complete an apprenticeship, apprentices need personalised support and mentoring to manage mental health and navigate workplace issues. ⁹¹

5.3.3 Quality skills and training that meet industry needs

As well as ensuring enough people complete tertiary education and training, qualifications need to be underpinned by skills that equip people for the workforce and are relevant to industry needs.

Lifting the quality of teaching and learning

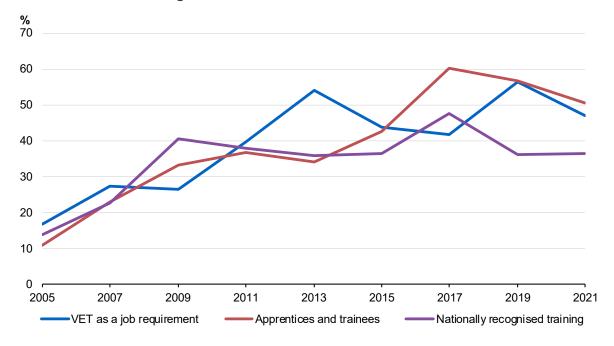
Lifting the relevance and quality of training in VET must be a priority in meeting future skills needs. VET qualifications that are up to date and support safety and quality in training outcomes make it easier for employers to recruit and develop the skilled workers they need and provide students with a pathway to secure, fairly paid work. Placing TAFE at the centre of the VET sector and elevating it as an example of best practice will improve the quality of teaching and learning across the wider VET sector.

xi Completion rates are for 2018 commencing cohort in trade occupations. Total completion rate for this cohort was 53.4 per cent.

Through an enhanced leadership role in the sector, TAFEs can lift the quality of VET by trialling innovative teaching and learning approaches, developing new curriculum and course materials, and supporting VET workforce initiatives.

Training providers need to be supported to deliver quality training, including through a capable workforce, learning resources and facilities. This is important for TAFEs, which typically deliver priority subjects that would not otherwise be offered by private providers and training in unprofitable areas or thin markets. Lifting the quality of VET delivery is particularly needed in a range of courses where existing training is not meeting employer needs. Employer satisfaction with nationally recognised training has fallen from 83.1 per cent in 2013, to 78.7 per cent in 2021. 92 Satisfaction is lower for employers using apprentices and trainees, at 74.2 per cent. Falling employer satisfaction can in part be explained by perceptions of training quality. For example, 50.6 per cent of employers of apprentices and trainees said training was poor quality or low standard (Chart 5.15).

Chart 5.15 Employers who cited training as poor quality or low standard as a reason for dissatisfaction with training



Source: NCVER Employer's Use and Views of the VET System, 2021.

Concerns about training quality and relevance are not uniform but need to be addressed to increase industry and student engagement and trust. Greater collaboration with industry, universities and governments on national economic priorities would support high-quality learning. This could include creating curriculum and applied learning opportunities that directly respond to skill demands and increasing partnerships with industry. This will be a focus of the tripartite JSCs and the Qualifications Reform Design Group established by the Government in August 2023.

More can also be done to promote high-quality learning and teaching in the higher education system through a greater focus on students. Evidence suggests variability in teaching practices across higher education is leading to disappointment for some students. 93 A more student-centred model of delivery and support, combined with more innovative curriculum and assessment design and delivery, is needed to ensure students receive a high-quality education.

A core difference between higher education and VET is the ability to self-accredit courses. In higher education, providers can apply to self-accredit courses of study, which allows providers significant autonomy to update courses and qualification content. In VET, accredited courses must be independently assessed by the Australian Skills Quality Authority or a state regulator. This does not allow for the same level of flexibility to meet new industry or local labour market needs.

While the majority of VET providers deliver high-quality training, there is a small number of private VET providers, particularly those who deliver international education, who may be enrolling non-genuine students. Removing lower-quality, non-compliant providers from the tertiary education sector would safeguard its reputation for quality. Similarly, removing information barriers for domestic and international students to enable them to choose high-quality providers will improve the integrity of the system and opportunities for students.

Creating industry-relevant training

An important part of making sure the skills taught in the education and training system are relevant for the workforce is direct engagement with industry. JSCs are an example of working with industry to elevate its voice and ensure training delivers better outcomes for learners and employers. The Government has established ten JSCs across industries including agribusiness, manufacturing, energy, gas and renewables, and finance, technology and business. The JSCs will identify skills needs for their sectors, map career pathways, develop contemporary VET training products and improve training and assessment practices. They will also work with JSA, drawing on its workforce analysis, to create a consistent understanding of the skills landscape and how gaps can be addressed.

JSCs will also have a role in qualifications reform. VET qualifications reform aims to build on the existing strengths of the VET system and ensure it is relevant to labour market needs and adapting to the challenges and opportunities facing the economy.

Innovative and new qualifications will be a vital part of meeting industry needs. The development of 'higher apprenticeships' – which combine structured on-the-job training through apprenticeships with study leading to degree-level qualifications – could provide opportunities for students to obtain higher-level skills. This has the potential to engage more people in tertiary education and address the skills needs of employers. Higher apprenticeships would allow students to develop more specialised higher-level skills tailored to emerging skills needs, such as digital or cyber technology and advanced manufacturing, not offered under traditional apprenticeship models.

Students engaging with industry and getting early exposure to workplaces can improve graduate outcomes and skills matching. Work-integrated learning generally refers to putting skills learnt through study into practice in a work setting, can count towards credit, and mostly leads to a qualification. Work-based learning – learning skills on the job as part of a qualification – also provides an accessible option for students who face financial barriers to education and training. A Universities Australia study found that in 2017, 37.3 per cent of students participated in work-integrated learning. However, just as some student cohorts face barriers to accessing education, they also face barriers to accessing work-integrated learning. Participation rates were lower for First Nations students (31.1 per cent), students from low SES backgrounds (27.8 per cent) and remote students (27.2 per cent).



5.3.4 Promoting ongoing and workplace learning

Lifelong learning supports labour market dynamism. As people participate in a more diverse range of roles during their careers and live longer, they will increasingly need to upskill and reskill to adapt to changing skills needs brought about by structural change. Regular retraining as a central and habitual part of participating in the workforce is the key to building transferable skills. Encouraging a culture of lifelong learning for businesses and individuals will create a more flexible workforce which can more effectively harness future labour market opportunities. This is especially important given Australia's relatively low overall management capability (as discussed in Chapter 4). Productivity gains for businesses from upskilling managers could be three times higher than for upskilling workers. Productivity gains for

As well as greater uptake of lifelong learning, there needs to be greater recognition and a more rigorous regime of prior learning and experience. Improved recognition of skills can facilitate learners moving through and across the tertiary system and leads to better job matching. For example, many people with caring responsibilities can have breaks in their education and work lives. During this time delivering unpaid care, they may develop valuable skills that should be recognised when they enter the labour force. Improved recognition of these skills will support them back into the workforce and better help match people into appropriate jobs. Recognition of prior learning also facilitates labour force participation by people following less linear career pathways.

The benefits of increased lifelong learning for business are significant. Employers benefit from a more productive workforce that can adapt, make best use of digital technology and investments, and innovate. Work-related training can bridge skills gaps by providing employer-specific skills and improve employee satisfaction and retention. There is a role for government in ensuring appropriate frameworks and information, as well as for employers who can play a leading role in workplace training and skills development and supporting their employees to grow throughout their careers.

Workplace learning is important in upskilling the labour force

Workplace learning plays a critical role upskilling people across their careers and helping employers build the skills they need in their workforce. However, Australia ranks in the bottom half of OECD countries for improving the use of workers' skills. 98 Australia also lags behind peers in the United States, Canada and England for participation in adult education and training. 99 Less than a third of Australian workers currently participate in work-related training each year and a quarter of all employees in Australia reported unmet demand for training. 100 Industry experience supports these findings, with a survey undertaken by the Business Council of Australia finding that 72 per cent of people had not been offered any training or professional development by their employer in the past two years. 101

The highest prevalence of workplace training is in industries such as health care and social assistance where ongoing training is often required as part of occupational accreditation. ¹⁰² Workers are more likely to complete workplace training if they already have high levels of educational attainment, work at a larger employer and are from a high SES background. ¹⁰³ These patterns of training limit opportunities for occupational mobility and career progression for people with lower educational attainment and those working in smaller businesses, and slow the diffusion of new innovations and technologies, reducing productivity (Chapter 4). Participation in workplace training is also lower among those who work part-time, which is likely to reinforce disparities between men and women in the workforce given women are more likely to work part-time. ¹⁰⁴ There is a case for a greater focus on the role of business in promoting targeted and work-relevant upskilling for these cohorts, especially in areas of evolving digital and tech skills needs, and new technologies such as robotics and Al.

The low level of workplace training is attributable to barriers faced by both workers and employers. For workers, the main barriers to formal and informal adult education and training have consistently been time and financial constraints. However, between 2016–17 and 2020–21, there was also a significant increase in a lack of available courses being reported as a barrier. People in regional and remote Australia were almost twice as likely as those in major cities to report their main barrier to learning as lack of course availability. This reflects the lower level of access and provision of education for those living outside major cities.

Businesses may face similar barriers, including the cost of providing training and allocating time for an employee to spend on training during the workday. Some businesses may be concerned about investing in the skills of their staff if they are not sure an employee will stay with the firm, or if upskilling their staff makes them more likely to be recruited by other employers. Stakeholders raised mixed employer experiences of training and that for some employers, training provision can be impacted by commercial factors which vary with the business cycle.

Action is needed to address barriers to workplace training

To improve uptake of workplace training and adult learning, attention should be given to the quality and relevance of the training provided. Making businesses aware of courses which more effectively target their skills needs is the first step to encouraging businesses to offer more training. For example, employers may require a better understanding of how specific training may support them to upskill staff to work with AI, or encourage use of within-workplace training delivery. The increased prevalence of online delivery of training will assist employers to provide more workplace training. Rates of online learning more than doubled from 19 per cent in 2016–17 to 55 per cent in 2020–21. For individuals, building a greater awareness of the different opportunities and benefits of upskilling will be crucial. However, there are considerable challenges and barriers in the tertiary system that prevent students from returning to study or from moving between VET and higher education.

Non-formal training can be a faster, cheaper and more flexible way to acquire knowledge. While not formally recognised, non-formal training can provide skills in line with changing skills demands as it does not require a lengthy approval process to develop the training package. There is scope to better integrate support for upskilling while people are currently working, particularly for workers who are likely to make the transition to new roles in the net zero transformation. There is also an opportunity to provide better skills support as part of employment services.

One of the Government's most important roles is ensuring the skills system enables and encourages the workforce and employers to make efficient investments in new skills and training. Supporting the development of shorter and stackable qualifications such as microcredentials is one way of doing this. Microcredentials are shorter than existing Australian Qualifications Framework (AQF) qualifications and build on broader core knowledge and skills. Where they contribute to a larger body of structured and coherent knowledge, they may be aggregated into larger qualifications. New shorter forms of education and training with multiple points of entry and exit will be required to rapidly build skills in the workforce to address immediate skills needs. Qualifications that can take years are not always a viable option for workers and businesses. People may not be able to spend long periods out of work to study for financial reasons, and for businesses, longer qualifications are not timely enough to address short-term needs. As tasks and jobs change at an accelerating pace, tertiary education will need to provide more shorter, stackable and portable qualifications. As these new courses and qualifications are created, employers need to take advantage of the opportunities they present by integrating these courses into the workplace and providing more workplace training opportunities to their employees.



Microcredentials provide a significant opportunity for stackable learning in a timely manner. While there are no comprehensive data on microcredential offerings, they are starting to be incorporated more broadly into Australia's tertiary education system. They have also been delivered through VET for a number of years in the form of skillsets. However, approaches across providers to offering microcredentials are mixed. Uncertainty around the recognition of microcredentials can make it difficult for people to demonstrate the skills they have gained to employers, and hard for both parties to verify the quality. Better acknowledgement and measurement of the different ways people upskill across their lives will be an important aspect of promoting lifelong learning. While short-form qualifications such as microcredentials are not currently recognised under the AQF, there are opportunities to develop innovative methods of demonstrating skills development.

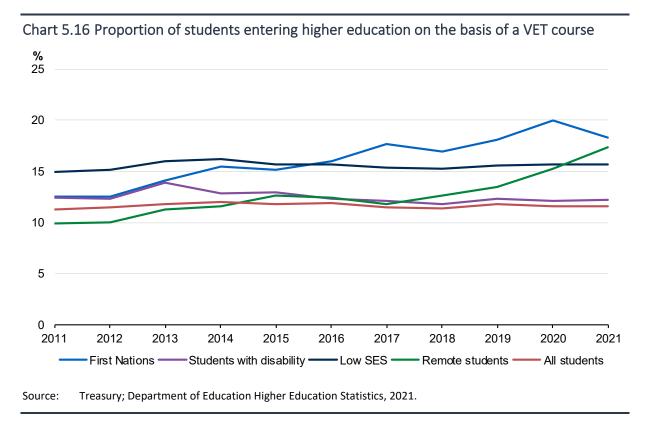
The current credentials system is also decentralised and does not provide a trusted information source for all of a person's qualifications and credentials information. Employers need to be able to quickly and easily verify an employee's credentials, and students and workers need to be able to effectively demonstrate their skills to employers with ease. To realise the benefits of lifelong learning, students and workers also need to be able to move between the VET and higher education systems over their lifetime, which requires more recognition of prior learning and experience. Digital recording of prior learning could support these aims and help to fill critical skills gaps and meet Australia's labour market needs. This would be underpinned by high-quality VET and higher education courses.

5.3.5 Better collaboration between VET and higher education

Meeting the skills needs of the future requires a whole-of-tertiary system approach. We have historically viewed higher education and VET as two separate pathways but addressing the skills needs of the future will require more collaboration. The setup of the current separate systems makes it challenging for students to move easily between VET and higher education. This is due to differences in funding, information or regulation, a lack of credit transfer or the perceived status of the different pathways. Reform is needed to help students study and upskill across both VET and higher education over their lifetime, to take advantage of new opportunities presented by structural change as the skills demanded by industry changes. The jobs of the future in care, net zero and digital will need workers trained through both VET and higher education. This will require flexibility and interoperability across the system while acknowledging the relative strengths of each sector and the benefits of diversity.

Transitions across tertiary sectors are low, but increasing

Collaboration between VET and higher education is an important part of improving skills development and building our future labour force. People are increasingly engaging in study and work pathways that use both the higher education and VET sectors throughout their lives. VET is an important entry pathway into higher education and is more likely to be used by students from low SES backgrounds, regional students and First Nations students.¹⁰⁹ In 2021, 11.6 per cent of commencing domestic undergraduate students used a VET award or enabling course as the basis for their admission into higher education.¹¹⁰ This proportion has been relatively stable over the last decade, but the proportion of some cohorts using this pathway has increased. For example, 18.3 per cent of First Nations students and 17.3 per cent of remote students used a VET course as the basis of their admission to higher education (Chart 5.16).¹¹¹ The pathway VET provides to the higher education system is also important for people to upskill and further their careers, particularly in priority sectors. For example, there is a well-established pathway for enrolled nurses with a VET qualification to transition to being a registered nurse, which requires a university qualification.



Increasing numbers of people are also undertaking VET qualifications to supplement the skills they gained in their higher education qualification with more job-specific skills. The proportion of VET program enrolments where students have a bachelor's degree or higher has risen from 9.6 per cent in 2018 to 10.8 per cent in 2022. Facilitating more collaboration and seamless transitions between VET and higher education is essential for creating the right skills mix and building the future workforce.

There are opportunities to make transitions across learning sectors easier

Creating a more flexible and interoperable tertiary education system must acknowledge the relative strengths of each sector and the benefits of diversity. One way to do this is to leverage pathways and occupations where there are existing connections between higher education and VET. For example, there are some careers where students could take either a VET or higher education pathway such as surveyors, graphic designers and medical laboratory technicians. There are also opportunities for one system to complement the other in building on qualifications. Qualifications in the education and health sectors have well-developed pathways between VET and higher education because accreditation is tied directly to requirements within occupations.

Credit transfer and recognition of prior experience is an important way of improving the connection between higher education and VET. Limited credit transfer can create unnecessary barriers to further skills development and inefficiencies when students have to duplicate their learning experience and extend their time in education and training. ¹¹⁵ As universities are self-accrediting institutions, admission practices and recognition of prior learning can differ significantly across providers. Credit recognition also differs across fields of education. ¹¹⁶ In its current form, the AQF makes qualification levels – and the skills and knowledge developed under them – difficult to understand and does not sufficiently support transitions between VET and higher education. A lack of guidance and clarity in the AQF also contributes to limited credit recognition. ¹¹⁷



Enhanced collaboration will be vital to delivering high-quality, industry-responsive qualifications. Innovative methods of course delivery in teaching and research, which combine the strengths of VET and higher education and the expertise of industry, can start to bridge the divide between the sectors. In addition, developing or trialling new forms of qualifications will support efforts to increase collaboration. These could be of particular use in areas of national priority, such as clean energy, the care economy and defence. 118 Innovative tertiary collaboration models of teaching and learning are already emerging across the country (Figure 5.1). Further tertiary collaborations including dual-sector models of delivery may also help to elevate the perception and status of VET.

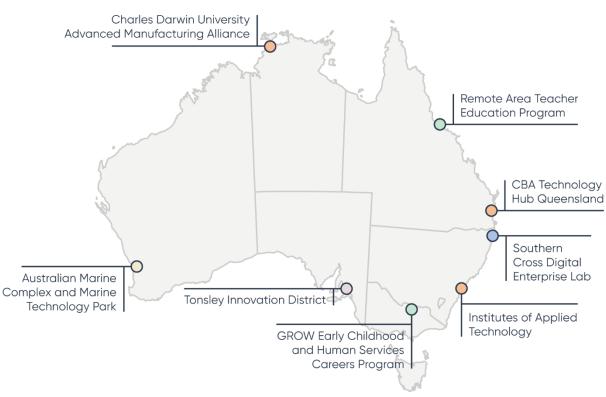


Figure 5.1 Selected Innovative Tertiary Collaboration Models

Building the future workforce will require careful 5.4 planning and collaboration

A greater focus on growing Australia's high-skilled workforce will help to address skills shortages and to achieve productivity growth. Proactive workforce planning can assist to ensure that Australians are gaining skills in priority areas, so they can be prepared to take advantage of emerging opportunities and be resilient to potential challenges.

In the future, Australia's labour market will be increasingly shaped by the rising demand for quality care and support services, increased use of digital and advanced technologies and the net zero transformation. A data-driven approach as to how these forces will shape the economy could help to inform settings for domestic skills and training and for effective migration strategies. Tailored, integrated solutions will be required to ensure we can meet future skills needs in sectors where there are unique challenges in relation to acute shortages.

The Government is committed to delivering a high quality and responsive education system. Improving access and outcomes from the tertiary education sector, including through enhanced collaboration, and promoting lifelong learning to assist in preparing our future workforce.

Endnotes

- 1 AlphaBeta, *Future Skills Report*, (2018), https://accesspartnership.com/wp-content/uploads/2023/03/google-skills-report.pdf, accessed 19 September 2023.
- 2 National Skills Commission (Commonwealth of Australia), *The state of Australia's skills 2021: now and into the future*, (December 2021), https://www.nationalskillscommission.gov.au/reports/state-of-australia-skills-2021, accessed 4 September 2023.
- 3 Victoria University, *Projections for Jobs and Skills Australia*, (2023).
- 4 National Skills Commission (Commonwealth of Australia), *Employment Projections, (2022)*, https://www.nationalskillscommission.gov.au/topics/employment-projections, accessed 19 September 2023.
- National Skills Commission (Commonwealth of Australia), *Emerging Occupations* (August 2020), https://www.nationalskillscommission.gov.au/reports/emerging-occupations, accessed 19 September 2023.
- 6 Jobs and Skills Australia analysis of Lightcast data (2018–2022).
- Department of Employment (Commonwealth of Australia), *Employment Outlook to November 2019*, (2015), https://cica.org.au/wp-content/uploads/Employment-Outlook-to-November-2019.pdf, accessed 19 September 2023.
- Natalie James, *Secretary's speech at the Ai Group's PIR 2023*, (Department of Employment and Workplace Relations July 2023), https://www.dewr.gov.au/about-department/announcements/secretarys-speech-ai-groups-pir-2023-31-july-2023, accessed 19 September; European Commission, 'Main messages from the Tripartite Social Summit', (March 2023), https://ec.europa.eu/commission/presscorner/detail/en/ip 23 1822, accessed 18 September 2023.
- 9 Department of Defence (Commonwealth of Australia) projections.
- 10 National Centre for Vocational Education Research (Commonwealth of Australia), *VET qualification completion rates 2022*, (August 2023), https://www.ncver.edu.au/research-and-statistics/publications/all-publications/vet-qualification-completion-rates-2022, accessed 19 September 2023.
- 11 Jackson et al., Working together to achieve better work integrated learning outcomes: Improving productivity through better employer involvement, (November 2015), https://acen.edu.au/wp-content/uploads/2016/06/Working-together-to-achieve-better-WIL-outcomes.pdf, accessed 19 September 2023.
- 12 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: From learning to growth, (2023); Andrew Norton, The first Job-ready Graduates university applications data, (October 2021), https://andrewnorton.net.au/2021/10/25/the-first-job-ready-graduates-university-applications-data/, accessed 19 September 2023.
- 13 Department of Education (Commonwealth of Australia), *Australian Universities Accord Interim Report*, (2023), https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report, accessed 14 September 2023.
- 14 Andrew Norton, *Jobs, interests and student course choices*, (June 2020), https://andrewnorton.net.au/2020/06/21/jobs-interests-and-student-course-choices/, accessed 19 September 2023.
- 15 Cherastidtham, I., Norton, A. & Mackey, W., *University attrition: what helps and what hinders university completion?*, (Grattan Institute 2018), https://grattan.edu.au/wp-content/uploads/2018/04/University-attrition-background.pdf, accessed 17 September 2023.
- Norton, A., *Financial influences on job-seeking university applicants*, (June 2020), https://andrewnorton.net.au/2020/06/28/financial-influences-on-job-seeking-university-applicants/, accessed 19 September 2023.

- 17 Goss, P., Sonnemann, J. & Nolan, J., *Attracting High Achieving Teachers to Teaching*, (Grattan Institute 2019), https://grattan.edu.au/wp-content/uploads/2019/08/921-Attracting-high-achievers-to-teaching.pdf, accessed 25 August 2023.
- 18 Department of Education, Skills and Employment (Commonwealth of Australia), Looking to the future: Report of the Review of senior secondary pathways into work, further education and training, (June 2020), https://www.education.gov.au/quality-schools-package/resources/looking-future-report-review-senior-secondary-pathways-work-further-education-and-training, accessed 23 August 2023.
- 19 Department of the Prime Minister and Cabinet (Commonwealth of Australia), *Incentivising excellence:* Attracting high-achieving teaching candidates, (February 2022), https://behaviouraleconomics.pmc.gov.au/sites/default/files/projects/incentivising-excellence-full-report.pdf, accessed 23 August 2023.
- 20 Department of Education analysis of Quality Indicators for Learning and Teaching Graduate Outcomes Survey.
- 21 Department of Education, Skills and Employment (Commonwealth of Australia), 'Looking to the future: Report of the Review of senior secondary pathways into work, further education and training', (June 2020), https://www.education.gov.au/quality-schools-package/resources/looking-future-report-review-senior-secondary-pathways-work-further-education-and-training, accessed 23 August 2023; Productivity Commission (Commonwealth of Australia), 'National Agreement for Skills and Workforce Development Review', (December 2020), https://www.pc.gov.au/inquiries/completed/skills-workforce-agreement/report/skills-workforce-agreement.pdf, accessed 25 August 2023.
- 22 Committee for Economic Development of Australia, 'A good match: Optimising Australia's permanent skilled migration', (2021), https://www.ceda.com.au/Admin/getmedia/150315bf-cceb-4536-862d-1a3054197cd7/CEDA-Migration-report-26-March-2021-final.pdf, accessed 17 August 2023.
- Booth, A., Leigh, A., & Varganova, E., 'Does ethnic discrimination vary across minority groups? Evidence from a field experiment', *Oxford Bulletin of Economics and Statistics*, (2021), http://andrewleigh.org/pdf/AuditDiscrimination.pdf, accessed 19 September 2023.
- 24 Flinders University Migrant Skills Mismatch Analysis of Multi-Agency Data Integration Project data.
- 25 Batainah, H., Hawkins, J. & Miranti, R., 'Untapped Potential: Trends and disparities in the economic participation of migrant refugee women in Australia', *National Centre for Social and Economic Modelling*, (2022), https://apo.org.au/sites/default/files/resource-files/2022-12/apo-nid321021_1.pdf, accessed 17 August 2023.
- Varela, P. et al., *The lifetime fiscal impact of the Australian permanent migration program*, (Treasury 2021); Cai et al., 'Modelling Fiscal Policy with OLGA: Treasury's OverLapping Generations model of the Australia economy', (Treasury 2023).
- Department of Home Affairs, *Review of the Migration System Final Report*, (2023), https://www.homeaffairs.gov.au/reports-and-pubs/files/review-migration-system-final-report.pdf, accessed 18 August 2023.
- 28 National Skills Commission (Commonwealth of Australia), *Employment Projections*, (2022), https://www.nationalskillscommission.gov.au/topics/employment-projections, accessed 19 September 2023.
- 29 Australian Government, 'Budget Paper No. 1: Budget Strategy and Outlook', (Canberra: 2023), https://budget.gov.au/content/documents.htm, accessed 25 May 2023.
- 30 Victoria University, *Projections for Jobs and Skills Australia*, (2023).
- Treasury (Commonwealth of Australia), *Intergenerational Report 2023: Australia's future to 2063*, (August 2023).
- 32 Victoria University, Projections for Jobs and Skills Australia, (2023).

- 33 National Skills Commission (Commonwealth of Australia), Care Workforce Labour Market Study Final Report, (September 2021), https://www.nationalskillscommission.gov.au/sites/default/files/2022-10/Care%20Workforce%20Labour%20Market%20Study.pdf, accessed 15 August 2023.
- 34 National Skills Commission (Commonwealth of Australia), Care Workforce Labour Market Study Final Report, (September 2021), https://www.nationalskillscommission.gov.au/sites/default/files/2022-10/Care%20Workforce%20Labour%20Market%20Study.pdf, accessed 15 August 2023.
- 35 National Skills Commission (Commonwealth of Australia), Care Workforce Labour Market Study Final Report, (September 2021), https://www.nationalskillscommission.gov.au/sites/default/files/2022-10/Care%20Workforce%20Labour%20Market%20Study.pdf, accessed 15 August 2023.
- 36 World Health Organization, 'Delivered by women, led by men: A gender and equity analysis of the global health and social workforce', Human Resources for Health Observer Series No. 24, (2019); The Senate (Commonwealth of Australia), Select Committee on Work and Care Final Report, (2023).
- Fair Work Commission (Commonwealth of Australia), 'Decision', Annual Wage Review 2022-23 (C2023/1), (2 June 2023), https://www.fwc.gov.au/documents/resources/2023fwcfb3500.pdf, accessed 19 September 2023.
- 38 Department of the Prime Minister and Cabinet (Commonwealth of Australia), Draft National Care and Support Economy Strategy 2023, (2023).
- 39 National Skills Commission (Commonwealth of Australia), Care Workforce Labour Market Study Final Report, (September 2021), https://www.nationalskillscommission.gov.au/sites/default/files/2022-10/Care%20Workforce%20Labour%20Market%20Study.pdf, accessed 15 August 2023.
- 40 Mackey, W., Coates, B., & Sherrell, H., Migrants in the Australian workforce, (Grattan Institute 2022).
- 41 Department of Health and Aged Care (Commonwealth of Australia), Independent review of health practitioner regulatory settings interim report, (April 2023).
- 42 National Skills Commission (Commonwealth of Australia), Care Workforce Labour Market Study Final Report, (September 2021), https://www.nationalskillscommission.gov.au/sites/default/files/2022-10/Care%20Workforce%20Labour%20Market%20Study.pdf, accessed 15 August 2023.
- 43 National Skills Commission (Commonwealth of Australia), Care Workforce Labour Market Study Final Report, (September 2021), https://www.nationalskillscommission.gov.au/sites/default/files/2022-10/Care%20Workforce%20Labour%20Market%20Study.pdf, accessed 15 August 2023.
- 44 Royal Commission into Aged Care Quality and Safety (Commonwealth of Australia), Final Report: Care, Dignity and Respect, Volume 4C, (2021).
- 45 National Disability Insurance Agency (Commonwealth of Australia), Annual Report 2021-22, (November 2022); NDIS Review (Commonwealth of Australia), 'Building a more responsive and supportive workforce', (May 2023).
- 46 Department of the Prime Minister and Cabinet (Commonwealth of Australia), Draft National Care and Support Economy Strategy 2023, (2023); Department of Health and Aged Care (Commonwealth of Australia), 2020 Aged Care Workforce Census, (September 2021).
- 47 Victoria University, Analysis for Jobs and Skills Australia, (2023).
- 48 Australian Government, Budget Paper No. 1: Budget Strategy and Outlook, (Canberra: 2023); Department of Social Services (Commonwealth of Australia), 'Budget 2023-24, Portfolio Budget Statement', (May 2023).
- 49 Department of the Prime Minister and Cabinet (Commonwealth of Australia), Draft National Care and Support Economy Strategy 2023, (2023).
- 50 Clean Energy Council, Workforce development: Clean energy jobs, (June 2020), https://www.cleanenergycouncil.org.au/advocacy-initiatives/workforce-development/clean-energy-jobs.
- 51 Clean Energy Council, Submission to the Clean Energy Capacity Study, (May 2023), https://assets.cleanenergycouncil.org.au/documents/Clean-Energy-Capacity-Study-Discussion-Paper.pdf, accessed 19 September 2023.

- 52 Treasury analysis of Lightcast data.
- Curtis, M.E., O'Kane, L., Park, J. R., Workers and the Green-Energy Transition: Evidence from 300 Million Job Transitions, National Bureau of Economic Research working paper, (2023).
- 54 Deloitte, Projections for Jobs and Skills Australia, (2023).
- Rutovitz, J et al., *The Australia Electricity Workforce for the 2022 Integrated System Plan: Projections to 2050 Revision 1*, Institute of Sustainable Futures, (University of Technology Sydney January 2023).
- 56 Clean Energy Council, Empowering Everyone: Diversity in the Australian clean energy sector, (2021).
- 57 Tyros, S., D. Andrews & A. de Serres, 'Doing green things: skills, reallocation, and the green transition', *OECD Economics Department Working Papers*, *No. 1763*, (OECD 2023), https://doi.org/10.1787/286a5007-en, accessed 19 September 2023.
- 58 Tyros, S., D. Andrews & de Serres, A., 'Doing green things: skills, reallocation, and the green transition', *OECD Economics Department Working Papers, No. 1763*, (OECD 2023), https://doi.org/10.1787/286a5007-en, accessed 19 September 2023.
- 59 Jobs and Skills Australia (Commonwealth of Australia), analysis of 2021 ABS Census of Population and Housing.
- 60 Wiseman, J., & Wollersheim L., *Building prosperous, just and resilient zero-carbon regions: Learning from recent Australian and international experience*, Melbourne Climate Futures, (University of Melbourne 2021).
- 61 Tech Council of Australia, 'Getting to 1.2 million: Our roadmap to create a thriving Australian tech workforce', *Digital Employment Forum*, (2022).
- 62 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Australia's data and digital dividend, (2023).
- 63 Tech Council of Australia, 'Getting to 1.2 million: Our roadmap to create a thriving Australian tech workforce', *Digital Employment Forum*, (2022).
- Jobs and Skills Australia (Commonwealth of Australia) analysis of Australian Skills Classification and JSA Employment Projections 2023.
- 65 Victoria University, 'Projections for Jobs and Skills Australia', (2023).
- Department of Industry, Science and Resources (Commonwealth of Australia), 'STEM Equity Monitor', Commonwealth Government (2023), https://www.industry.gov.au/publications/stem-equity-monitor.
- 67 Leigh, A., 'Returns to Education in Australia', *Economic Papers*, Vol. 27, (2008), https://doi.org/10.1111/j.1759-3441.2008.tb01040.x.
- 68 Victoria University, *Projections for Jobs and Skills Australia*, (2023).
- 69 Universities Australia, *Data Snapshot*, (July 2022), https://www.universitiesaustralia.edu.au/wp-content/uploads/2022/08/220523-Data-snapshot-2022 web.pdf, accessed 19 September 2023.
- 70 Australian Institute of Health and Welfare (Commonwealth of Australia), *People with disability in Australia: Educational attainment*, (2022), https://www.aihw.gov.au/reports/disability/people-with-disability-in-australia/contents/education-and-skills/educational-attainment, accessed 25 August 2023.
- 71 Australian Bureau of Statistics (Commonwealth of Australia), *Census of Population and Housing*, (2021), accessed 14 August 2023.
- 72 Department of Education (Commonwealth of Australia), *Australian Universities Accord Interim Report*, (2023), https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report, accessed 14 September.
- 73 Department of Education (Commonwealth of Australia), *Australian Universities Accord Interim Report*, (2023), https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report, accessed 14 September.
- 74 Council of Australian Governments (Commonwealth of Australia), *National Agreement for Skills and Workforce Development*, (2012).



- 76 Australian Bureau of Statistics (Commonwealth of Australia), Census of Population and Housing, (2021), accessed 14 August 2023.
- 77 Department of Education (Commonwealth of Australia), Australian Universities Accord Interim Report, (2023), https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report, accessed 14 September.
- 78 Department of Education (Commonwealth of Australia), Selected Higher Education Statistics 2021 Student data, (October 2022), https://www.education.gov.au/higher-education-statistics/student-data/selectedhigher-education-statistics-2021-student-data, accessed 19 September.
- 79 Department of Education (Commonwealth of Australia), Australian Universities Accord Interim Report, (2023), https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report, accessed 14 September.
- 80 Department of Education (Commonwealth of Australia), Australian Universities Accord Interim Report, (2023), https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report, accessed 14 September.
- 81 Jobs and Skills Australia (Commonwealth of Australia), Labour Market Update September 2023, (September 2023), https://www.jobsandskills.gov.au/reports/labour-market-update-september-2023, accessed 19 September.
- 82 Productivity Commission (Commonwealth of Australia), National Agreement for Skills and Workforce Development Review, (December 2020).
- Department of Education, Skills and Employment (Commonwealth of Australia), Looking to the future: Report of the Review of senior secondary pathways into work, further education and training, (June 2020).
- 84 Organisation for Economic Cooperation and Development (OECD), Improving work-based learning in schools: Note on Australia, (OECD 2020).
- 85 Polidano C., & Tabasso, D., Making it real: The benefits of workplace learning in upper-secondary VET courses, (Melbourne Institute September 2013); Ranasinghe, R. et al., 'School-to-work pathways', (National Centre for Vocational Education Research 2019).
- 86 National Centre for Vocational Education Research (Commonwealth of Australia), Completion and attrition rates for apprentices and trainees 2022, (September 2023), https://www.ncver.edu.au/research-andstatistics/publications/all-publications/completion-and-attrition-rates-for-apprentices-and-trainees-2022, accessed 19 September 2023.
- 87 O'Dwyer, L., & Korbal, P., Completion rates for group training organisations and direct employers: how do they compare?, (National Centre for Vocational Education Research 2019).
- 88 National Skills Commission (Commonwealth of Australia), 2022 Skills Priority List Key Findings Report, (October 2022).
- 89 National Centre for Vocational Education Research (Commonwealth of Australia), Completion and attrition rates for apprentices and trainees 2022, (September 2023), https://www.ncver.edu.au/research-andstatistics/publications/all-publications/completion-and-attrition-rates-for-apprentices-and-trainees-2022, accessed 7 September 2023.
- 90 National Centre for Vocational Education Research (Commonwealth of Australia), Completion and attrition rates for apprentices and trainees 2022, (September 2023).
- 91 Department of Employment and Workplace Relations (Commonwealth of Australia), Australian Apprenticeship Services and Supports Discussion Paper, (November 2022).
- 92 National Centre for Vocational Education Research (Commonwealth of Australia), Employers' use and views of the VET system 2021: data tables, (October 2021).

- 93 Department of Education (Commonwealth of Australia), *Australian Universities Accord Interim Report*, (2023), https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report, accessed 14 September.
- 94 Jackson et al., Working together to achieve better work integrated learning outcomes: Improving productivity through better employer involvement, (November 2015), https://acen.edu.au/wp-content/uploads/2016/06/Working-together-to-achieve-better-WIL-outcomes.pdf, accessed 19 September 2023.
- 95 Universities Australia, *Work integrated learning in universities: Final report*, (April 2019), https://www.universitiesaustralia.edu.au/wp-content/uploads/2022/03/WIL-in-universities-final-report-April-2019.pdf, accessed 19 September 2023.
- 96 OECD, Skills Outlook 2021: Learning for life, (June 2021), https://doi.org/10.1787/0ae365b4-en, accessed 19 September 2023.
- 97 Productivity Commission (Commonwealth of Australia), 5-year Productivity Inquiry: Innovation for the 98%, (2023).
- 98 OECD, *Skills Strategy 2019 Australia: Skills to shape a better future*, (May 2019), https://www.oecd.org/australia/Skills-Strategy-%20Australia-EN.pdf, accessed 19 September 2023.
- 99 OECD, 'Preparing for the future of work across Australia', *OECD Reviews on Local Job Creation*, (September 2021), https://doi.org/10.1787/9e506cad-en, accessed 19 September 2023.
- 100 Shah, C., 'Employer-supported training in Australia: participation, demand and supply', *NCVER*, (2017); Australia Bureau of Statistics (Commonwealth of Australia), *Work-related Training and Adult Learning, Australia*, 2020-21, (11 March 2022), accessed 22 August 2023.
- 101 Business Council of Australia, Unpublished survey, (2023).
- 102 Treasury (Commonwealth of Australia) analysis of 2023 HILDA data.
- 103 Treasury (Commonwealth of Australia) analysis of 2023 HILDA data; Shah, C., *Employer-supported training in Australia: participation, demand and supply,* (National Centre for Vocational Education Research 2017).
- 104 Shah, C., *Employer-supported training in Australia: participation, demand and supply*, (National Centre for Vocational Education Research 2017).
- 105 Australia Bureau of Statistics (Commonwealth of Australia), Work-related Training and Adult Learning, Australia, 2020-21, (11 March 2022).
- 106 Australia Bureau of Statistics (Commonwealth of Australia), Work-related Training and Adult Learning, Australia, 2020-21, (11 March 2022).
- 107 OECD, 'Micro-credentials for lifelong learning and employability: Uses and possibilities', *OECD Education Policy Perspectives, No. 66*, (March 2023), https://doi.org/10.1787/9c4b7b68-en, accessed 19 September 2023.
- 108 Dawkins, P., Hurley, P. & Noonan, P., *Rethinking and revitalising tertiary education in Australia*, (Mitchell Institute, Victoria University, (2019), https://www.vu.edu.au/sites/default/files/rethinking-and-revitalising-tertiary-education-mitchell-institute.pdf, accessed 21 August 2023.
- 109 Li, I. W., Carroll, D. R. & Jackson, D., 'Equity implications of non-ATAR pathways: Participation, academic outcomes, and student experience', National Centre for Student Equity in Higher Education, Curtin University, (2022), https://www.ncsehe.edu.au/wp-content/uploads/2022/02/Li_UWA_Final.pdf, accessed 23 August 2023.
- 110 Department of Education (Commonwealth of Australia), *Selected Higher Education Statistics 2021 Student data*, (October 2022), https://www.education.gov.au/higher-education-statistics/student-data/selected-higher-education-statistics-2021-student-data, accessed 21 August 2023.
- 111 Department of Education (Commonwealth of Australia), Selected Higher Education Statistics 2021 Student data, (October 2022), https://www.education.gov.au/higher-education-statistics/student-data/selected-higher-education-statistics-2021-student-data, accessed 14 September 2023.



- 113 National Centre for Vocational Education Research (Commonwealth of Australia), 'Total VET students and courses 2022', NCVER DataBuilder – program enrolments, (August 2023), https://www.ncver.edu.au/research-and-statistics/data/databuilder#tva-students, accessed 12 September 2023.
- 114 Wibrow, B., 'VET and higher education pathways do outcomes differ for the same occupation?', (National Centre for Vocational Education Research 2022), https://www.ncver.edu.au/research-andstatistics/publications/all-publications/vet-and-higher-education-pathways-do-outcomes-differ-for-thesame-occupation, accessed 21 August 2023.
- 115 Department of Education (Commonwealth of Australia), Australian Universities Accord Interim Report, (2023), https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report, accessed 14 September 2023.
- 116 Department of Education and Training (Commonwealth of Australia), Credit pathways in VET and higher education: Research project final report, (October 2018), https://www.education.gov.au/higher-educationreviews-and-consultations/resources/credit-pathways-vet-and-higher-education, accessed 21 August 2023.
- 117 Department of Education (Commonwealth of Australia), Australian Universities Accord Interim Report, (2023), https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report, accessed 14 September 2023.
- 118 Department of Education (Commonwealth of Australia), Australian Universities Accord Interim Report, (2023), https://www.education.gov.au/australian-universities-accord/resources/accord-interim-report, accessed 14 September 2023.

6 Overcoming barriers to employment and broadening opportunities

Main points

- Increasing labour force participation promotes social inclusion and boosts economic potential.
- Too many communities still face concentrated unemployment and entrenched disadvantage. Although the unemployment rate is at historic lows, this won't always be the case. If we can get policy settings right, the current labour market presents a significant opportunity to break cycles of disadvantage.
- Roughly one in three children born into families in the bottom 20 per cent of the income distribution remain there. Family background, labour market access and educational outcomes, as well as peer groups and networks have a strong impact on life outcomes.
- Compounding local factors, complex personal circumstances and discrimination can make it challenging for families and communities to break out of cycles of disadvantage. People face multiple, interconnected barriers to employment.
- Government policies can put opportunity in reach of more people through targeted, place-based approaches that complement universal services, and by addressing disincentives in the social security system. But many existing supports and workplaces do not provide enough help.
- People also need support from multiple services as they transition through life stages from education, caring and into mature age, and as they balance work with other parts of life. Likewise, people with disability may need additional supports to fulfil their potential.

6.1 Our objective is to overcome barriers to employment and broaden opportunity

Labour market inequalities must be reduced if Australia is to address entrenched disadvantage and achieve inclusive full employment (Chapter 2). Reducing disadvantage improves Australia's economic security and resilience by supporting greater economic activity, which also eases pressure on government spending, and bolsters revenue in the face of significant forces including ageing. Treasury estimates a 2 percentage point improvement in the participation rate by 2062–63 could contribute an additional 3¼ per cent to GDP.

Everyone should have the opportunity to access paid work which supports financial independence, health and wellbeing, and social connection. Sharing the benefits of work more evenly will also support the Government's broader objectives of creating a healthier, fairer and more cohesive society. Reducing labour market inequalities to achieve inclusive full employment requires concerted action by governments, unions, civil society and employers.

6.2 There is more to do to share opportunities and overcome disadvantage

Australia's labour market has evolved over the past six decades. Australia's labour force participation rate has risen markedly, with women and mature age people driving this growth. But not all Australians are experiencing the same increases in participation. More needs to be done to boost employment opportunities and overcome entrenched and intergenerational disadvantage.

Too many people are still unable to work the number of hours they want and need, and are not able to fully access the benefits of work. Many parts of Australia experience unemployment and long-term unemployment rates well above the national average. Employment rates for Aboriginal and Torres Strait Islander people lag those of non-Indigenous people, and the employment rate for people with disability has been stagnant between 1998 and 2018 (Chapter 2, Box 2.1).

Chapter 2 describes how labour market inequalities can arise from structural factors that often relate to entrenched disadvantage. Disadvantage is associated with complex structural and systemic inequalities beyond a person's control, including their access to material and social resources, and their ability to participate in society. Joblessness and poverty affect health outcomes, housing security, social participation, and a person's capacity to engage in education and training. Disadvantage is about 'impoverished lives, not just depleted wallets'.¹ Employment is the main route out of disadvantage for most working age people, but it needs to be secure work, otherwise people risk falling back again.²

This section analyses the nature of disadvantage and how it affects people's ability to participate in employment, including how disadvantage:

- can start with where you are born and where you live (Section 6.2.1)
- can follow you through early childhood and into your school years (Section 6.2.2), influencing employment opportunities later in life
- can cause or compound life events (Section 6.2.3), which keep employment out of reach
- can be entrenched by siloed services and access problems (Section 6.2.4).

Unemployment can also be the product of changing life circumstances, such as managing care responsibilities or reaching mature age (Section 6.6). People with disability, either acquired or lifelong, can also face unique challenges. Support to manage these transitions can help to prevent new cycles of disadvantage.



A wide range of strategies are needed to support people to re-engage, engage more, or continue to engage in the workforce, including:

- building capabilities through employment services to help people overcome multiple barriers to work and break cycles of disadvantage (Section 6.3)
- creating inclusive workplaces in partnership with employers to provide meaningful economic and social participation opportunities for those who have been excluded from the labour market (Section 6.4)
- addressing disincentives in the social security system (Section 6.5).

6.2.1 Entrenched disadvantage is intergenerational and geographically concentrated

Disadvantage is often intergenerational. Roughly one in three children born into families in the bottom 20 per cent of the income distribution will remain there.³ Australia is considered more socially mobile than other advanced economies. However, similar to those economies some measures of mobility have worsened over time.⁴ In 2019, approximately two-thirds of Australians aged 30 to 34 years old had higher real incomes than their parents at the same age, a decline from over 80 per cent in 1954.⁵

The costs of unemployment and intergenerational disadvantage are not evenly felt across Australia. Poorer labour market outcomes and disadvantage are often disproportionately concentrated in a relatively small number of communities and areas.⁶

The highest concentration of disadvantage is in remote communities and some regional areas. The five regions with the highest long-term unemployment rates make up 12 per cent of all long-term unemployed people nationally, despite only having five per cent of the working age population. Outback — Queensland has the highest unemployment rate in the country — around 3 times the national average (Table 6.1). This region also has one of the highest long-term unemployment rates (1.1 per cent), the lowest proportion of the working age population in employment (65.0 per cent), and one of the highest rates of disadvantage (as measured by the Socio-Economic Indexes for Areas, or SEIFA). Similarly, Wide Bay, in regional Queensland, the Latrobe — Gippsland region in Victoria, and the Coffs Harbour — Grafton region in New South Wales also face poor labour market outcomes including high rates of unemployment and long-term unemployment.

While disadvantage can be concentrated in regions, the largest number of people experiencing disadvantage live in the suburbs of capital cities. One-quarter of all long-term unemployed people are in seven mostly city-based regions. For example, Sydney – South West has an unemployment rate significantly higher than the national average (4.8 per cent) as well as a low employment rate (67.1 per cent) and a high long-term unemployment rate (1.3 per cent). Likewise, despite proximity to major labour markets in Brisbane and the Gold Coast, the Logan – Beaudesert region in Queensland has poor employment outcomes with high unemployment (5.6 per cent) and long-term unemployment rates (1.1 per cent). Adelaide – North, Melbourne – West, Ipswich and Hobart experience similar higher levels of unemployment.

i Data and figures in Section 6.2.1 are based on a 12-month average to July 2023 using ABS Labour Force data.

Table 6.1 Regions (SA4) with highest unemployment rates (12-month average)

Region	Unemployment rate (%)
Queensland - Outback	9.2
South Australia - Outback	6.6
Wide Bay	5.7
Logan - Beaudesert	5.6
Ipswich	5.5
Adelaide - North	5.4
Melbourne - West	5.2
Moreton Bay - North	5.0
Northern Territory - Outback	4.8
Sydney - South West	4.8

Source: ABS Labour Force Detailed, July 2023.

Note: Statistical Area Level 4 (SA4) is a geographic area which represents labour markets or groups of labour markets

within each state and territory.

Between the 2016 and 2021 Censuses, most clusters of disadvantage, as defined in the SEIFA, changed little. The main exceptions were Hobart (which has become relatively more advantaged) and Western Sydney (which has become relatively more disadvantaged).

One reason place is such an important concept is that moving far away from home is uncommon. Around 70 per cent of people live in the same local labour market in which they spent their childhood. Because people typically work near where they grow up, many will face similar challenges to their parents unless local cycles of disadvantage are broken.

Family background is one of the strongest determinants of life outcomes, reflecting cycles of intergenerational disadvantage, and is strongly influenced by place. Parents who experience disadvantage are more likely to have children who will experience disadvantage in their adult lives. Where someone grows up also influences who they grow up with. Role models and peers in a person's local community can have a strong impact on their life outcomes. Being born into a higher income peer group is associated with higher income later in life, with the influence of peer group being up to a fifth of that of parents.

6.2.2 Inequality in education is a major influence on employment outcomes through life

Education is a major contributor to life outcomes, including employment. Unequal beginnings can lead to differences in when children enter early childhood education, which in turn affects school outcomes, and later employment outcomes.

Early childhood education and care

Children develop cognitive and social emotional skills that are fundamental to their later achievement as adults. ¹⁰ Brain development occurs more quickly in the first five years of life than at any other time. Children from disadvantaged backgrounds are twice as likely to be vulnerable on one or more Australian Early Development Census domains. ¹¹

High-quality early childhood education and care (ECEC) is critical in ensuring all children get the best start in life, including cognitive and social development. In 2021, 36 per cent of children who did not

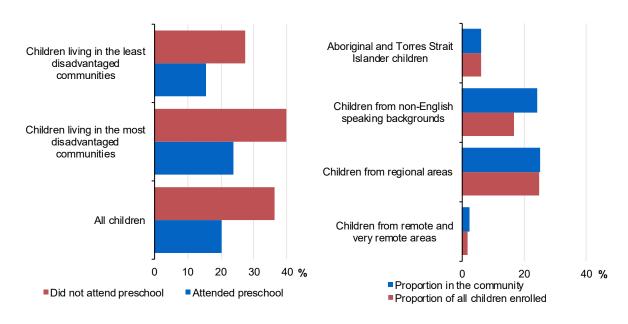
attend preschool were assessed as developmentally vulnerable on one or more domains, compared to 20 per cent of children who attended preschool (Chart 6.1). 12

While children from disadvantaged backgrounds are the most likely to benefit from high-quality ECEC, they are among the least likely to participate in it. Children aged zero to five years from cohorts that experience disadvantage are under-represented in child care, and children aged three to five years from these cohorts are under-represented in preschool (Chart 6.2).¹³

If not addressed early, developmental vulnerability becomes more difficult and costly to tackle as a child falls further behind. Without high-quality ECEC and targeted early intervention, cycles of disadvantage repeat and set a trajectory for poorer outcomes later in life.¹⁴

Chart 6.1 Proportion of children assessed as developmentally vulnerable on one or more domains by preschool attendance and relative disadvantage

Chart 6.2 Proportion of children aged 3 to 5 years enrolled in a preschool program compared with their representation in the community



Source: Department of Education analysis of AEDC data Source:

Productivity Commission Report on Government Services, 2023.

Schooling

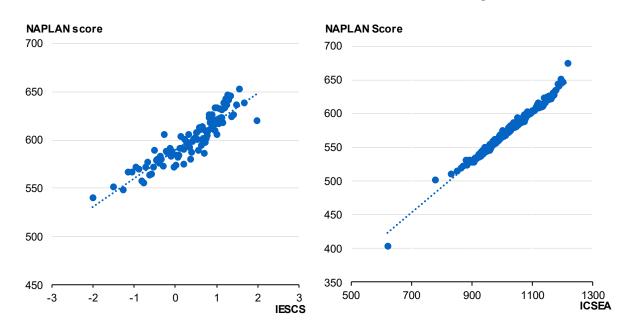
Unequal school outcomes are driven by various factors, such as socio-economic segregation, intersectional and compounding disadvantage, out-of-school factors, the learning environment and the quality of teaching and curriculum resources. ¹⁵ Without change, unequal education outcomes will continue in Australia.

Low socio-economic status is associated with substantially lower school and student performance. ¹⁶ The socio-economic background of students has a strong relationship with average Year 9 NAPLAN scores at both the student and school level (Charts 6.3 and 6.4). This may also capture the effect of

other out-of-school factors, such as parental engagement, availability of learning resources such as libraries, and access to other services.

Chart 6.3 Average student Year 9 NAPLAN scores and Index of Economic, Social and Cultural Status

Chart 6.4 Average school Year 9 NAPLAN scores and Index of Community Socio-Educational Advantage



Source: Treasury; NCVER Longitudinal Surveys of

Australian Youth.

Note: Each point on the scatter plot represents a group of 44 students. The Index of Economic, Social and Cultural Status is a composite measure that

combines into a single score the financial, social, cultural and human capital resources available to a student. Confounding factors have not been

controlled for.

Source: Treasury; ACARA data.

Note: Each point on the scatter plot represents a group of 63 schools. NAPLAN results are from 2008 to

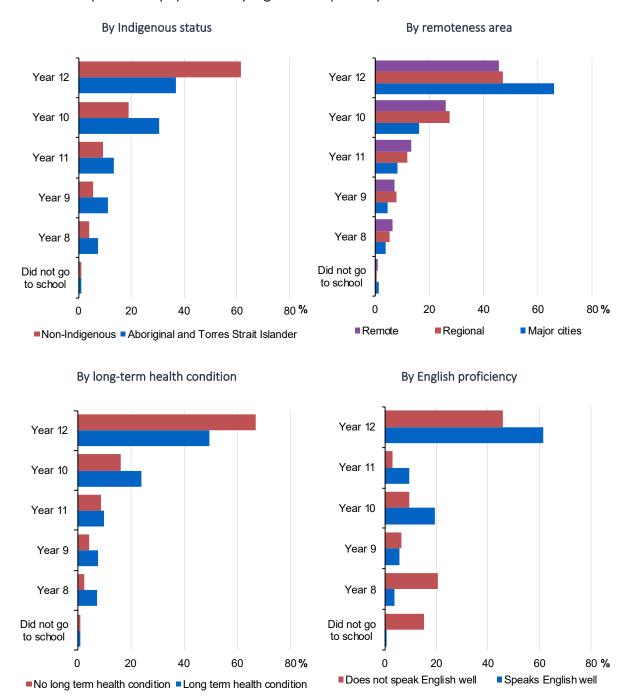
2017. ICSEA is the Index of Community Socio-Educational Advantage; it provides an indication of the socio-educational background of students. Confounding factors have not been

controlled for.

Australia's schools are highly segregated along socio-economic lines compared to other OECD countries and this trend is accelerating. ¹⁷ Students from disadvantaged backgrounds are rapidly becoming more concentrated in certain schools. This is having a detrimental impact on education outcomes through compounding negative peer effects on the learning environment, teacher workloads and morale, and school resourcing.

Inequalities throughout the course of a person's education affects their chances of Year 12 attainment, which in turn is one of the biggest determinants of future employment (Chapter 5). Aboriginal and Torres Strait Islander people and those living in regional and remote areas are significantly less likely to finish Year 12 than non-Indigenous people and those living in major cities respectively. People with a long-term health condition and people with low proficiency in English are also less likely to have completed Year 12 (Chart 6.5).

Chart 6.5 Proportion of population by highest completed year of school



Source: ABS Census of Population and Housing, 2021.

6.2.3 Life events can create or compound disadvantage

Unemployment; family, domestic and sexual violence; homelessness; and incarceration can affect anyone in society. But they are more likely to affect people who experience other forms of disadvantage, and are more likely to have more negative impacts or be harder to manage for this cohort.

Unemployment and income support

Many people will find themselves unemployed at some point in their lives, although this is more likely for those from disadvantaged backgrounds. Some will seek financial support through the income support system. Around one-quarter of people who are unemployed receive the JobSeeker Payment and another quarter receive other income support payments. Most of the remaining unemployed people are ineligible for payment.¹⁸

Not everyone on unemployment benefits meets the definition of unemployed used in official statistics. This reflects the complex barriers to work they face. In 2019, 35.7 per cent of people who received unemployment benefits were unemployed (Chart 6.6). Nearly as many were in employment (28.6 per cent), generally in part-time work not earning enough to move fully off payment. Others (35.7 per cent) did not meet the formal definition of unemployed for a wide range of reasons such as illnesses or episodic conditions that allowed job seekers a temporary exemption from looking for work or parents with caring-related exemptions.

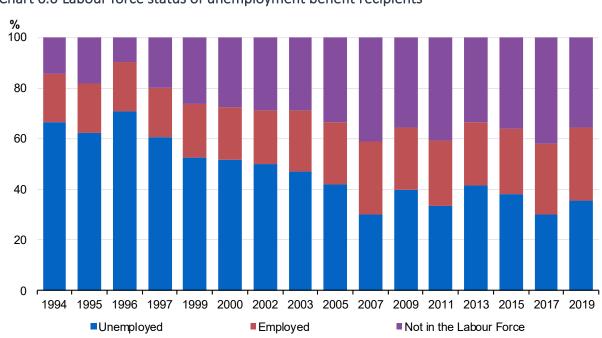
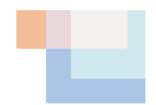


Chart 6.6 Labour force status of unemployment benefit recipients

ABS Survey of Income and Housing, 2019-20. Source:



People's engagement with the JobSeeker Payment varies. For those who entered the payment in 2018–19, over the following five years:

- 9 per cent remained on payment without earnings
- 13 per cent remained on payment with some earnings
- 15 per cent exited payment within a year and remained off payment
- 25 per cent exited payment after a year and remained off payment
- 38 per cent exited payment but returned to payment at least once.

Over half of JobSeeker recipients either combined work and payment or moved on and off payment more than once. This emphasises the diversity of challenges and pathways people on income support experience in their journey of taking up work. These challenges can include insecure work, balancing work and care responsibilities, health issues, and various forms of discrimination.

Labour market scarring

Consultations for this White Paper highlighted the self-reinforcing nature of long periods of unemployment and disadvantage. Employers are less likely to employ someone, the longer their experience of unemployment. Around one-third of employers are less likely to employ a person if they have been unemployed for four to six months. This proportion increases to half for those unemployed for seven months to a year, and to two-thirds for those unemployed for one to two years. ¹⁹

Around 36 per cent of job seekers in Workforce Australia (the mainstream employment service) had no paid work in the previous two years. These rates were even higher for First Nations people (50 per cent), people with disability (45 per cent), and people from culturally and linguistically diverse backgrounds (43 per cent). Of remote job seekers in the Community Development Program (the employment service for remote areas), 74 per cent had no paid work in the previous two years.

Family, domestic and sexual violence

Family, domestic and sexual violence is a pervasive social issue, and can affect people from all walks of life. People who have experienced domestic and family violence are more likely to have disrupted work histories, lower pay, and be employed on a casual or part-time basis.²⁰ A White Paper submission noted: 'both violence and the escape impact the ability of victim-survivors to work, remain engaged with their employers, and earn an independent income. Workplaces may be the site of violence or lack the flexibility that would enable victim-survivors to remain engaged whilst navigating abuse or escape. Violence may also impact a victim-survivor's confidence, health, appearance (from injury) and ability to undertake work.'

Women are more likely to be victim-survivors of family, domestic and sexual violence. Approximately one in four women, and one in eight men, have experienced violence by an intimate partner or family member since the age of 15. Family, domestic and sexual violence is a violation of people's right to a life free from violence. A recent report on the prevalence and impact of sexual violence in Australia showed its long-term negative impacts include reduced economic security for women.²¹ Another study found mothers who had experienced partner violence reported a 34 per cent drop in income

ii All employment services administrative data in this Chapter is as at 30 June 2023, unless otherwise specified. Employment services are discussed in detail in Section 6.3.

after separation, compared to a 20 per cent drop for mothers who had separated but had not experienced partner violence.²²

Some women face a greater risk of violence when they experience other forms of disadvantage or discrimination. For example, First Nations women and women with disability are more likely than other Australians to experience violence.²³ Approximately 60 per cent of single mothers have experienced violence by a previous partner.²⁴

Housing instability

Housing instability, including homelessness or lack of access to affordable housing, has been identified as a barrier for 11 per cent of job seekers in the Workforce Australia caseload. Housing instability can significantly affect job seekers' capacity to find and sustain employment. For example, homelessness makes it difficult to maintain personal hygiene, appropriate clothing, paperwork and regular communications. People experiencing housing instability often face challenges with mental health and emotional wellbeing, drug and alcohol use, lack of access to transport, and employer attitudes, which present additional barriers for finding and sustaining employment.²⁵

Incarceration

For those who have been incarcerated, returning to the community, family and employment can be difficult. Consultations indicated criminal history checks can be bluntly applied in the jobs market, excluding people from work, even when criminal history is not relevant to a specific job. Criminal history disproportionately impacts First Nations people because of their over-representation in the criminal justice system – something that is attributable to systemic and historical forces. ²⁶ People who have been incarcerated are more likely to experience other concurrent barriers including homelessness and housing instability, lower education, and substance misuse, making it harder to find employment and overcome disadvantage.

6.2.4 Fragmented and limited services can make it harder to overcome disadvantage

Effective coordination of a broad range of services can make it easier to overcome multiple barriers, including entrenched disadvantage. These services – education, child care, transport, housing, health services including mental health, telecommunications and disability support – are vital contributors to work readiness. However, many remote and regional communities continue to experience issues with the quality and accessibility of essential services, with education, employment and health being of particular concern.

Accessing public transport, particularly after dark, can be a barrier for many women. In 2021–22, 80 per cent of women did not use public transport alone after dark. For those who did, 23 per cent felt unsafe and this rate was higher for women aged 18 to 24 (32 per cent) and women with disability (34 per cent).

Many people seeking work lack access to transport due to a limited public transport, or not having a vehicle or a driver's licence. Access to transport can affect job seekers in any part of the country, but is more common on the urban fringe and in regional areas. ²⁷ Around 5.1 per cent of job seekers on the Workforce Australia caseload have no access to transport. This compares to 51.6 per cent of Community Development Program participants in remote Australia.



Certain cohorts are more likely to have limited access to transport. For example, 13.6 per cent of First Nations job seekers in Workforce Australia have no access to transport. In a roundtable held for this White Paper, people with disability described transport as the biggest challenge, with limited and inconsistent support through relevant services, as well as safety concerns. Transport barriers, including long commutes, can also affect women's participation, by making it more difficult to manage care and work responsibilities. ²⁸ In addition, issues with transport disproportionately impact women who are more likely to work in industries such as aged care and disability support services, where issues with transport are significant. This includes the need to have access to their own vehicle to be able to perform care and support roles, particularly in home-based aged care and disability support services.

The multiple forms of complex socio-economic disadvantage require a holistic approach, and policy response and service interventions from multiple systems. These systems are often fragmented and operate in silos making them hard for people to navigate. System fragmentation and siloed approaches are evident across a broad range of human service systems including education, employment services, housing, health, community services, and justice systems. This can result in people 'falling through the cracks', or being unable to access support. In these circumstances, wrap-around supports can help link people with the range of relevant services. Case management can serve as a glue that brings multiple service systems together.

6.2.5 Addressing disadvantage through place-based approaches

Mainstream services are often designed to meet the needs of the average service user with a single need. Services designed this way can fail to meet the needs of those who are facing multiple or complex barriers.

Place-based approaches support communities, governments and service providers to develop targeted plans to identify local priorities and coordinate resources. These approaches can make meaningful, long-term improvements in areas of entrenched disadvantage. In particular, supporting children and families during the early years can play a key role in preventing and breaking cycles of disadvantage.²⁹

Place-based approaches elevate local voices. Embedding policy responses in the community can provide more tailored responses to local needs and link existing services more effectively to offer holistic, evidence-driven solutions to community problems. Stakeholders have called for targeted, place-based strategies to encourage and support more people to enter the workforce. These stakeholders note many programs, including employment services, are not as effective as they could be because they are not always responsive to local needs or linked up with other services.

Community decision-making and capability building can support the delivery of effective place-based services. However, this can require building capability to implement local solutions, including by providing greater access to data to inform local priorities, and ensuring that funding arrangements for community organisations are fit-for-purpose.

6.3 Investing in people through employment services

Employment services can help people connect to jobs and develop skills and broader work readiness. However, they are not always sufficient to overcome the complex barriers to workforce participation associated with entrenched disadvantage. People facing multiple barriers to employment can require tailored, joined-up help from multiple support systems and inclusive employer practices, in addition to effective assistance from employment services.

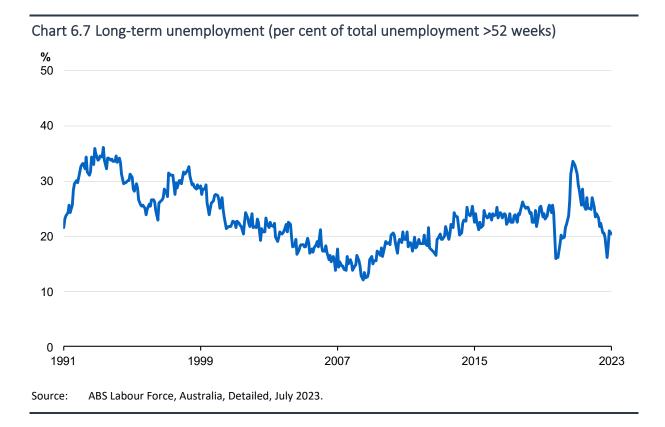
The Government supports over 944,000 job seekers through its key employment programs. These are Workforce Australia (the mainstream non-remote program), the Community Development Program (the remote program), and Disability Employment Services (the specialist disability specific employment program). Commonwealth employment services are predominantly used by income support recipients who are required to engage with the system as part of fulfilling mutual obligation requirements.

In addition to referrals for job opportunities, contracted employment service providers are required to provide job seekers with a range of supports. This includes assistance with job search, skills development, case management, connections with education or training, wage subsidies, assistance with work-related essential goods and equipment, and referrals to relevant local community services.

Consultations for this White Paper indicated that Australia's employment services system is seen as highly transactional and poorly tailored to the diverse and complex needs of people who use it. Services are thought to do little to support job seekers and build their capabilities, with one stakeholder arguing that national 'employment services had failed to keep those people at the highest risk of disadvantage connected with labour markets, let alone in paid employment'. Some of this criticism relates to the former jobactive model, but many stakeholders consider little has changed with the move to Workforce Australia. Stakeholders have argued:

- the most disadvantaged job seekers are not adequately supported
- job seekers feel they are not receiving tailored support for their individual needs
- the system is highly fragmented and difficult to navigate
- there is a lack of employer engagement and connections to job opportunities.

Since the shift in Australia's employment services model to fully outsourced delivery, there has been less personalised servicing, and less qualified and experienced frontline consultants. Between 2008 and 2016, average caseloads per consultant rose from 94 to 148 making it increasingly difficult for frontline staff to provide quality support to clients. This coincided with the doubling of the proportion of the unemployed who were long-term unemployed between 2009 and 2019 (Chart 6.7). As at 2016, frontline staff were spending 34.6 per cent of their work hours, on average, meeting contractual compliance obligations and administration.



Delivering employment services to meet increasingly 6.3.1 complex needs and circumstances

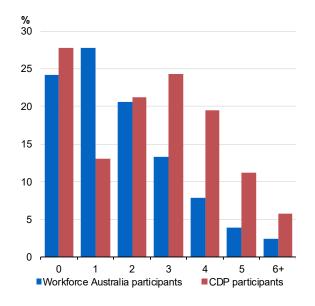
The increasing duration of unemployment means job seekers increasingly face multiple, interconnected barriers to employment. These often arise from joblessness and poverty and affect all aspects of a person's life.

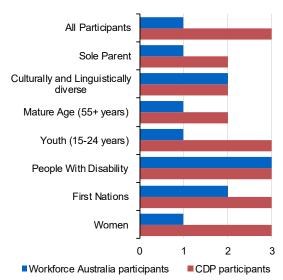
The most common barriers for Workforce Australia participants are not having a Year 12 education (37 per cent), no paid work in the past two years (36 per cent), disability (28 per cent), and intergenerational disadvantage (16 per cent). Around three-quarters of job seekers in the program face at least one employment barrier and 14 per cent of job seekers experience four or more barriers (Chart 6.8). Over half of First Nations job seekers in Workforce Australia face at least two barriers, while over half of people with disability face at least three (Chart 6.9). However, even the most common barriers only affect around one-third of job seekers in Workforce Australia, highlighting the diversity of job seekers and the need for tailored approaches.

In remote areas, 36 per cent of Community Development Program participants need to overcome four or more barriers, with the most common barrier being an absence of recent regular paid employment (74 per cent), followed by not having a Year 12 education (64 per cent) and issues with transport (52 per cent).

Chart 6.8 Percentage of Workforce Australia and Community Development Program clients who face multiple barriers

Chart 6.9 Median number of barriers faced by Workforce Australia and Community Development Program Participants by cohort





Source: Department of Employment and Workplace Relations and NIAA (Workforce Australia and Community Development Program data), June 2023.

Note: Job seeker barriers to employment are based on specific question/responses in current Jobseeker Snapshot.

These barriers are: poor internet skills, not contactable by phone, homelessness/housing instability, disability/health condition, no transport, criminal history, education – less than Year 12, no paid work in two years prior to Job Seeker Snapshot, poor/mixed English language proficiency, substance abuse issues, and intergenerational disadvantage.

All participants with disability have at least one barrier to employment experience identified through responses to the guestions related to medical conditions.

Chart 6.10 shows that almost all participants in Disability Employment Services face significant barriers to employment, with 98 per cent of participants facing at least one employment barrier and nearly two-thirds more than five barriers. The higher number of barriers reflects the more detailed Disability Employment Services barriers data, as well as the greater level of disadvantage. The most common barriers for Disability Employment Services participants are endurance limitations (7 per cent), physical limitations restricting type of work (6 per cent), episodic fluctuations (6 per cent) and psychological/psychiatric condition (6 per cent).

iii Multiple types of disability and health conditions are recorded separately in the Disability Employment Services employment data as opposed to being recorded once in the Workforce Australia and Community Development Program datasets (based on the JSCI). Disability Employment Services data is drawn from Employment Services Assessments (ESAt) or Job Capacity Assessments (JCA). It cannot be directly compared with Workforce Australia and Community Development Program data (based on the Job Seeker Classification Instrument or JSCI) above.

% 50 40 30 20 10 0 1.5 6.10 11.15 16.20 21+

Chart 6.10 Percentage of Disability Employment Services clients who face multiple barriers (groups of 5 barriers)

Source:

Department of Social Services Disability Employment Services Data, 30 June 2023.

Note:

Participant barriers to employment are based on barriers recorded in the most recent Employment Services Assessment or Job Capacity Assessment.

These barriers are across around 70 different distinct categories. Examples include: Endurance limitations, Chronic pain, Awaiting medical/health intervention, Limited work goals, Transport issues, No or limited support network identified, Torture/trauma, Relationships/family, Sensory communication, Self care, Cross cultural issues, Domestic Violence, Legal action pending, Family law issues pending, and Gambling.

6.3.2 Creating a system that works for job seekers

The level of direct support – averaging 30 minutes a fortnight – currently available in the system is not sufficient for the most disadvantaged job seekers with multiple barriers. Academic research suggests that while the system may work relatively well for an average job seeker, it has failed those who are most disadvantaged.³⁴

Taking the time to invest in people and their skills generally delivers better labour market outcomes over the long term.³⁵ Nonetheless, the system needs to have flexibility to allow tailored responses to individual needs and circumstances.

The current approach drives down the cost of the income support system by getting people into any job rather than matching them with roles that best suit their skills and interests. Around 44 per cent of job seekers retain their employment following placement for less than 12 weeks. Although the work-first approach has the benefit of minimising labour market scarring and helping people build experience in entry level jobs, it can push job seekers into precarious employment that does not lift them out of disadvantage or into jobs that do not develop or fully use their skills.

The system also does not always work for employers. Stakeholders reported employment services and employers do not engage effectively with one another, reducing opportunities for job seekers.

The *I Want to Work* report found 4 per cent of employers used the system in 2018, compared to 18 per cent in 2007, while linked ABS-employment services data estimated 14.5 per cent of employing businesses had hired a participant in mainstream employment services in 2015–16. The need to interact with multiple competing providers to fill vacancies has been a major driver of employers increasingly disengaging from the system.

Further, when providers engage with employers, job matching is highly gendered, reinforcing occupational segregation.³⁶ For example, female job seekers represent over 80 per cent of referrals to 'carers and aides' jobs, while male job seekers represent over 90 per cent of referrals to 'construction, mining and labourer' roles.

In remote Australia, thin labour markets with few employers and limited job opportunities disproportionately impact First Nations communities. In these thin labour markets, the absence of jobs means traditional employment services based around job search and capability building are not effective.

Meeting the needs of people with high barriers to work will require investments in work readiness and skills development for some individuals seeking work, while also promoting timely job search for those closer to the labour market to minimise risks of labour market scarring. In addition, the system needs to better meet employer needs, but alongside this there needs to be better employer capability building.

6.4 Creating inclusive workplaces

6.4.1 Ending discrimination can put work in reach for more people

Workplaces that are not safe, respectful or inclusive limit job opportunities, especially for marginalised groups. Workplace discrimination, bias and harassment make it more difficult for people to find work, feel safe, and progress in their job. This reduces their economic security. Discriminatory workplaces can experience high staff turnover and reduced employee morale. Employers tolerating such behaviour risk reputational damage.³⁷

Women, people with disability, mature age people, youth, the long-term unemployed, First Nations people and people from culturally and linguistically diverse backgrounds are more likely to experience discrimination during the recruitment process, limiting their job opportunities. A 2017 survey of 1,200 businesses found 93 per cent of large businesses and 89 per cent of medium-sized businesses indicated openness to hiring people with disability, but only around a third of all businesses actually did so.

Many employers are also less likely to offer interviews to women and people from certain ethnic backgrounds, particularly in STEM fields.³⁸ Likewise, one in three human resources professionals reported they would not hire someone aged over 50.³⁹ This phenomenon is apparent in the public sector too, with a recent study of promotions in the Australian Public Service finding that, at every level, people from an English-speaking background were more likely to win promotions. Controlling for other factors, the researchers concluded discrimination was likely to be the driver of this difference.⁴⁰

Stakeholders also highlighted the need for accessible recruitment processes to open opportunities for people with disability. A White Paper submission noted that even recruitment websites aimed at recruiting employees with disability had accessibility issues.⁴¹ Common accessibility issues include navigability, a lack of captioning or alt-text, and poor screen contrast.



People experiencing multiple forms of disadvantage are particularly likely to be discriminated against. For example, culturally and linguistically diverse women face compounding impacts of sexism and racism at work. Muslim women have reported that wearing a headscarf is a barrier to finding a job, especially in customer service roles. ⁴² In addition, women are subject to negative age stereotypes and discrimination at younger ages than men. ⁴³

Discrimination and unsafe workplaces also limit opportunities and lower retention at work. Managers' biases affect the allocation of work tasks, access to learning and development opportunities and promotions. ⁴⁴ Experiences of harassment or exclusion in the workplace can negatively affect career progression. For example, women who experience sexual harassment are more likely to switch to jobs that have more female colleagues and lower pay. ⁴⁵

6.4.2 Job design can allow more people to participate

Creating inclusive workplaces goes beyond ending discrimination, and employers have a large role to play. It requires improving access to suitable jobs so people can keep working as life circumstances change, such as jobs that offer flexibility to balance care responsibilities or manage disability. In designing jobs that allow more people to participate, businesses create opportunities for more people, and can position themselves more competitively in the labour market, attracting a broader pool of staff, retaining current skilled staff, and benefiting from diverse experience.

In 2020–21 about 10 per cent of women and 9 per cent of men – approximately 116,000 people – reported their main difficulty finding employment or more hours was an absence of jobs with suitable conditions or arrangements. Nearly half of women (48.7 per cent) report the flexibility to work part time is very important for their labour market participation. One woman who had been outside the labour force for over 10 years described these experiences: "I would love to get back into work but [I am] trying to find work that works around my caring role... I see a lot of jobs advertised and I've got years of experience [but] nobody wants to hire someone who can only do 10 to 15 hours a week."

Flexible work arrangements can help people maintain employment through key life stages. For example, women who have greater access to flexible start and finish times before having children are more likely to remain employed after having children.⁴⁷ As examined in Chapter 3, both men and women need flexibility. However, men are more reluctant than women to request flexible working conditions and less likely to be granted flexibility when they do make a request.⁴⁸ Those caring for elderly people or people with disability are more likely to leave the workforce altogether when flexible work is not available.⁴⁹ Stakeholders also highlighted the need for flexibility for First Nations people to meet cultural responsibilities.⁵⁰

Secure jobs support people to continue working when life circumstances change. For instance, parents and carers can struggle to manage caring arrangements when they receive little notice about forthcoming work rosters, or are required to work non-standard hours. ⁵¹ A regular schedule is the most common working arrangement change sought by new mothers. When these requests are granted, new mothers work more hours and experience a smaller drop in earnings after having children. ⁵² The combination of flexibility to manage care responsibilities, and security around hours and schedules, is an essential feature of a job for some people.

6.4.3 Role for employers to address participation barriers

Safe, inclusive and flexible workplaces foster opportunities within reach of people from all walks of life. Workforce diversity is an element of any firm's social licence to operate, and delivers business

benefits too. Diversity allows employers to draw on the widest possible talent pool, raise staff retention and improve staff performance and wellbeing.⁵³

Employers can put strategies in place that build culture and create more open and inclusive workplaces, such as:

- designing jobs to be inclusive and accommodating of employees' needs including in relation to hours and location where possible
- supporting employees to balance work with care responsibilities through more generous leave arrangements (such as paid parental leave)
- introducing workplace policies codes of conduct and anti-bullying and harassment policies backed by training to emphasise the value of diversity and inclusion
- taking steps to eliminate sexual harassment in the workplace, and taking allegations of misconduct seriously
- creating diversity champions and employee networks to promote an inclusive culture
- introducing inclusive hiring practices
- employment targets to increase parity, for example, gender balance and cultural diversity in recruitment, retention, and leadership positions.

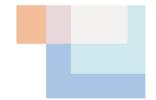
Inclusion strategies and policies to foster diverse workplaces are increasingly common. Over half of large private sector organisations have conducted a gender pay gap analysis and more than 2000 organisations have a Reconciliation Action Plan.⁵⁴

Employers can also support inclusive workplace by promoting flexibility. As discussed in Chapter 3, around 60 per cent of employees now have flexible start and finish times, and around half can work from home. ⁵⁵ This is a marked change from a decade ago and means there are more options for more people to work in a way that suits them. This change has supported the participation of people with care responsibilities and enabled greater work-life balance. The trend towards inclusive practices is occurring in small and medium businesses too. Stakeholder consultation for this White Paper revealed how a medium-sized manufacturer in a male-dominated sector recruited and retained more women by introducing flexible shifts around school hours.

Strategies and policies, however, do not guarantee success. Many are not evidence-based, try to 'fix' workers rather than workplace culture, or fail to recognise diverse experiences. ⁵⁶ However, carefully designed and evaluated strategies can be successful. ⁵⁷

Despite recent labour market tightness, stakeholders indicated limited changes in hiring practices and flexibility. Employers, particularly small businesses, often face practical challenges such as:

- limited knowledge about supporting cohorts of workers with higher needs or in making reasonable adjustments
- · committing limited resources to establishing policies and championing change
- perceived risks of employing an unemployed person
- complexities in the hiring process
- the cost of training someone who may not stay long term.



6.5 Removing financial disincentives and providing better supports to work

The design of the tax-transfer system is an important factor in supporting people to re-engage and engage more with paid work. Australia's tax-transfer system seeks to balance equity, efficiency, simplicity, sustainability, and policy consistency.

The system is targeted and, unlike many other countries, non-contributory. This means that people don't need to pay into it to be able to receive a benefit. The system is designed to help a range of people including those who are unable to work due to age or disability, people with young children, carers, and people without paid work, such as those made unemployed in economic downturns or during regional transitions. The transfer system includes:

- allowance payments to help people meet the basic costs of life and undertake activities such as study and looking for work
- pension payments to provide an acceptable level of support for people who are generally not expected to work or required to undertake activities to receive payment
- family payments to help meet the cost of raising children
- child care assistance, recognising that the cost of early childhood education and care can be a barrier to workforce participation.

Effective design of transfer payments is made challenging by the unavoidable trade-off between the generosity of payments, the cost to taxpayers, and the incentives for people to work. The Government aims to strike the right balance between these, but the system is complex and imperfect.

The targeted nature of Australia's transfer system helps ensure its sustainability. However, it can reduce the financial rewards of work, although means tests are designed to ensure that income support recipients are always better off working. Income tax and out-of-pocket costs associated with working (such as child care) also reduce these incentives.

Consultations for this White Paper found that while the financial benefits of work are important, they are not the only factor affecting whether people take up paid work. People's participation decisions depend on the job opportunities and supports available (discussed earlier in this Chapter), as well as the clarity and predictability of incentives.⁵⁸

The following section discusses whether settings in the transfer system are right for the modern labour market and focuses on two key groups: secondary earners and income support recipients (particularly those on JobSeeker Payment).

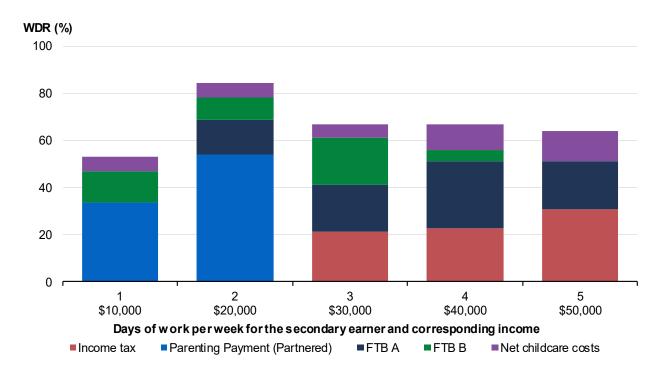
6.5.1 Financial disincentives for secondary earners impede women's economic equality

Secondary (or lower) income earners in families with children can face significant financial disincentives to increasing participation, and in many cases gain little financially by moving from part-time to full-time work. Secondary earners may see over half of the extra income from working an additional day lost to withdrawn payments (such as Family Tax Benefit), higher tax liabilities and increased out-of-pocket child care costs (Chart 6.11). The chart below shows the situation for a secondary earner in a couple, with one child aged three years, who would be earning \$50,000 if

working full time. For the first day of work, just over 50 per cent of extra income is lost to taxes, transfer payment withdrawals and out-of-pocket child care costs. Moving from one to two days of work per week means this secondary earner loses over 80 per cent of their extra income.

Women are more likely than men to be secondary earners, due to prevailing gender norms and the gender pay gap especially after the birth of their first child (Chapter 3). Following the arrival of children, parents face a trade-off between paid work and caring for children. Gender norms and lower income typically mean women bear primary responsibility for caring for children, and may work part time, work flexibly in a lower-paying job, or leave paid employment to manage these responsibilities.

Chart 6.11 Proportion of extra income lost to taxes, transfer payment withdrawals and net child care costs for a secondary earner in a couple with one child aged three – \$50,000 primary earner income and \$50,000 full-time equivalent secondary earner income



Source: Treasury CAPITA model, Budget 2023–24.

Note: WDR refers to the Workforce Disincentive Rate. This is the proportion of earnings from an additional day of work that is lost to income taxes, the withdrawal of transfer payments, and net child care fees.

Cameo is based on estimated tax and transfer policy settings for the December quarter 2023–24. The household is renting at a cost of \$800 per week and does not have a HECS–HELP debt. Income tax includes the impact of personal tax rates and thresholds, the Medicare levy, as well as relevant tax offsets including the low income tax offset and beneficiary tax offset. The household only receives private income from employment. Where applicable, the household has suitable private health cover such that they do not pay the Medicare levy surcharge. Their child is in long day care for 10 hours per day worked by the secondary earner, for 50 weeks per year, at a cost of \$11.80 per hour.

The limited financial returns to taking up additional work for secondary earners reinforces traditional gender norms and presents a major barrier to women's economic equality. Women with children are more responsive to changes in financial incentives than men and people without children.⁵⁹ This means small increases in mothers' take-home pay can lead them to take-up more paid work.



6.5.2 Helping income support recipients to work when they can

The highly targeted nature of the transfer system means that support is progressively withdrawn as recipients report higher income from work (and other income sources).

The income free area allows income support recipients to earn an amount of income every fortnight (\$150 for JobSeeker Payment recipients) before their payment is progressively withdrawn. This allows people, particularly those who are less likely to immediately move to full-time work (such as people with a partial capacity to work), to work small amounts without losing payment.

Most people receiving JobSeeker Payment have no labour income (78 per cent of recipients in July 2023) and so do not make use of the income free area. JobSeeker recipients who do earn income do not appear to restrict their income to align with the income free area threshold, with no bunching of recipients earning around or above the \$150 per fortnight threshold.⁶⁰ This may reflect that many jobs do not offer workers the opportunity to precisely choose their preferred number of work hours or that the threshold is not the key determinant in the number of hours people choose to work.⁶¹

Beyond the income free area, a single person on the JobSeeker Payment who is working will generally lose at least half of each additional dollar they earn through a combination of taxes and payment withdrawal (and at some points more than 80 cents on the dollar). This tightly targeted payment withdrawal in combination with mutual obligation requirements (discussed further below) keeps the JobSeeker Payment targeted at people who need it most and constrains the overall cost of the program. People in this scenario are always financially better off when they have employment earnings.

Age and Disability Support Pension, and Carer Payment recipients can face similar financial barriers to working, as these payments are also targeted through means testing, however they have access to more generous settings as they are not expected to work. Analysis in the Retirement Income Review suggested the financial returns to work may not always be the most important factor in mature age people's decisions to work or not, especially if they are retired, the withdrawal of the Age Pension may dissuade some people from working. ⁶² The situation for single parents receiving Parenting Payment (96 per cent of whom are women) is slightly different. Parenting Payment (Single) has a more generous income free area and lower withdrawal rate which recognises the important role that carers of children play, and the challenges single parents face combining paid work with caring. Despite the challenges posed in combining work and care, Parenting Payment (Single) recipients have one of the highest rates of reporting earnings out of all income support recipients (32.8 per cent of recipients, June 2023).

Smoothing income support as earnings change

Working age payment recipients also accrue employment credits (up to a cap) over periods when they have little or no income. These are designed to create smoother transitions back into employment for recipients. They target support to those taking up work or looking for more work, rather than those who work continuously while on payment. Credits can be used to offset future employment income which would otherwise have resulted in a reduction in payment. Once credits are accumulated, less payment is withdrawn for a temporary period, strengthening the immediate returns from work. For example, a single mother on Parenting Payment (Single), who has been unemployed for over a year and decides to work part-time (two 5-hour shifts a week at \$30/hour) is able to keep her full rate of payment for five additional weeks.

Employment credit systems help smooth transitions from receiving the full rate of income support while unemployed to a partial rate or no income support while working. These credits can be an effective tool for increasing employment and earnings, and as part of the Jobs and Skills Summit the Government provided a temporary upfront credit for pension payment recipients.⁶³

Financial and non-financial incentives can lower participation

Consultations on this White Paper found job seekers often feel that there is value to remaining attached to the income support system. Beyond access to payment, eligibility for an income support payment can provide ongoing access to health care cards and concessions. Health care cards provide income support recipients with access to cheaper medicines under the Pharmaceutical Benefits Scheme, and access to bulk billing and refunds to medical expenses through the Medicare Safety Net. More broadly, Commonwealth concession card holders have access to the following at reduced or no cost: public transport, vehicle registration and licences, dental and eye care, electricity and gas, council rates and water/sewerage, and emergency services levies. These benefits are particularly valued by people with disability because they often face significant health care costs. Eligibility for an income support payment can also qualify someone to receive the Child Care Subsidy, which can be an important determinant of women's workforce participation. The potential loss of these benefits can act as a barrier to work for some people across a wide range of working age and pension payments.

Some income support recipients report that once they have left income support, regaining income support if needed is complicated, time-consuming and carries a degree of uncertainty which may create anxiety around less secure job opportunities. To help mediate this, income support recipients can remain attached to the income support system for six to seven fortnights when they are earning enough income to reduce their payment to \$0. This allows people to automatically resume payment if their income drops below the income cut out limit during this period, without the need to make a new claim or serve waiting periods. After this period, people are required to apply for payment again and are subject to waiting periods, which can vary depending on their circumstances.

Incentivising job seekers to take up job opportunities, even if they are not full-time ongoing roles, helps reduce reliance on income support. For JobSeeker Payment recipients aged 22 to 30, earning any income is associated with a 9.3 per cent lower expected lifetime receipt of welfare. Combining earnings and payment increases the probability of exiting income support and reduces time on payment. First reflects the important role of entry level jobs in providing pathways to better jobs and more hours, and ultimately exit from payment. Further, part-time employment has been found to increase the probability of full-time employment by approximately nine percentage points for men and six percentage points for women (for those who were not previously in the labour force). ⁶⁵

Balancing mutual obligations to drive participation

Current social security policy settings link eligibility to requirements to attend appointments with employment services providers and engage in activities. This can include applying for jobs, participating in education or training, and going to job interviews. For working age payments, these obligations mean people can have payments suspended if they do not meet requirements.

Well-designed activity requirements improve labour market outcomes.⁶⁶ However, if requirements are too onerous or are not accompanied by genuine quality support to find suitable employment, they can have harmful effects. Overly strong obligations can push people to become 'the hidden unemployed' as they stop searching for work and move on to payments with less onerous conditions or leave payment without finding work.⁶⁷



The type of activity requirements also matter. Poorly-designed obligations can tie up job seekers in low quality programs that exhaust both time and financial resources to attend, reducing capacity to search for suitable work. ⁶⁸ They can have consequences for employers too, such as high administrative burden from large volumes of low-quality or unsuitable application submitted for the purpose of meeting obligations rather than genuine applications for work. Well-designed obligations can support better outcomes for both job seekers and employers.

6.6 Supporting people to engage in work as life evolves

Some people need different supports to re-engage, engage more, or remain engaged in work as life changes. Support systems need to be set up so that they can cater to people's individual needs as circumstances change at different stages of life. For example, young people may need support to transition from education to employment. People with care responsibilities often require flexibility to balance work and care, and support to re-enter the workforce after taking career breaks. Older people may need support to continue participating in the workforce as they transition towards retirement. People with disability or health limitations, either acquired or lifelong, can also need assistance to work to their full capacity. The challenges of these life stages can be compounded by intergenerational disadvantage.

6.6.1 Transition from education to employment

The transition from education to employment can be bumpy and this can be more complicated when young people are from a disadvantaged background. The youth unemployment rate is double that of the general population (discussed in Chapter 2). The high youth unemployment rate reflects the barriers young people can face when trying to enter the workforce, such as having fewer skills and less experience and needing flexibility around education and life commitments.

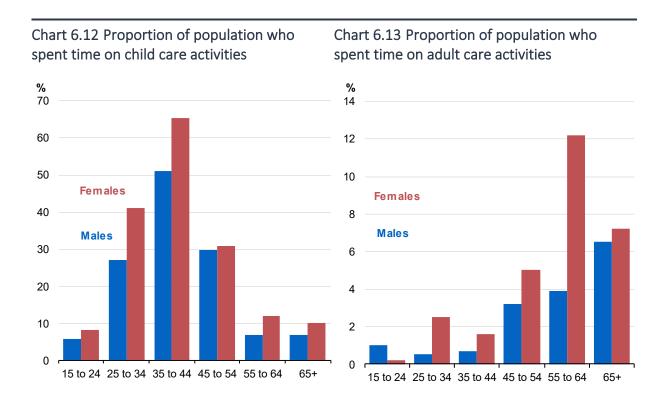
Young people often bear the brunt of weak labour markets. They may be unable to find work or be forced to take jobs further down the 'jobs ladder' when fewer entry-level job opportunities are available.⁶⁹ Young people may have limited social networks to connect them with employment opportunities or experience discrimination from employers, particularly when they have multiple intersecting barriers. For example, young refugees and migrants can face specific barriers including 'experiences of racism and discrimination in looking for work and at work, unconscious bias from employers and recruiters, lack of targeted and flexible support available and lack of recognition of prior education or training undertaken outside of Australia'.⁷⁰

At a roundtable discussion held for this White Paper, young people highlighted transport including the cost of driving lessons and mental health challenges as significantly impacting their ability to obtain and remain in employment.

Effective employment services can be an important support for young people's entry into the workforce. Employment services that build young people's capabilities can improve pathways into work. These services should be integrated with complementary systems focused on investing in the individual to achieve successful outcomes.

6.6.2 Balancing work and care responsibilities

Unpaid care is not shared equally in Australia. Women bear most of these responsibilities, reflecting the persistence of traditional gender norms. Chart 6.12 below shows that about half of men, and two-thirds of women aged 35 to 44 years spent time caring for children in 2020–21. On average, women undertook 4 hours and 31 minutes of unpaid domestic, care and voluntary work each day. This compares to 3 hours and 12 minutes for men. Women do most of the housework even when they are household breadwinners or work considerably more hours than their male partners. For parents, mothers spent an average of 3 hours 34 minutes caring for children, while fathers spent 2 hours 19 minutes. A significant proportion of people, particularly women aged 55 to 64 years, care for an elderly person or person with disability (Chart 6.13).



Source: ABS How Australians Use their Time, 2020–21.

Note: Child care activities include physical and

Child care activities include physical and Note: emotional care, teaching, helping, playing, talking, minding and feeding children under 15 years old.

ABS How Australians Use their Time, 2020–21. Adult care activities include caring for someone aged 15 years or over who is sick, with disability or elderly.

Unpaid care responsibilities can be a barrier to participation for those who want to work more, as they reduce the time available for paid work.⁷³ Overall, 24.7 per cent of women, and 0.2 per cent of men, reported caring for children as the main reason they were not available to start a job or work more hours in 2020–21.

Source:

Many unpaid carers need work flexibility to accommodate children's schedules, care recipients' medical appointments, or sick days.⁷⁴ Because this flexibility is disproportionately sought by women,



it contributes to occupational segregation and the gender pay gap (Chapter 3).⁷⁵ Care responsibilities earlier in life can limit education and work opportunities for women later in life, particularly for those from culturally and linguistically diverse backgrounds.⁷⁶

Strengthening formal care services

Effective formal care and support services – including aged care, disability support, outside school hours care and early childhood education and care – are crucial for facilitating participation of people with care responsibilities. To carers of people with disability and older people to engage with work effectively, 'substitute care' from the NDIS and aged care systems needs to be adequate. Additionally, workplaces need to be more flexible and inclusive, and the interface with the income support system needs to improve. These systems are particularly important for low-income families and single mothers.

The cost, availability, flexibility and quality of care services influence the work decisions of people with care responsibilities. High costs of services are barriers to work. This is particularly the case for women, who are more likely to have the cost of child care factored against their earnings rather than household earnings. This can factor into decisions about increasing participation. In addition, limited availability of services constrains carers from taking up new opportunities, particularly in regional or remote areas. So Service schedules that cannot accommodate variable or non-standard work hours limit carers' employment opportunities. Carers are also reluctant to leave their loved ones in a poor care environment.

Re-balancing paid work and care

Reforms to encourage sharing of paid work and care have long-term benefits for women, men, children, and the economy. Supporting gender equality within the labour force, especially in relation to care responsibilities in the family, is critical to women's economic security later in life.⁸³

Shifting gender norms also offer opportunities for men to better balance work with care responsibilities. Attitudes to fatherhood and working fathers have changed over the last 15 years becoming more supportive of greater father involvement in the care of children and the ability of working fathers to meet the needs of their children.⁸⁴ This has caused significant change around young workers' expectations of work and care, and employers need to keep up with these changes.

We have made significant progress on paid parental leave

Paid parental leave is a key tool in lowering the barriers for women to return to work and improving gender equality in the way work and care responsibilities are shared in society. The introduction of Australia's publicly-funded paid parental leave scheme in 2011 increased women's workforce participation, particularly for mothers on lower incomes and sole parents. This is consistent with international evidence showing the benefits of paid parental leave for increasing women's labour force participation, lowering the gender pay gap and supporting women's and children's health. Beautiful to the contract of the contr

Paid parental leave is overwhelmingly taken by women. In 2021–22, women made up 65 per cent of all parents who used the Paid Parental Leave scheme. Under previous settings, which differentiated between primary and secondary carers, almost 99 per cent of men who accessed the scheme did so under Dad and Partner Pay. Similar results are seen for private parental leave schemes. This can reinforce the norm that women are the primary caregiver, entrenching an unequal distribution of paid and unpaid work over the life course.⁸⁷

Policy changes in place from 1 July 2023 are designed to help address this inequality by encouraging fathers to take leave in the crucial early months of children's lives, fostering a more equal division of unpaid care and housework, and facilitating women's greater workforce participation (discussed further in Chapter 7). Overseas, these policies have been shown to shift traditional gender norms, improve women's economic outcomes over the long-term, and improve fathers' wellbeing and relationships with their children.⁸⁸ This reduces the impact of a fall in earnings for new mothers and enables them to maintain or increase their workforce participation, with benefits to their lifetime earnings and career progression.⁸⁹

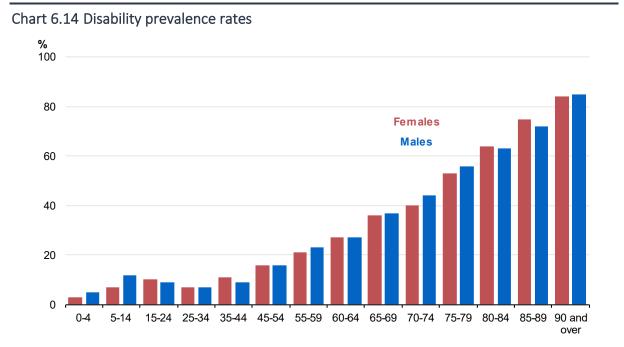
6.6.3 Helping mature age workers remain in the workplace longer

People are working until later in life, but mature age people can face significant difficulty finding a job after becoming unemployed and tend to remain unemployed for longer than younger workers. This is likely to disproportionately impact regional areas that have older populations, and in spite of significant workforce shortages. These difficulties are apparent in the increasing proportion of JobSeeker Payment recipients aged over 55. As at 26 May 2023, this cohort makes up 29 per cent of all people receiving JobSeeker Payment, an 11 per cent increase since September 2013.

Stakeholders argued age discrimination and poor health were major barriers to work for mature age workers, confining them 'to redundancy and irrelevance'. After turning 50 years old, 24 per cent of people have experienced employment-related discrimination, either in the workplace or when seeking employment. He most frequent issue encountered was being treated unfavourably, by being sidelined, patronised or not treated as capable, and this was more common among women than men. Other barriers faced by mature age workers include disability, chronic illness, and unpaid care responsibilities. Women also face unique barriers to remaining in the workforce including menopause (discussed in Section 6.6.4).

Manual workers, including those working in care sectors, can face unique challenges maintaining employment in mature age. These include the higher prevalence of physical injuries in manual jobs as well as the greater difficulties some mature age workers may experience when performing physically strenuous work. The median age of physical workers in Australia is 40, compared to 48 for non-physical workers. Only 18 per cent of physical workers are aged 55 and older, indicating that as these workers get older, they are either shifting into jobs that are less physically demanding or leaving the workforce. Poor health is a key reason mature age workers involuntarily cease working.

Early retirement can be further influenced by disability, which generally increases with age (Chart 6.14). In 2018, one in eight (13 per cent) people aged 15 to 64 years had disability (including chronic or long-term illness), compared to one in two (49.6 per cent) people aged 65 years and over. The prevalence of disability increases from 22 per cent for 55 to 59 year olds to 27 per cent for 60 to 64 year olds, and to 36 per cent for 65 to 69 year olds.



Source: ABS Disability, Ageing and Carers, Australia: Summary of Findings 2018.

6.6.4 Supporting people with disability or health conditions to work to their capacity

Around one in six people in Australia or about 4.4 million have disability. Another 22 per cent or 5.5 million people have a long-term health condition. Disability can be acquired (developed during a person's lifetime as a result of accident or illness) or present from birth. Disability types include sensory (loss of sight, hearing and speech difficulties), physical (breathing difficulties and restrictions in physical activities), psychosocial (mental illnesses, nervous or emotional conditions, memory problems), and intellectual (difficulties learning or understanding).

Engagement with people with disability for this White Paper drew out the diversity of perspectives in the disability community around participation barriers. While some felt a need to conceal their disability to avoid unconscious biases, others suggested that their 'invisible disability' meant workplaces failed to provide the reasonable adjustments they required to work.

Long-term health conditions and disability can limit the amount or type of work people can do. Long-term sickness or disability was the main reason reported for being unavailable to start a job or work more hours in 2020–21 (24.5 per cent). It was the most commonly reported reason for men (35.1 per cent) and the second most commonly reported reason for women (18.8 per cent) after caring for children (24.7 per cent). Workforce Australia data suggest disability and health conditions affect the capacity of 28 per cent of job seekers, especially mature age people (39.4 per cent), women (26.9 per cent), and First Nations people (26.5 per cent).

The intersection of gender inequality and disability discrimination means women with disability experience unique challenges entering the workforce, working to their capacity, or being supported to remain in the workforce. The underlying structural barriers to their workforce participation include: poverty, lack of safe, accessible and affordable housing, lack of accessible and affordable transport, the high incidence and prevalence of gender-based violence, non-optional costs of disability, and inflexible work arrangements.⁹⁴

Some health issues disproportionately affect women and can limit their ability to participate in the workforce over their lifetimes. For example, the physical and psychological effects of reproductive health issues, such as endometriosis, abnormal uterine bleeding or menopause, may force women to take time off work, work part time, or leave the workforce. A study found that one in seven women had taken time off from work or school during their menstrual cycle. Faround 20 per cent of women experiencing menopause have severe symptoms that interfere with their daily lives. This can lead to long-term absences from work or force women into early retirement.

Although many people with mental health conditions live full lives, these conditions can reduce some people's capacity to work and ability to secure employment. The National Study of Mental Health and Wellbeing conducted in 2021 found that about two in five Australians aged 16 to 85 have experienced a mental health disorder during their lifetime, and one in five had experienced symptoms in the previous 12 months. Some groups experience higher rates of mental illness. First Nations people, those who identify as LGBTIQA+, people with disability, and those aged 16 to 24 are most likely to have experienced symptoms in the previous 12 months. ⁹⁷ Of job seekers in Workforce Australia, 14 per cent have an identified mental health condition. In comparison, 58 per cent of job seekers in Disability Employment Services have a mental health condition.

Effective and coordinated formal support systems including the NDIS, physical and mental health services, and employment services is crucial for improving employment outcomes for people with disability or health conditions. At the same time, these systems can only be effective if workplaces are inclusive and free from discrimination. Several White Paper submissions suggested workplace design prevents people with disability engaging in work despite being skilled and willing to work. Submissions also discussed how workplace modifications and 'job carving' can be effective in supporting people with disability and significant health conditions. Stakeholders also suggested more employers, particularly small and medium sized organisations, need encouragement to employ people with disability.

6.7 An integrated and multifaceted approach

The Government is focused on helping people to overcome barriers to participation and broaden opportunities across the country. Connecting more people to work and breaking cycles of disadvantage needs an integrated approach that goes beyond government and involves genuine partnerships with communities, industry and philanthropy. It requires a deep understanding of what matters to local communities and involving them in policies that directly affect them. The Government will work with employers and communities to ensure everyone is pulling in the same direction — including greater use of partnerships, focused on supporting people, places and expanding opportunities. As a starting point the Government is progressing the work announced in the Targeted Entrenched Community Disadvantage package, and scoping a First Nations Economic Partnership with the Coalition of Peaks to improve progress against Closing the Gap outcomes.



The Government is also committed to a social security system that provides a strong safety net for those who need it. The Government has increased the rate of working age and student payments and provided the largest increase to Commonwealth Rent Assistance in 30 years. Age pensioners were provided a temporary \$4,000 boost to their Work Bonus income banks to support them to work more if they want to and to assist filling labour shortages. Other aspects of the social security system, and broader government service systems, can be improved to facilitate workforce participation and remove artificial barriers that act as a deterrent to coming off payment into work.

Addressing the wide range of barriers to labour force participation that may arise across a person's life requires a broad suite of policies. The Government is supporting families to balance care and work responsibilities more equally through expanded Paid Parental Leave and Cheaper Child Care, and improving quality and access in other formal care settings such as aged care and disability care.

Greater flexibility and support at work for individual needs as circumstances change across a person's life can help to create a stronger, more productive workforce. The Government is working with employers, civil society and the community to build more inclusive workplaces.

Endnotes

- 1 Sen, A., Social exclusion: Concept, application and scrutiny, Social Development Papers No. 1, Office of Environment and Social Development, (Asian Development Bank June 2000).
- 2 McLachlan, R., Gilfillan, G. & Gordon, J., *Deep and Persistent Disadvantage in Australia*, (Productivity Commission 2013), https://www.pc.gov.au/research/supporting/deep-persistent-disadvantage, accessed 19 September 2023.
- 3 Deutscher, N., & Mazumder, B., 'Intergenerational mobility across Australia and the stability of regional estimates', *Labour Economics*, 66 (October 2020).
- 4 Berman, Y, 'The Long-Run Evolution of Absolute Intergenerational Mobility.' *American Economic Journal: Applied Economics*, 14 (3): 61–83, (July 2022), https://www.aeaweb.org/articles?id=10.1257/app.20200631, accessed 19 September 2023;
 - Corak, M., 'Intergenerational mobility: what do we care about? What should we care about?', Australian Economic Review, 53, 230–240 (2020), doi: 10.1111/1467-8462.12372.
- Kennedy, T. & Siminski, P., 'Are We Richer than Our Parents Were? Absolute Income Mobility in Australia', *Economic Record*, 98(320), pp. 22–41, (March 2022), https://onlinelibrary.wiley.com/doi/full/10.1111/1475-4932.12641, accessed 6 July 2023.
- Tanton, R., et al., *Dropping off the Edge 2021*, (Jesuit Social Services 2021), https://static1.squarespace.com/static/6170c344c08c146555a5bcbe/t/61958bf805c25c1e068da90f/16371 90707712/DOTE_Report+_Final.pdf, accessed 19 September 2023.
- Deutscher, N., & Mazumder, B., 'Intergenerational mobility across Australia and the stability of regional estimates', *Labour Economics*, 66, (October 2020).
- Cobb-Clark, D., 'Intergenerational transmission of disadvantage in Australia', (Australian Institute of Health and Welfare 2019), https://www.aihw.gov.au/getmedia/37c2c8b7-328c-41e1-bace-87ed7a551777/Australias-Welfare-Chapter-2-summary-18Sept2019.pdf.aspx, accessed 19 September 2023; Deutscher, N., 'Place, Peers, and the Teenage Years: Long-Run Neighborhood Effects in Australia', *American Economic Journal: Applied Economics*, pp. 220–249, (April 2020), https://openresearch-repository.anu.edu.au/bitstream/1885/212389/1/01_Deutscher_Place%252C_Peers%252C_and_the_Teena ge_2020.pdf, accessed 19 September 2023.
- 9 Deutscher, N., 'Place, Peers, and the Teenage Years: Long-Run Neighborhood Effects in Australia', American Economic Journal: Applied Economics, pp. 220–249, (April 2020).
- 10 Schleicher, A., *Helping our Youngest to Learn and Grow: Policies for Early Learning*, International Summit on the Teaching Profession, (OECD 2019), https://okm.fi/documents/1410845/15822900/OECD+report.pdf, accessed 19 September 2023.
- 11 Department of Education (Commonwealth of Australia), *Report Now Available: 2021 Australian Early Development Census, (1 April 2022),* https://www.education.gov.au/early-childhood/announcements/report-now-available-2021-australian-early-development-census, accessed 19 September 2023.
- 12 Department of Education (Commonwealth of Australia) analysis of Australian Early Development Census data, https://www.education.gov.au/early-childhood/early-childhood-data-and-reports/australian-early-development-census-aedc, accessed 19 September 2023.
- Productivity Commission (Commonwealth of Australia 2023), *Early childhood education and care*, (2023), https://www.pc.gov.au/inquiries/current/childhood#draft, accessed 19 September 2023.
- 14 McLachlan, R., Gilfillan, G. & Gordon, J., *Deep and Persistent Disadvantage in Australia*, (Productivity Commission 2013), https://www.pc.gov.au/research/supporting/deep-persistent-disadvantage, accessed 19 September 2023.



- 15 Department of Education (Commonwealth of Australia), *Better and Fairer Education System Consultation Paper*, (2023), https://www.education.gov.au/review-inform-better-and-fairer-education-system/resources/better-and-fairer-education-system-consultation-paper, accessed 19 September 2023.
- 16 Lamb S., et al., Educational opportunity in Australia 2020: Who succeeds and who misses out, Centre for International Research on Education Systems, (Mitchell Institute Victoria University October 2020), https://www.vu.edu.au/sites/default/files/educational-opportunity-in-australia-2020.pdf, accessed 16 September 2023.
- 17 Department of Education (Commonwealth of Australia), *Better and Fairer Education System Consultation Paper*, (2023).
- 18 Clarke E., Adams N., La Cava G. & Nolan M., *Does JobSeeker target those who need it*, e61 Research Note No. 7, https://e61.in/wp-content/uploads/2023/04/Does-JobSeeker-target-those-who-need-it-1.pdf, accessed 19 September 2023.
- 19 Lewers Research, Research Report for SEEK [unpublished], (2023)
- 20 Australian Law Reform Commission, *Family violence and employment*, (19 December 2011), https://www.alrc.gov.au/publication/family-violence-and-commonwealth-laws-improving-legal-frameworks-alrc-report-117/15-employment-law-overarching-issues-and-a-national-approach/family-violence-and-employment-3/, accessed 19 September 2023.
- 21 Townsend, N., et al., A life course approach to determining the prevalence and impact of sexual violence in Australia: Findings from the Australian longitudinal study on Women's Health, Australia's National Research Organisation for Women's Safety, (2022).
- 22 Summers, A., *The Choice: Violence or Poverty*, (University of Technology Sydney July 2022), https://assets.website-files.com/62b998c0c9af9f65bba26051/63228540ce74a60866ee4e98_TheChoice-violence-or-poverty-web.pdf, accessed 19 September 2023.
- 23 Department of Social Services (Commonwealth of Australia), *National Plan to End Violence against Women and Children 2022-2032*, (2022), https://www.dss.gov.au/sites/default/files/documents/11_2022/national_plan_to_end_violence_against_w omen_and_children_2022-2032.pdf, accessed 19 September 2023.
- 24 Summers, A., The Choice: Violence or Poverty, (University of Technology Sydney July 2022).
- Desmond, M., & Gershenson, C., 'Housing and Employment Insecurity among the Working Poor', *Social Problems*, 63(1), 46–67. (February 2016), doi:https://doi.org/10.1093/socpro/spv025.
- 26 Council of Australian Governments. *Prison to Work report,* (December 2016), https://www.voced.edu.au/content/ngv%3A78682, accessed 21 September 2023.
- 27 Lunn, A., Brandtner, C., & Young, C., *Why Public Transit Helps Young People Get Work*, Scholars Strategy Network (8 June 2018), https://scholars.org/contribution/why-public-transit-helps-young-people-get-work, accessed 24 July 2023.
- 28 Farré, L., Jofre-Monseny, J., & Torrecillas, T., 'Commuting time and the gender gap in labor market participation', *Journal of Economic Geography*, (2022), doi:https://doi.org/10.1093/jeg/lbac037; Grant-Smith, D., Osbourne, N., & Marinelli, P., 'Transport and Workplace Accessibility: Routes to improved equity', in P. M. Flynn, K. Haynes, & M. A. Kilgour, *Overcoming Challenges to Gender Equality in the Workplace: Leadership and Innovation*, 107–123, (Greenleaf Publishing in association with GSE Research 2017).
- The Smith Family, *Breaking the Cycle of Disadvantage*, (July 2010), https://www.thesmithfamily.com.au/media/files/research/policy-submissions/social-inclusion-board-july2010.pdf, accessed 27 April 2023.
- 30 Centre for Policy Development, *Employment White Paper Submission*, (December 2022), https://cpd.org.au/wp-content/uploads/2023/04/CPD-Employment-White-Paper-Submission.pdf, accessed 16 September 2023.
- 31 O'Sullivan, S., McGann, M., & Considine, M., Buying and selling the poor: Inside Australia's privatised welfare-to-work market, (Sydney University Press 2021); Borland, J., Employment White Paper Submission,

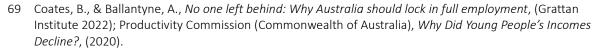
- (Treasury 2022), https://app.converlens.com/treasury/employment-white-paper/public-submissions/view/79, accessed 19 September 2023.
- 32 Considine, M., O'Sullivan, S., Nguyen, P., McGann, M., & Lewis, J., Proposed Licensing System for the New Employment Services Model Response to Discussion Paper, (The Policy Lab University of Melbourne 2020), https://s3-ap-southeast-2.amazonaws.com/figshare-production-eu-latrobe-storage9079-ap-southeast-2/31566980/ProposedLicencingSystemetcResponsetoDiscussionPaper.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIARRFKZQ25KW2DIYRU/20230920/ap-southeast-2/s3/aws4_request&X-Amz-Date=20230920T005910Z&X-Amz-Expires=10&X-Amz-SignedHeaders=host&X-Amz-Signature=d893472efa6d65510bb4baf0ebc05d0630f1a4229c130c592b4e7bf03e978e29, accessed 19 September 2023.
- 33 Lewis, J.M., Considine, M., O'Sullivan, S., Nguyen, P. & McGann, M., From Entitlement to Experiment: The new governance of welfare to work Australian Report back to Industry Partners, (The University of Melbourne 2016), https://rest.neptune-prod.its.unimelb.edu.au/server/api/core/bitstreams/e49043f8-433a-5fd3-8243-9da883f8c776/content, accessed 19 September 2023.
- O'Sullivan, S., McGann, M., & Considine, M., Buying and selling the poor: Inside Australia's privatised welfare-to-work market. (Sydney University Press 2021).
- 35 Card, D., Kluve, J., & Weber, A., 'What works? A meta analysis of recent active labour market program evaluations', *Journal of the European Economic Association*, 16(3), 894–931 (2018)
- 36 O'Sullivan, S., McGann, M., & Considine, M., Buying and selling the poor: Inside Australia's privatised welfare-to-work market. (Sydney University Press 2021).
- 37 Soutphommasane, T, 'Anti-racism on the job', *The Proctor*, 33(11), 42–44, (December 2013), https://search.informit.org/doi/epdf/10.3316/informit.313956749335277, accessed 7 March 2023.
- Booth, A. L., Leigh, A., & Varganova, E., 'Does Ethnic Discrimination Vary Across Minority Groups? Evidence from a Field Experiment', Oxford Bulletin of Economics and Statistics, (2011), https://openresearch-repository.anu.edu.au/bitstream/1885/34947/2/01_Booth_Does_Ethnic_Discrimination_2011.pdf, accessed 7 March 2023; Kessler, J., & Low, C., 'Research: How Companies Committed to Diverse Hiring Still Fail', Harvard Business Review (11 February 2021), https://hbr.org/2021/02/research-how-companies-committed-to-diverse-hiring-still-fail, accessed 8 March 2023; Australian Human Rights Commission (Commonwealth of Australia), Employing Older Workers (2018), (31 October 2018), https://humanrights.gov.au/our-work/age-discrimination/publications/employing-older-workers-2018, accessed 8 March 2023; Adamovic, M., & Leibbrandt, A., 'A large-scale field experiment on occupational gender segregation and hiring discrimination', Industrial Relations, 34–59, (2022).
- 39 Australian Human Rights Commission (Commonwealth of Australia), *Employing Older Workers (2018)*, (31 October 2018), https://humanrights.gov.au/our-work/age-discrimination/publications/employing-olderworkers-2018, accessed 8 March 2023.
- 40 Win, N.N., Breunig, R. & Hansell, D., Modern Australian Public Service Careers [unpublished], (2023).
- 41 Diversity Council of Ausralia, Submission to the Treasury Employment White Paper, (November 2022).
- 42 Australian Human Rights Commission (Commonwealth of Australia), 'Sharing the Stories of Australian Muslims', (July 2021), https://humanrights.gov.au/sites/default/files/document/publication/ahrc_sharing_stories_australian_muslims_2021.pdf, accessed 22 August 2023.
- 43 McGann, M., Bowman, D., Kimberly, H., & Biggs, S., *Too old to work, too young to retire*, (Brotherhood of St Laurence November 2015), https://library.bsl.org.au/jspui/bitstream/1/7905/4/Workforce_vulnerabilities_in_midlife_and_beyond_rese arch_summary_2015.pdf, accessed 22 August 2023; Mapedzahama, V., Laffernis, F., Barhoum, A., & O'Leary, J., *Culturally and racially marginalised women in leadership: A framework for (intersectional) organisational action*, (Diversity Council of Australia 2023).

- Diversity Council of Australia, Jumbunna Institute, *Gari Yala (Speak the Truth): Centreing the experiences of Aboriginal and/or Torres Strait Islander Australians at work*, (2020), https://www.dca.org.au/research/project/gari-yala-speak-truth-centreing-experiences-aboriginal-andortorres-strait-islander, accessed 15 July 2023; Australian Government, Women's Budget Statement 2023–24, (Canberra 2023), https://budget.gov.au/content/womens-statement/download/womens budget statement 2023-24.pdf, accessed 19 September 2023.
- 45 Folke, O., & Rickne, J., 'Sexual Harassment and Gender Inequality in the Labor Market', *The Quarterly Journal of Economics*, 137(4), 2163-2212 (November 2022), https://academic.oup.com/qje/article/137/4/2163/6581192, accessed 15 April 2023.
- Department of the Prime Minister and Cabinet, Behavioural Economics Team (Commonwealth of Australia), Women long-term not in the labour force [unpublished] (2022).
- 47 Bahar, E., Bradshaw, N., Deutscher, N., & Montaigne, M., *Children and the gender earnings gap: Evidence for Australia*. (Treasury 2023).
- 48 Australian Human Rights Commission (Commonwealth of Australia), *Supporting Working Parents: Pregnancy and Return to Work National Review Report*, (25 July 2014), https://humanrights.gov.au/our-work/sex-discrimination/publications/supporting-working-parents-pregnancy-and-return-work, accessed 15 April 2023; Skinner, N., Cathcart, A., & Pocock, B. 'To ask or not to ask? Investigating workers' flexibility requests and the phenomenon of discontented non-requesters', Labour and Industry, 103–119, (2016).
- 49 Productivity Commission (Commonwealth of Australia) *Carer Leave: A case for an extended unpaid carer leave entitlement?*, (23 February 2023), https://www.pc.gov.au/inquiries/current/carer-leave/position#:~:text=This%20position%20paper%20%E2%80%93%20A%20case,to%20the%20National%2 0Employment%20Standards, accessed 14 April 2023.
- Gray, M., Hunter, B., & Lohoar, S., *Increasing Indigenous employment rates*, (Australian Institute of Health and Welfare 5 March 2012), https://www.aihw.gov.au/getmedia/71bb346a-1b83-4038-a2f7-647e65a21445/ctg-ip03.pdf.aspx?inline=true, accessed 15 July 2023; Lowitja Institute, Submission to the Employment White Paper, (Treasury 2022), https://app.converlens.com/treasury/employment-white-paper/public-submissions/view/312, accessed 19 September 2023.
- The Senate (Commonwealth of Australia), Senate Select Committee on Work and Care Final Report, (March 2023), https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Work_and_Care/workandcare/Report, accessed 8 August 2023.
- 52 Ciasullo, L., & Uccioli, M., What Works for Working Mothers? A Regular Schedule Lowers the Child Penalty (20 October 2022), https://martinaucc.github.io/martinauccioli/Uccioli_jmp-Ciasullo_Uccioli-Child_penalty_working_arrangements.pdf, accessed 8 August 2023
- Onken-Menke, G., Nüesch, S., & Kröll, C., 'Are you attracted? Do you remain? Meta-analytic evidence on flexible work practices', Business Research, 239-277, (2018); Jack, M., & Jack, D., Bridging the Work and Family Divide: Understanding the benefits of family friendly workplaces, Family Friendly Workplaces (2022), https://familyfriendlyworkplaces.com/wp-content/uploads/2022/05/FFW_Bridging-the-work-and-family-divide_Report_2022-DIGITAL.pdf, accessed 9 August 2023; IP Australia (Commonwealth of Australia), Australian IP Report, (2023); Cassells, R., & Duncan, A., Gender Equity Insights 2020: Delivering the Business Outcomes, Bankwest Curtin Economics Centre & Workplace Gender Equality Agency (2020); Diversity Council Australia, Inclusion@Work Index 2021–2022: Mapping the State of Inclusion in the Australia, (2021).
- Reconciliation Australia, 2021 RAP Impact Report, https://www.reconciliation.org.au/wp-content/uploads/2022/06/2021-RAP-Impact-Report.pdf, accessed 19 September 2023; Workplace Gender Equality Agency (Commonwealth of Australia), Australia's Gender Equality Scorecard, (2022).
- 55 Treasury analysis of 2021 HILDA data.
- Ryan, M. K., 'Addressing workplace gender inequality: Using the evidence to avoid common pitfalls', *British Journal of Social Psychology*, 1–11, (22 November 2022),

https://bpspsychub.onlinelibrary.wiley.com/doi/full/10.1111/bjso.12606, accessed 10 August 2023; Leon, C., 'Insights for Indigenous employment into a case study of unconscious bias in the Australian Public Service', Australian Journal of Social Issues, 898–919, (26 May 2022),

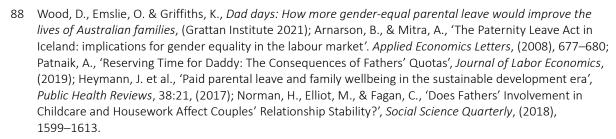
https://onlinelibrary.wiley.com/doi/10.1002/ajs4.221, accessed 10 August 2023.

- 57 Workplace Gender Equality Agency (Commonwealth of Australia), *Gender equality strategy guide*, (Sydney 2019).
- 58 Keane, M. P., 'Recent research on labor supply: implications for tax and transfer policy', *Labour Economics*, 1–13, (2022)
- Keane, M. P., 'Recent research on labor supply: implications for tax and transfer policy', *Labour Economics*, 1–13, (2022); Bargain, O., Orsini, K., & Peichl, A., 'Comparing labor supply elasticities in Europe and the United States: new results', *The Journal of Human Resources*, 723–838 (2014); Dandie, S., & Mercante, J., 'Australian labour supply elasticities: comparison and critical review', (Treasury 2007); Breunig, R., Gong, X., Mercante, J., Weiss, A., & Yamauchi, C., 'Child Care Availability, Quality and Affordability: Are Local Problems Related to Labour Supply?', *Economic Record*, 87, 109–124 (ANU Crawford School March 2011), https://devpolicy.crawford.anu.edu.au/pdf/staff/robert_breunig/ChildCare_LocalReports_v2.pdf, accessed 10 August 2023; Freestone, O., & Breunig, R., 'Risk aversion and the elasticity of intertemporal substitution among Australian households', *Economic Record*, 121–139 (2020); Mumford, K., Parera-Nicolau, A., & Pena-Boquete, Y., 'Labour supply and childcare: allowing both parents to choose', *Oxford Bulletin of Economics and Statistics*, 577–602 (2019); Apps, P., Kabatek, J., Rees, R., & van Soest, A., 'Labor supply heterogeneity and demand for child care of mothers with young children', *Empirical Economics*, 1641–1677 (2016).
- 60 Nolan, M., 'Do people change their earnings to avoid losing benefit payments?', E61 Institute (2023), https://e61.in/wp-content/uploads/2023/05/Beneficiaries-and-the-income-free-area.pdf, accessed 22 August 2023.
- 61 Chetty, R., Friedman, J. N., Olsen, T., & Pistaferri, L., 'Adjustment Costs, Firm Responses, and Micro vs. Macro Labor Supply Elasticities: Evidence from Danish Tax Records', *The Quarterly Journal of Economics*, 749–804, (2011).
 - Gong, X., & Breunig, R., 'Channels of labour supply responses of lone parents to changed work incentives', *Oxford Economic Papers*, 916–939, (2014).
- 62 Keane, M. P., 'Recent research on labor supply: implications for tax and transfer policy', *Labour Economics*, 1–13, (2022).
- Wilkins, R., & Leigh, A., 'Effects of Temporary In-Work Benefits for Welfare Recipients: Examination of the Australian Working Credit Programme', *Fiscal Studies*, 335–369, (2012).
- 64 Buddelmeyer H., Cai L., & Zakirova R., *Combining Income Support and Earnings*, (Melbourne Institute of Applied Economic and Social Research January 2009), https://www.researchgate.net/publication/263656751_Combining_Income_Support_and_Earnings, accessed 22 August 2023.
- 65 Bathgate M., Cai L., & Law V., 'Is Part-time Employment a Stepping Stone to Full-time Employment?', Economic Report Volume 90 Issue 291, (May 2014), https://onlinelibrary.wiley.com/doi/full/10.1111/1475-4932.12120, accessed 23 August 2023.
- 66 Borland, J. & Tseng, Y., 'Does a minimum job search requirement reduce time on unemployment payments? Evidence from the Jobseeker Diary in Australia', *Industrial & Labor Relations Review*, 60(3), 357–378 (2007), doi:10.1177/001979390706000303; Hérault, N., & Kalb, G., 'Understanding the rising trend in female labour force participation', *Fiscal Studies*, 341 (2022).
- 67 O'Sullivan, S., McGann, M. & Considine, M., *Buying and selling the poor: Inside Australia's privatised welfare-to-work market*, (Sydney University Press 2021).
- 68 Borland, J., 'Dealing with unemployment: What should be the role of labour market programs?', *Evidence Base*, (4), 1–27 (2014), doi:10.4225/50/558110C9B892D, https://anzsog.edu.au/app/uploads/2022/06/10.21307_eb-2014-004.pdf, accessed 19 September 2023.



- 70 Australian Youth Affairs Coalition, *Submission to the Full Employment White Paper*, (Treasury 2022), https://app.converlens.com/treasury/employment-white-paper/public-submissions/view/282, accessed 19 September 2023.
- 71 Alesina, A., Giuliano, P., & Nunn, N. 'On the Origins of Gender Roles: Women and the Plough', *The Quarterly Journal of Economics*, 128(2), 469-530, (2013); Baranov, V., Haas, R. d., & Grosjean, P., 'Men. Male-biased sex ratios and masculinity norms: evidence from Australia's colonial past', *Journal of Economic Growth*, (2023); Grosjean, P., & Khattar, R. 'It's Raining Men! Hallelujah? The Long-Run Consequences of Male-Biased Sex Ratios', *The Review of Economic Studies*, 723–754, (2023).
- 72 Bertrand, M., Kamenica, E., & Pan, J., 'Gender identity and relative income within households', *The Quarterly Journal of Economics*, 571–614, (2015), https://scholar.google.com/citations?view_op=view_citation&hl=en&user=zGJKZpkAAAAJ&cstart=20&pages ize=80&sortby=pubdate&citation_for_view=zGJKZpkAAAAJ:HE397vMXCloC, accessed 9 August 2023.
- Bertrand, M., Kamenica, E., & Pan, J., 'Gender identity and relative income within households', The Quarterly Journal of Economics, 571–614, (2015), https://scholar.google.com/citations?view_op=view_citation&hl=en&user=zGJKZpkAAAAJ&cstart=20&pages ize=80&sortby=pubdate&citation_for_view=zGJKZpkAAAAJ:HE397vMXCloC, accessed 9 August 2023. Cortés, P., & Pan, J., 'Children and the remaining gender gaps in the labor market', *Journal of Economic Literature* (forthcoming); Risse, L., Submission to Employment White Paper, (Treasury 2022), https://app.converlens.com/treasury/employment-white-paper/public-submissions/view/103, accessed 19 September 2023; Equality Rights Alliance, *Submission to the Employment White Paper*, (2022), https://www.equalityrightsalliance.org.au/publications/submission-re-the-employment-white-paper/, accessed 19 September 2023.
- Dean, L., Churchill, B., & Ruppanner, L., 'The mental load: building a deeper theoretical understanding of how cognitive and emotional labor overload women and mothers', Community work and family, (2021), https://www.researchgate.net/publication/356528716_The_mental_load_building_a_deeper_theoretical_u nderstanding_of_how_cognitive_and_emotional_labor_overload_women_and_mothers, accessed 10 August 2023; Department of the Treasury (Commonwealth of Australia), Women's Budget Statement, Budget.gov.au (25 October 2022), https://archive.budget.gov.au/2022-23-october/womens-statement/download/womens_budget_statement_2022-23.pdf, accessed 10 August 2023.
- 75 Haeck, C., Lefebvre, P., & Merrigan, P., 'Canadian evidence on ten years of universal preschool policies: The good and the bad', *Labour Economics*, 36, pp. 137–157, (October 2015), https://www.sciencedirect.com/science/article/pii/S0927537115000664, accessed 11 August 2023; Bahar, E., Bradshaw, N., Deutscher, N., & Montaigne, M., *Children and the gender earnings gap: Evidence for Australia*, (Treasury 2023).
- 76 COTA, Response to The Australian Government Treasury: Employment White Paper Terms of Reference, (30 November 2022), https://www.carersaustralia.com.au/wp-content/uploads/2022/12/021122_-Carers-Australia-Submission-to-Treasury-Employment-White-Paper_FINAL.pdf, accessed 19 September 2023.
- Productivity Commission (Commonwealth of Australia), Carer Leave: A case for an extended unpaid carer leave entitlement?, (23 February 2023), https://www.pc.gov.au/inquiries/current/carer-leave/position#:~:text=This%20position%20paper%20%E2%80%93%20A%20case,to%20the%20National%2 0Employment%20Standards, accessed 19 September 2023; COTA, Response to The Australian Government Treasury: Employment White Paper Terms of Reference, (30 November 2022); Olivetti, C., & Petrongolo, B., 'The Economic Consequences of Family Policies: Lessons from a Century of Legislation in High-Income Countries', Journal of Economic Perspectives, 205-30. (2017); Ferragina, E., 'Family policy and women's employment outcomes in 45 high-income countries: A systematic qualitative review of 238 comparative and national studies', Social Policy & Administration, 1016-1066 (2020); Morrissey, T. W., 'Child care and parent

- labor force participation: a review of the research literature', *Review of Economics of the Household*, 1–24, (2017).
- 78 COTA, Response to The Australian Government Treasury: Employment White Paper Terms of Reference, (30 November 2022).
- 79 Akgunduz, Y. E., & Plantenga, J., 'Child care prices and maternal employment: A meta-analysis', *Journal of Economic Surveys*, *32(1)*, (9 January 2017); Hook, J., & Paek, E., 'National Family Policies and Mothers' Employment: How Earnings Inequality Shapes Policy Effects Across and Within Countries', *American Sociological Review*, 381–416, (2020).
- 80 Hurley, P., Matthews, H. & Pennicuik, S., *Deserts and oases: How accessible is childcare?*, (Mitchell Institute, Victoria University 2022); Jackson, A., McKenzie, M., & Grey, E., *Child Care Subsidy Activity Test: Incentive or barrier to labour force participation?*, (March 2023), https://static1.squarespace.com/static/61e32e62c8c8337e6fd7a1e6/t/6404ef877d49164322d52aa1/16780 45067038/IEP Activity+Test+V5%5B13%5D.pdf, accessed 19 September 2023.
- 81 Baxter, J. A., Hand, K. & Sweid, R., Flexible child care and Australian parents' work and care decision-making, (Australian Institute of Family Studies 15 November 2016), https://aifs.gov.au/sites/default/files/publication-documents/rr37-flexible-child-care.pdf, accessed 19 September 2023; Equality Rights Alliance, Submission to the Employment White Paper, (2022), https://www.equalityrightsalliance.org.au/publications/submission-re-the-employment-white-paper/, accessed 19 September 2023; The Senate (Commonwealth of Australia), Select Committee on Work and Care Final Report, (March 2023), https://parlinfo.aph.gov.au/parlInfo/download/committees/reportsen/024994/toc_pdf/FinalReport.pdf;fileT ype=application%2Fpdf, accessed 19 September 2023.
- 82 Breunig, R., et al., 'Child Care Availability, Quality and Affordability: Are Local Problems Related to Labour Supply?', *Economic Record*, 87, pp. 483–507. (March 2010), https://devpolicy.crawford.anu.edu.au/pdf/staff/robert_breunig/ChildCare_LocalReports_v2.pdf, access 19 September 2023.
- 83 Bradbury, B. & Zhu, A., 'Welfare Entry and Exit after Marital Separation among Australian Mothers'. *Economic Record*, Volume 94 issue 307 pg. 405–423, (August 2018), https://onlinelibrary.wiley.com/doi/full/10.1111/1475-4932.12427, accessed 19 September 2023; Broadway B., Kalb G., & Maheswaran D., From Partnered to Single: Financial Security Over a Lifetime, (Melbourne Institute June 2022), https://melbourneinstitute.unimelb.edu.au/__data/assets/pdf_file/0011/4134467/Breaking-Down-Barriers-Report-5-June-2022.pdf, accessed 19 September 2023.
- 84 Churchill, B. & Craig, L., Men's and women's changing attitudes towards fatherhood and working fathers in Australia, (2022).
- Martin B., et al., Paid Parental Leave Evaluation Final Report, (Department of Social Services November 2014), https://www.dss.gov.au/sites/default/files/documents/03_2015/finalphase4_report_6_march_2015_0.pdf, accessed 19 September 2023.
- Budig, M. J., Misra, J. & Boeckmann, I., 'Work-Family Policy Trade-Offs for Mothers? Unpacking the Cross-National Variation in Motherhood Earnings Penalties'. Work and Occupations, 43(2), (2016); Ferragina, E., 'Family policy and women's employment outcomes in 45 high-income countries: A systematic qualitative review of 238 comparative and national studies'. *Social Policy & Administration*, (2020), 1016–1066; Aitken, Z. et al., 'The maternal health outcomes of paid maternity leave: A systematic review'. *Social Science & Medicine*, (4 February 2015), 32–41; Nandi, A., et al., 'The Impact of Parental and Medical Leave Policies on Socioeconomic and Health Outcomes in OECD Countries: A Systematic Review of the Empirical Literature', *The Milbank Quarterly*, (September 2018), 434–471.
- Wood, D., Emslie, O. & Griffiths, K., *Dad days: How more gender-equal parental leave would improve the lives of Australian families*, (Grattan Institute 2021).



- 89 Australian Government, Women's Budget Statement 2022–23, (Canberra 2022).
- 90 COTA, *Submission to the Treasury Employment White Paper*, (November 2022), https://cota.org.au/wp-content/uploads/2022/12/COTA-A-Submission-Employment-White-Paper.pdf, accessed 1 December.
- 91 COTA, Submission to the Treasury Employment White Paper, (December 2022).
- 92 Aegon, *The changing Face of Retirement: The Young, Pragmatic and Penniless Generation*, (Global Coalition on Aging 2018), https://globalcoalitiononaging.com/wp-content/uploads/2018/07/aegon-retirement-readiness-survey-young-generations.pdf, accessed 19 September.
- 93 Australian Council of Social Service, *Submission to the Employment White Paper*, (29 November 2022), https://www.acoss.org.au/wp-content/uploads/2022/11/White-Letter-to-Employment-Taskforce.pdf, accessed 19 September; COTA, *Submission to the Treasury Employment White Paper*, (December 2022).
- 94 Women with Disabilities Australia, *Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability*, (August 2020), https://wwda.org.au/wp-content/uploads/2020/08/WWDA-Response-to-Employment-Issues-Paper-Final1.pdf, accessed 19 September 2023.
- 95 Schoep, M.E., et al, 'Productivity loss due to menstruation-related symptoms: a nationwide cross-sectional survey among 32 748 women', *BMJ Open Volume 9 Issue 6*, (June 2019) https://bmjopen.bmj.com/content/9/6/e026186, accessed 19 September 2023.
- Jean Hailes for Women's Health, *Symptoms of menopause*, (May 2023), https://www.jeanhailes.org.au/health-a-z/menopause/menopause-symptoms, accessed 19 September 2023.
- 97 Australian Institute of Health and Welfare (Commonwealth of Australia), *Family, domestic and sexual violence*, (3 February 2023), https://www.aihw.gov.au/reports/domestic-violence/family-domestic-and-sexual-violence, accessed 19 September 2023.

Our Roadmap for a dynamic and inclusive labour market

A critical moment for Australia's labour market

Australia's labour market has transformed alongside its economy, with significant shifts in the composition of the workforce, the jobs people are doing and their experiences at work. Today's labour market is much more inclusive, flexible, services-oriented and productive than in previous eras but there's work to do to ensure Australians are beneficiaries of the changes we anticipate in our economy and society.

Our labour market is falling short of its potential. Around 3 million Australians would like more work, and outcomes vary significantly based on where people live, whether they've experienced complex disadvantage, their gender, and other personal characteristics. Employers have experienced acute labour shortages that have impeded their ability to expand and grow.

Australia's productivity growth has declined and is falling behind international peers. This is limiting opportunities for businesses to thrive and for people to benefit from sustainable real wage growth.

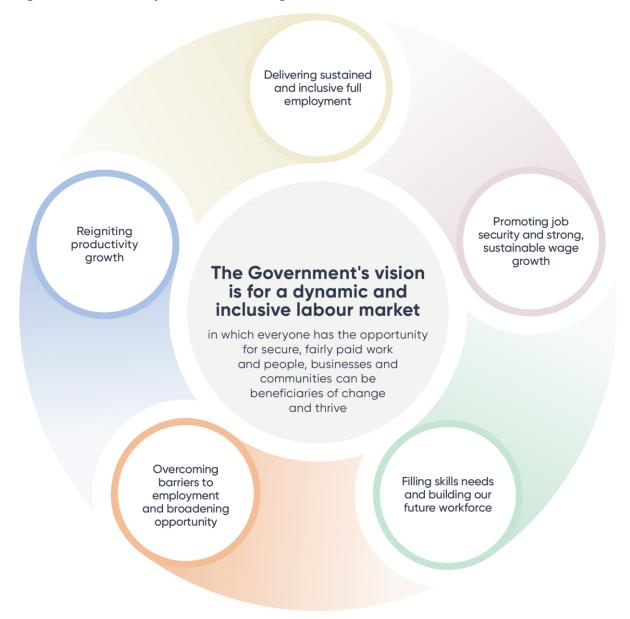
Building up the potential and inclusiveness of Australia's labour market is critical to our ability to deliver on our broader social, economic and environmental goals. For example, we need to expand the provision of quality care and support to meet the demands of population ageing, and the growing demand for early education and care and the National Disability Insurance Scheme (NDIS). Australia is also committed to achieving a 43 per cent reduction in emissions by 2030 and net zero by 2050 and is uniquely positioned to become a renewable energy superpower. And we need to seize the opportunities arising from the technological and digital transformation of our economy.

This Roadmap sets the policy directions the Government will take to position the Australian labour market for the future, through investing more in education, skills and training, expanding opportunities to work, and boosting labour productivity. It lays out our approach to sustained and inclusive full employment, investing in human capital and ensuring the benefits of work and opportunity are available to more people right across Australia.

New policy directions for a dynamic and inclusive labour market

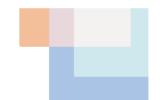
The labour market is central to Australians' wellbeing. The Government's vision is for a dynamic and inclusive labour market in which everyone has the opportunity for secure, fairly paid work and people, businesses and communities can be beneficiaries of change and thrive. The Government's five objectives discussed in this White Paper all contribute to achieving this vision (Figure R.1).

Figure R.1 The five objectives contributing to our vision



Achieving this vision will require concerted action across a comprehensive range of policy levers. The Government's Roadmap for delivering these reforms is built around 10 policy areas:

- 1. **Strengthening economic foundations** by placing full employment at the heart of our institutions and policy frameworks, progressing a five pillar productivity agenda and strengthening the foundations for secure, fairly paid jobs.
- 2. **Modernising industry and regional policy** so people, communities and businesses are positioned to withstand the challenges and reap the benefits as we strive to become a renewable energy superpower, realise the opportunities of technological change and broaden and deepen Australia's industrial base.



- 3. *Planning for our future workforce* by coordinating skill priorities and policies, and meeting workforce needs in the context of a growing care and support economy, the net zero transformation and technological change.
- 4. **Broadening access to foundation skills** by charting a course towards universal access to affordable, quality early childhood education and care, improving school outcomes and expanding access to adult learning opportunities that help people find and keep a secure, fairly paid job.
- 5. *Investing in skills, tertiary education and lifelong learning* by increasing the share of Australians studying in areas of high skills need, improving collaboration between the vocational and higher education sectors, and removing barriers to learning across the course of people's lives.
- 6. **Reforming the migration system** through better targeting skilled migration, improving the employment outcomes of international students and realising the employment potential of migrants.
- 7. **Building capabilities through employment services** by setting out clear principles for future reform and implementing changes in an evidence-based way that applies learnings from evaluations and accounts for the needs of local labour markets and individuals.
- 8. **Reducing barriers to work** by addressing disincentives to participate, improving the quality of support for people with disability, and promoting gender equality.
- 9. **Partnering with communities** to achieve genuine place-based change informed by community needs, deepening ties with social enterprise and partnering with First Nations people to support economic development.
- 10. *Promoting inclusive, dynamic workplaces* by working with employers to foster workplace diversity, collaborating with businesses through the employment services system and improving the quality and transparency of data to measure workplace performance.

Improving women's economic equality is a Government priority, and will require a focus on women who face complex and intersecting forms of disadvantage, as well as looking at ways we can better value and share care work, ensure safe and respectful workplaces and reduce workforce gender segregation. These sit as cross-cutting principles guiding action across each of the objectives and policy priorities.

The Roadmap has its genesis in the Jobs and Skills Summit

This White Paper builds on the solid foundations provided by the Jobs and Skills Summit in September 2022. Extensive consultation with employers, workers, communities, civil society, unions and governments has consistently informed our approach. The Summit brought together over 140 Australians to discuss the challenges and opportunities facing the labour market, such as addressing skills shortages, delivering secure, well-paid jobs and boosting productivity. The Summit resulted in 36 immediate outcomes and 38 areas for further work, which are all now completed or in progress.

Many issues raised at the Summit have been acted on or explored in depth through a wide-ranging, year-long stakeholder engagement process for the White Paper. This included considering over 400 public submissions, consultations in every state and territory, partnering with researchers and academics, and engaging with more than 250 stakeholders, including meeting with people with lived experience and from diverse backgrounds. The perspectives and ideas shared through these forums inform the Government's policy agenda going forward.

A Roadmap to navigate the future

The Government's policy agenda for delivering its vision for Australia's labour market is summarised in this Roadmap. It presents our policy actions across three time horizons – work that has been implemented, work underway and future reform directions. We have already made meaningful progress – for example to improve skills development, support women's economic participation, improve migration settings and make workplaces fairer and safer. We are also taking new actions through this White Paper. Importantly, the future reform directions outlined in this Roadmap summarise the Government's forward policy agenda which will be progressed in the 2024–25 Budget and over the years to come.

The process of reform is already underway

The Government has already taken action to build the workforce we need now and into the future. For example, we have established Jobs and Skills Australia (JSA) to elevate workforce planning, committed to 480,000 Fee-Free TAFE places to grow our skilled workforce, and made important policy changes such as raising the Temporary Skilled Migration Income Threshold so that our skilled migration system better complements the skills of Australians. The *Fair Work Legislation Amendment (Secure Jobs, Better Pay) Act 2022* (Secure Jobs, Better Pay Act) has reformed our workplace relations system. This includes putting gender equality and job security at the heart of the Fair Work system and, among other things, updating our bargaining system to ensure all workers and businesses can negotiate in good faith for agreements that benefit them.

Significant work underway includes investing an additional \$3.7 billion in a new National Skills Agreement with states and territories and the Australian Universities Accord process, which both aim to enhance our tertiary education sector. We are reforming the Disability Employment Services model, as well as replacing the Community Development Program and ParentsNext, to begin shifting the focus of employment services to building capability. We are developing a National Strategy for the Care and Support Economy to take a joined-up approach to care and support sector labour shortages, and a National Strategy to Achieve Gender Equality in pursuit of a more gender equal society. And reviews are underway to improve access to quality, affordable early childhood education and care (ECEC) by the Productivity Commission and Australian Competition and Consumer Commission.

Further examples of the measures implemented to date and work underway are mapped against the White Paper's 10 priority policy areas in the Roadmap tables below.

The White Paper sets out new policies and new directions

Achieving the Government's vision for the labour market will require ambition, collaboration and action across a comprehensive range of policy levers. The transformation of the labour market in the past 50 years has shown we can become more inclusive and more productive – and the changes expected over the next 50 years will require even greater effort.

Strong economic management and robust institutions will provide the basis on which we can create more well-paid and secure jobs for more Australians across our country. At the heart of the Government's policy agenda is a new approach to full employment – one that emphasises inclusion and opens up the benefits of work to more people. This means critically assessing reforms through the lens of how they contribute to job creation, grow skills and remove barriers to work. Full employment should not be simply a statistical estimate, it must be at the centre of the Government's agenda.



Fostering an environment that promotes the growth of new, high productivity jobs and supports sustainable wages growth is a priority for Government. We are taking action to boost productivity across the economy through our five pillar productivity agenda.

Modern industry and regional policy, including strategic coordination and crowding-in investment in priority areas, are needed to broaden and deepen Australia's industrial base into the future. Through our new approach, the Government will promote the investment needed in key industries, work to modernise our national infrastructure and support innovation. The Government's investment in JSA will improve the planning needed for businesses and workers to source and develop the skills they need.

A strong and connected tertiary sector is critical to industry development, technological adoption and supplying human capital to support our future economy. Tertiary education will need to keep pace with Australia's changing industry composition and the evolving mix of skills required by business. The Government will promote new, innovative models of tertiary collaboration, including by fast tracking the establishment of up to six TAFE Centres of Excellence, and consulting with industry, unions, tertiary institutions and across governments to define the scope, outcomes and benefits of a National Skills Passport. The Government is also exploring opportunities for more widely accessible degree-level higher apprenticeships, which TAFE Centres of Excellence will be instrumental in delivering.

The Government is elevating lifelong learning and foundation skills across our education and training systems. Recognising that human capital development starts early in life, the Government is committed to making access to high-quality, equitable and affordable early childhood education and care universal, and is charting a course towards this ambition. In the schooling system, the next National School Reform Agreement provides a significant opportunity to tie funding to reforms needed to lift student outcomes. We will deliver stronger and more inclusive foundation skills training through improving access to the redesigned Skills for Education and Employment program and promoting lifelong learning, including by building up the microcredentials ecosystem. The Australian Universities Accord will inform a long-term plan for Australia's higher education system.

Migration is not a substitute for investing in the skills of Australians. However, a well-targeted skilled migration system boosts productivity, and can complement the skills of Australians in addressing short term skills shortages. The Government's new Migration Strategy will better target our skilled migration system, improve employment outcomes for international students and take steps to reduce exploitation.

Recognising the importance of improving the outcomes of employment services, the Government is defining clear principles for employment services reform which will set the direction for how we will support people seeking jobs, and businesses seeking workers. The Government wants the future employment services system to invest in people's potential, building their human capital and connecting with broader social services to help people overcome barriers to participation and build pathways to decent jobs. The Government will also back the social enterprise sector to provide more employment and training opportunities for Australians facing disadvantage.

The Government is addressing disincentives to work in the income support system by extending the nil rate period so that people can retain concession cards for longer when they first get back into work. This change recognises that for some, the transition is difficult and there are disincentives currently in the system. We are retaining enhanced arrangements for the Pension Work Bonus so age pensioners who wish to combine work and payment can keep more of what they earn.

Across this agenda, the Government is continuing its commitment to place-based approaches, which involve communities as active participants in the design of policies and programs. We are expanding and reforming the Local Jobs Program, and will be developing approaches that are right for communities and coordinating resources to directly address the local drivers of disadvantage to help us achieve inclusive full employment.

To build a stronger evidence base for sustained and inclusive full employment, the Government is investing in enhanced labour market data and analytical capability. This is particularly important for understanding and responding to the labour market experiences of cohorts that are too often under-represented, so we can better support more Australians into secure, fairly paid work.

To achieve the future reform directions in this Roadmap we need strong partnerships and collaboration with and between governments, employers, unions, civil society and the broader community. For example, recognising the significant opportunity we all have to improve economic opportunity for Aboriginal and Torres Strait Islander people, the Government is working with the Coalition of Peaks to scope a First Nations Economic Partnership. We are also working with businesses to foster inclusive and dynamic workplaces and ensure our workforce is well-trained and valued. While the Government is responsible for policy settings and reforms that maximise labour market opportunity, all participants in the labour market have a responsibility to work together to realise the benefits.

By working together, we can build a stronger, fairer and more inclusive economy and society for generations to come.

Box R.1 Taking practical steps now to modernise Australia's labour market: new commitments

Meeting our skills needs and building our future workforce

- Turbocharging TAFE Centres of Excellence fast tracking up to six TAFE Centres of Excellence nationally to begin in 2024, working with states and territories to bring together industry and education and training providers – including universities – to design world leading skills and curriculum.
- Advancing Higher and Degree Level Apprenticeships developing more widely accessible degree-level higher apprenticeships that can be delivered by VET providers to meet industry needs in priority areas such as clean energy, care and support and digitalisation.
- National Skills Passport defining the scope, outcomes and benefits of a National Skills Passport in consultation with industry, unions, tertiary institutions and across governments to help people more easily demonstrate their skills to employers and reduce barriers to lifelong learning.

Incentivising and supporting participation

- Addressing Disincentives to Work in the Income Support System extending the nil rate period to allow income support recipients to retain access to concession cards and other supplementary benefits for longer, to smooth the transition to work.
- Enhancing the Work Bonus providing an ongoing upfront credit of \$4,000 to the Work Bonus income bank of new pensioners over Age Pension age and eligible veterans and permanently lifting the maximum Work Bonus balance from \$7,800 to \$11,800.
- Reforming the Local Jobs Program embedding best-practice place-based policy design principles in the program, and expanding eligibility to more people seeking work.
- First Nations Economic Partnership collaborating with the Coalition of Peaks and First Nations stakeholders to scope an economic partnership.
- Backing Social Enterprises identifying ways to provide more employment and training opportunities for Australians who face disadvantage.

Supporting evidence-based policy development and program delivery

Addressing Data Gaps – funding enhanced labour market data from the Australian Bureau of Statistics (ABS) and analytics capability in the Treasury as we take forward our policy agenda.

1 Strengthening economic foundations

Table R.1 Actions to strengthen our economic foundations

Implemented

Set clear, strategic objectives

- Introduced a new, bolder full employment objective
- Made full employment, real wages growth, and women's economic equality core objectives of our Economic and Fiscal Strategy
- Added job security and gender equality to the objects of the Fair Work Act

Established a better evidence base for policy development

- Introduced gender responsive budgeting and a national wellbeing framework: Measuring What Matters
- Established the Australian Centre for Evaluation
- Refreshed the Tax Expenditures and Insights Statement
- Released a new Intergenerational Report to guide our understanding of future workforce needs and opportunities
- Established a Women's Economic Equality Taskforce to provide advice on priorities for women's economic equality

Supported the lowest paid

- Advocated for pay rises through submissions to Fair Work Commission Annual Wage Reviews
- Fully funded the largest ever increase to award minimum wages through aged care work value case
- Legislated to expand access to bargaining for small businesses and industries with low levels of bargaining

Underway

Strengthening economic institutions

- Implementing RBA Review recommendations
- Renewing the Productivity Commission
- Empowering the Fair Work Commission to set minimum standards for employee-like work
- Better coordinating strategic planning across economic institutions, including Jobs and Skills Australia and the new Net Zero Authority
- Promoting inclusion by working with new advisory forums, including the Economic Inclusion Advisory Committee
- Legislating reforms to close loopholes that undercut wages and conditions, and to criminalise intentional wage theft
- Funding the ABS to address priority gaps in labour market data

Improving productivity

- Elevating productivity reform on National Cabinet's agenda
- Working across portfolios to realise productivity growth opportunities, including through the Competition Review, Migration Strategy, National Strategy for the Care and Support Economy and a Net Zero 2050 plan

Future reform directions

Elevate full employment in decision-making

- Embed sustained and inclusive full employment as a strategic objective
- Better measure and monitor progress to full employment, especially underemployment and outcomes across cohorts
- Address structural sources of underutilisation

Progress a five pillar productivity agenda

- Create a more dynamic and resilient economy
- Build a skilled and adaptable workforce
- Harness data and digital technologies
- Deliver quality care more efficiently
- Invest in cheaper, cleaner energy and the net zero transformation

Embed the fundamentals for secure, well-paid jobs

- Promote labour market dynamism, including investigating non-compete agreements
- Further address migrant worker exploitation through Migration Strategy initiatives
- Improve gender equality and safety in the workplace

The Government has an ambitious vision – one centred on creating more opportunities for more Australians to have secure jobs with growing wages. Sound economic management and a well-functioning labour market are essential to realising this vision, and complement other policy areas explored in this Roadmap which create jobs, boost productivity and wages, build skills and broaden opportunities to work.



For too long, the debate around full employment has been too narrowly focused on statistical estimates of cyclical unemployment. The national unemployment rate is near record lows, although is expected to rise modestly over the coming year. Even though more people are participating in paid work than ever before, we know that there are still many Australians who want work, or to work more hours, and there are stark differences in employment outcomes across different groups of people in our society. The last decade produced the slowest productivity growth in 60 years, which has contributed to slower real wage growth.

The Government has bolder ambitions for our labour market. We have set a new, broader definition for our full employment objective of sustained and inclusive full employment and we are pursuing a broad-based agenda to boost productivity and drive strong and sustainable wage growth.

Sound and effective economic institutions and policy frameworks that promote robust and inclusive growth are essential to achieving these outcomes.

To strengthen our economic foundations, the Government is:

- placing full employment at the heart of our institutions and policy frameworks
- progressing a five pillar productivity agenda
- strengthening the foundations for secure, well-paid jobs.

Our actions to date have set clear strategic objectives, invested in stronger economic institutional and policy frameworks, improved the quality of analysis available to inform policy development, and set up mechanisms to ensure all voices are heard. Significant work is underway to embed our full employment objective across Government policies, to lift productivity through a five pillar agenda, and to strengthen the foundations for secure, well-paid jobs – including by promoting pay equity and addressing exploitation – and to drive women's economic equality.

Strong institutions, frameworks and a robust evidence base provide the bedrock for effective policies and better economic and labour market outcomes. They are being complemented by a full suite of actions across the policy areas detailed in this Roadmap. This includes building people's skills and capabilities, creating the conditions for businesses to grow and realise the benefits from emerging industries and technologies, overcoming barriers to work and working with communities and businesses to promote a more inclusive and dynamic labour market. Together, these efforts will help drive sustained and inclusive full employment, reinvigorate productivity and ensure strong, sustainable wage growth.

Elevating full employment in decision-making

We are setting clear objectives and building strong institutions and frameworks. These actions support a strong economy, drive better labour market outcomes, and ensure our people, businesses and communities are beneficiaries of the big structural changes underway. This includes a new, broader definition for the Government's full employment objective and elevating this as a strategic objective across the core decision-making frameworks that guide policymaking.

We are improving our policy development process, and improving the data and analysis we have to measure progress and highlight shortfalls in pursuit of full employment. Together, these are the foundational enablers of other priority actions.

Sustained and inclusive full employment is an overarching policy objective

The Government's objective is sustained and inclusive full employment – where everyone who wants a job can find one without searching for too long. This recognises that there is still significant untapped potential in our labour market.

Full employment is a core objective in the Government's Economic and Fiscal Strategy, along with growing real wages, and ensuring women's economic participation and equality. We are implementing the recommendations of the RBA's review, including clarifying that the RBA's dual mandate for monetary policy is price stability and full employment. This will ensure we have the most effective central bank, monetary policy framework, and processes now and into the future. As is longstanding practice and consistent with the RBA Review, the Reserve Bank will remain operationally independent.

Through sound macroeconomic management and policy settings that promote strong and sustainable economic growth, we can help keep employment as close as possible to its current maximum sustainable level. While economic shocks can sometimes occur and cause cyclical deviations from this level, effective macroeconomic policy management can minimise the adverse impact these cycles have on employment and provide the best environment to sustain full employment. We will ensure that fiscal policy and monetary policy are working together to help achieve this.

Better measuring and monitoring employment

Our approach to achieving sustained and inclusive full employment recognises that underemployment has become a more significant source of spare capacity and that a broader focus on, and better measures of, underutilisation and its causes are needed.

Limitations in the level of labour market information available have constrained policymakers' ability to account for underemployment and variation in employment outcomes across cohorts. To address this, the Government will invest in significantly improving the data available to policymakers through expanding the ABS's data on barriers to job mobility and career progression, job security and the quality of employment. This will improve the data available on the amount and value of unpaid care, and include consulting on more frequent employment data for First Nations people. This builds on our earlier actions to improve ABS data on factors preventing people entering the workforce, including barriers facing women, unpaid carers, people with disability, older people, First Nations people, culturally and linguistically diverse people and those living in remote areas, as an outcome of the Jobs and Skills Summit.

Addressing structural sources of underutilisation

The Government is placing more emphasis on addressing the sources of structural underutilisation, to raise the level of employment we can sustain over time and broaden labour market opportunities. We are addressing the structural sources of underutilisation, from helping people to acquire new skills and capabilities to breaking down barriers to work that prevent people from realising their potential. While strengthening Australia's skills system is at the centre of this effort, a broad suite of policy levers will play important roles in supporting growth in jobs and addressing barriers to employment. This will require action across all 10 policy areas presented in this Roadmap.

We are establishing new institutions that will provide new focus and coordination to ensure we are building the workforce we need for the future, and that all Australians are well placed to benefit from our changing economy. JSA is improving our ability to anticipate and influence the skills needs associated with our changing economy, and the Net Zero Authority will promote an orderly and positive transformation through decarbonisation. This will better ensure that the skills needed by our



economy match the skills of workers now and into the future, facilitating better matching, and lowering structural underutilisation as our economy and workforce needs continue to evolve.

Some of our actions, such as our commitment to the National Agreement on Closing the Gap for First Nations People (Closing the Gap Agreement), are cross-cutting – delivering on these commitments helps meet multiple objectives. The Closing the Gap Agreement, agreed by the Commonwealth, the states and territories, the Australian Local Government Association, and the Coalition of Peaks is the overarching policy framework to overcome the inequality experienced by First Nations people and achieve life outcomes equal to all Australians, including in employment. There are four Priority Reform areas, 17 socio-economic outcome areas, and 19 socio-economic targets aimed at addressing specific areas of disadvantage including education and employment outcomes. As at June 2023, only four of the 19 targets are on track to be met by 2031. Achieving sustained and inclusive full employment will contribute to meeting these targets. Closing the Gap represents a significant opportunity to improve First Nations people's lives, including through improved economic participation.

Progressing a five pillar productivity agenda

Productivity growth is central to the Government's objective of delivering strong and sustainable wage growth, as well as supporting job creation. No single policy decision determines overall productivity outcomes. Instead, reinvigorating productivity growth will require focused and systematic efforts across a wide range of policy areas, often working in partnership with states and territories.

The Government has a five pillar productivity agenda (Box R.2) to catalyse and accelerate productivity-enhancing reforms. This agenda focuses on enduring drivers of productivity growth, including effective investment in physical and human capital, boosting innovation and promoting dynamic and competitive markets. However, it recognises that the policy actions required to bring about these outcomes change over time. Realising Australia's productivity potential will require responding to our changing economic structure: capturing new opportunities presented by the growth of the care and support economy, the net zero transformation and the increased use of digital technologies, and tailoring efforts to boost investments in physical capital, skills and innovation to the prevailing challenges in these areas.

The Government is already taking action to implement this agenda. Working with states and territories, we have elevated productivity reform on National Cabinet's agenda and instigated cross-jurisdictional initiatives such as the Better Planning for Stronger Growth reforms to support coordinated and effective investments in our cities, towns, and suburbs. We are helping to realise the productivity benefits of data and digital technologies in the care and support economy. For example, investment in *My Health Record* is supporting a more integrated and person-centred healthcare system.

Going forward, the Government is focused on driving reforms across all five pillars of our productivity agenda. The 10 areas for reform outlined in this Roadmap have been shaped by this five pillar productivity agenda. This section outlines our strategy, and provides examples of how it is being progressed.

Box R.2 Our five pillar productivity agenda

Our five pillar agenda provides strategic focus for a program of ongoing productivity reform. Examples of current priority areas of work include:

Creating a more dynamic and resilient economy Strengthening competition by ensuring our laws, policies and institutions are fit for purpose, and providing a favourable environment for doing business

Renewing and strengthening the Productivity Commission

Reducing barriers to labour mobility, including through increasing the supply of

secure, affordable housing

Boosting private sector investment and ensuring that public investment delivers

better value for money

Modernising markets so people and businesses can trade more efficiently and safely, through payments systems reforms, a simplified trade system and

digital markets

Building a skilled and adaptable workforce

Investing in better educational outcomes from early childhood, to schools,

to tertiary education and lifelong learning

Reinvigorating foundation skills programs and improving access to

tertiary education

Better targeting skills needs through workforce planning and tailored responses to

industry challenges

Reforming the migration system to better attract highly skilled workers and

combat worker exploitation

Harnessing data and digital technology

Improving access to high-speed internet connectivity, especially in regional areas

Supporting businesses to adopt digital technologies and improving cyber security

Raising digital foundation skills across our workforce and expanding the supply of

workers with specialist digital skills in our economy

Growing our critical technologies industries such as quantum, robotics, and

Artificial Intelligence (AI)

Delivering quality care more efficiently

Developing a strategy to holistically build the care and support economy

and workforce

Developing strategies to assist the sector to adopt technologies that can reduce

strenuous, repetitive or administrative tasks

Streamlining regulatory burden, without compromising quality

Improving models of care to lift the quality and efficiency of services

Investing in cheaper, cleaner energy and the

transformation

net zero

Committing to net zero by 2050 and providing clarity on the pathway

Investing in new cheaper, cleaner energy

Promoting efficient decarbonisation, including through ensuring the integrity of

carbon credits

Growing high-productivity low-emissions industries

Supporting efficient adaptation and investments in resilience



Creating a more dynamic and resilient economy

Dynamic and competitive markets lay the foundation for businesses to innovate and boost productivity. The Government is taking action to get this enabling environment right.

We are reviewing competition laws, policies and institutions to ensure they remain fit for purpose, with a focus on reforms that will increase productivity, reduce the cost of living and boost wages. The Competition Taskforce in Treasury is advising on reforms to non-compete clauses that restrict workers from shifting to a better-paying job, merger settings and competition issues raised by new technologies. We are also committed to renewing and strengthening the Productivity Commission, to ensure it is well placed to provide robust advice in the changing global economic landscape.

We are removing barriers to labour mobility in partnership with the states and territories, including through increasing the supply of secure, affordable housing. This includes setting a target of 1.2 million new homes over five years from 1 July 2024 and increasing investment in social and affordable housing including through the Housing Australia Future Fund, Social Housing Accelerator and National Housing Infrastructure Facility. The Government is working with National Cabinet to support this momentum through the National Housing Accord. We are improving cross-jurisdictional worker mobility through digitalisation of occupational licensing and improved worker screening in the care and support sector.

Reforms are underway to boost private sector investment in Australia and ensure public investment delivers better value for money. For example, we have boosted tax incentives to support Build-to-Rent developments to reduce barriers to new supply in the private rental market, and we are streamlining the Foreign Investment Review process and strengthening foreign relationships to attract overseas capital. We are completing an independent strategic review of the Infrastructure Investment Program, and preparing an Infrastructure Policy Statement that will ensure the Government's investments in infrastructure deliver productivity, sustainability and liveability outcomes. We are supporting small businesses to invest in energy efficiency and storage through our Small Business Energy Incentive.

These actions have been supported by the Treasurer's Investor Roundtables, which bring together global asset managers, investors, superannuation funds, banks and relevant experts to help identify and overcome barriers to investment in priority areas, including in housing and the net zero transformation.

We are modernising markets so people and businesses can trade more efficiently and safely. The Strategic Plan for the Payments System is modernising our payments system, enabling greater competition, innovation and productivity across the economy, providing certainty for industry investment, and supporting new entrants to navigate the regulatory landscape. We are supporting improved competition in our financial markets, including in clearing and settlement services, to provide any emerging competitors with fair, transparent and non-discriminatory access to market infrastructure. And we will strengthen Australia's sustainable finance markets through a Sustainable Finance Strategy, which will seek to ensure Australia's financial markets keep pace with global developments and can effectively support the transition to net zero. Actions underway include the development of a Sovereign Green Bond program – this will enable investors to back public projects driving Australia's net zero transformation and boost the scale and credibility of Australia's green finance market.

A skilled and adaptable workforce

The skills of our workforce are a key determinant of productivity growth. A skilled, adaptable workforce will place us in the best position to innovate and diffuse ideas, making the most of the changes in the global economy.

The Government is driving improvements in the delivery of foundation skills and reforming the tertiary education sector to better meet skill needs. We are investing in more affordable, accessible, equitable and high-quality ECEC to support child learning and development, improving school outcomes and teacher effectiveness, and lifting foundation skills, including through the redesign of the Skills for Education and Employment program. Through the new five-year National Skills Agreement and Australian Universities Accord, we are also reforming the vocational education and higher education sectors to meet current skill needs, including by expanding opportunities for Australians from regional areas and under-represented backgrounds to gain tertiary qualifications.

Australia's migration system can also do much more to support productivity growth. Migration is not a substitute for investing in skills, but a well-designed skilled migration program can complement the skills of Australians, connect Australian businesses to international markets and help spread global best practices. The Government has already taken significant steps to realign skilled migration with Australia's priorities, including through raising the Temporary Skilled Migration Income Threshold and extending post-graduation work rights for international students studying in priority areas. The next phase of reforms to the migration system will focus on realigning migration with Australia's strategic priorities and amplifying its contribution to productivity growth.

These priority areas are discussed in greater detail in sections on Planning for our future workforce, Broadening access to foundation skills, Investing in skills, tertiary education and lifelong learning, and Reforming the migration system.

Harnessing data and digital technology

Data and digital technologies provide opportunities for transformational change in the way we produce goods and services and how market players compete. To maximise the impact of this transformation on productivity, the Government is focused on expanding adoption across all parts of Australia.

High speed internet connectivity is the backbone of digital transformation, and the Government is expanding full-fibre NBN access to an additional 1.5 million premises by late 2025, including at least 660,000 premises in regional Australia.

The Government is helping all businesses to adopt digital technologies. This includes championing data sharing, improving the infrastructure and security for data sharing, and supporting innovation, the diffusion of knowledge, and the development of a workforce skilled in adopting digital technologies. The Government is expanding Digital ID into a national, whole-of-economy system that provides Australians with a secure, convenient, voluntary and inclusive way to verify who they are when accessing services online, without having to provide copies of their personal identity documents to business and government. This has significant productivity benefits, including streamlined government service delivery. We are also helping businesses adopt advanced and cutting-edge digital technologies, through a critical technologies package that includes initiatives such as a National AI Centre, and we are consulting on a the right guardrails and regulations to promote the safe and responsible use of AI.

Broadening adoption also requires building trust in digital technologies and how they can be used at work. The Government has already elevated cyber security to a national priority and made significant investments in building cyber capabilities, including developing a 2030 Australian Cyber Security Strategy and supporting small businesses to uplift their cyber skills. Going forward, the Government will focus on putting guardrails in place that give businesses confidence they can trust and leverage new technologies, such as responsible Al. Together with significant investments in building digital skills, these initiatives will support businesses to realise the productivity improvements possible through digital technologies.



These priorities areas are discussed in greater detail in sections on Modernising industry and regional policy, Planning our future workforce, and Investing in skills, tertiary education and lifelong learning.

Delivering quality care more efficiently

As an ageing population and rising demand drive growth, finding ways to improve productivity in the care and support economy will become increasingly important to Australia's aggregate productivity performance. A productive and sustainable care and support economy is a core objective of the Government's forthcoming National Strategy for the Care and Support Economy 2023–2033. In support of this objective, National Cabinet has agreed to work together to streamline worker screening to reduce administrative burden and facilitate labour mobility.

The Government is improving the quality and efficiency of spending including through improving funding and procurement approaches, and driving innovation through better policy evaluation and the diffusion of best practice. Improvements underway include the introduction of a new residential aged care funding model, which is targeting funding more closely at care need, a new star ratings system for aged care providers to drive competition, and increasing dispensing quantities for common medicines. The NDIS Review is looking at the design, operations and sustainability of the NDIS. Across the health system more broadly, by delivering health care at the right time and in the right way, we can provide better care, more efficiently. This includes improving access to multidisciplinary care for people with chronic conditions in underserviced communities, use of technology, and enabling our health workforce to work as close as possible to the top of their scope of practice.

Going forward, the Government is focused on leveraging its active role as a service provider, funder and regulator to promote productivity-enhancing practices. This means using funding and regulatory tools to shape market behaviour towards desired outcomes that can raise productivity, such as the entry of high-quality providers and improved use of assistive and emerging technologies.

Targeted actions to assist the care and support economy workforce are also discussed in the section on Planning for our future workforce.

Investing in cheaper, cleaner energy and the net zero transformation

Improving productivity in large and growing sectors is important because these sectors will have an outsized impact on Australia's overall productivity outcome. In addition, changes underway in Australia's economy, such as the potential to generate low-cost renewable energy, matter because they present new avenues to improve productivity and mitigate productivity headwinds.

Australia's abundant sources of renewable energy, including wind and solar, create an opportunity to become a renewable energy superpower. Cheaper energy, efficiency improvements and circular economy measures to reduce carbon emissions will unlock opportunities to produce more from less. New industries that are central to the net zero transformation, such as green metals and critical minerals, present new opportunities to add value and diversify. By promoting competition, innovation and dynamism through the net zero transformation, Australia can use this historic economic shift to lift productivity across sectors. The Government is investing more than \$40 billion to realise our ambition to become a renewable energy superpower.

The net zero transformation will require significant investment in physical capital. Getting this right can support Australia's energy sector to catch-up to the global productivity frontier. The Government has provided the policy clarity industry needs to invest by legislating its commitment to a 43 per cent emissions reduction by 2030, reforming the Safeguard Mechanism and taking action to ensure the integrity of Australian Carbon Credit Units. We are also working closely with state and territory

governments to ensure regulatory barriers and planning requirements are well coordinated and do not add unnecessary delays in critical investments. The Government is introducing internationally aligned requirements for large companies and financial institutions to make consistent and comparable climate-related financial disclosures designed to support institutional investment in the net zero transformation. Later this year the Government will also consult on a Sustainable Finance Strategy to reduce barriers to investment and increase the transparency and credibility of Australia's sustainable finance markets.

The physical impacts of climate change will present some headwinds to productivity growth. Effective action to mitigate emissions and, where necessary, to adapt to higher temperatures and build resilience, will have a significant impact on Australia's productivity potential. Supporting innovation and diffusion, such as the development of climate-smart agricultural goods, will play an important role in mitigating these impacts. By investing in improved disaster resilience, such as early flood warning systems, and developing a National Climate Adaptation Plan, the Government is increasing Australia's resilience to floods, bushfires and other extreme weather events, and improving communities' ability to recover.

The potential productivity gains associated with the net zero transformation can only be achieved if these projects have the workforce available in the right locations with the right skills. The Government is working on a number of fronts to ensure that the workforce planning required is in place. JSA will help us understand what skills are required through its Clean Energy Capacity study, and the Government is establishing the Net Zero Authority to help coordinate the transformation and support workers into alternative employment opportunities. The Government will coordinate efforts with states and territories through the National Energy Transformation Partnership and delivery of the National Energy Workforce Strategy, which will focus on both energy generation and energy demand workforces. To support the upskilling and reskilling required to achieve the net zero transformation in the most productivity-enhancing way, the Government is supporting new and innovative tertiary education programs such as the establishment of TAFE Centres of Excellence.

These priority areas are discussed in greater detail in the sections on Modernising industry and regional policy, Planning for our future workforce, and Investing in skills, tertiary education and lifelong learning.

Embedding the fundamentals for secure, well-paid jobs

A more inclusive, fair and productive labour market is key to achieving our objectives for full employment and wage growth. Reigniting productivity growth through our five pillar agenda will contribute to sustainably lifting wage growth. We are improving equity in our labour market, including through reducing the gender pay gap, advocating for our lowest paid workers, promoting job security and preventing mistreatment of employees, including the exploitation of migrant workers.

Supporting the lowest paid and job security

The Government has taken action to support Australia's lowest paid workers through its submissions to the Fair Work Commission's (FWC) Annual Wage Review (AWR). The 2023 AWR decision to increase the National Minimum Wage by 8.6 per cent and increase Modern Award wages by 5.75 per cent resulted in the largest annual increases in history. The Government has also supported the largest ever increase to award minimum wages, where the FWC provided an interim increase of 15 per cent to award minimum wages for many aged care workers.



The Secure Jobs, Better Pay Act amended the *Fair Work Act 2009* (Fair Work Act) to add the principles of job security and gender equality in the FWC's decision-making processes. The Secure Jobs, Better Pay amendments to the Fair Work Act also included limits on the use of fixed term contracts for the same role (from 6 December 2023), to improve employees' job security. The Government's reforms to the Fair Work Act have also reinvigorated bargaining.

The Government is making the definition of casual employment fairer so the practical reality of the employment relationship is relevant and create a new pathway to permanency for casual employees if they are working like a permanent worker.

The Government is also leading by example on job security, preferencing direct employment in aged care and will examine the drivers of insecure work and other aspects of job design and use stewardship levers to incentivise more secure and fairly paid jobs for workers.

Addressing wage underpayment

Underpayment harms workers and forces businesses that follow the law to compete with businesses that have an unfair advantage. Underpayment particularly affects workers with lower bargaining power, including young workers, migrant workers and people with disability.

The Government is taking action to drive behavioural change, prevent underpayments, and ensure workers receive their lawful entitlements. The Secure Jobs, Better Pay Act implemented recommendation 4 of the Migrant Workers' Taskforce by amending the Fair Work Act to prohibit job advertisements that include rates of pay that would breach the Fair Work Act. This prohibition reinforces the expectation that employers consider their workplace obligations, including correct rates of pay, before advertising employment. The Government will continue to address migrant worker exploitation through the forthcoming Migration Strategy, discussed further in the Reforming the migration system section.

The Government is undertaking a review of the Fair Work Act small claims procedure, to determine what enhancements could be made to enable workers to more easily recover their unpaid entitlements. The Government has also committed to better regulating labour hire arrangements to protect workers from exploitation, promote compliance with relevant laws and drive behavioural change in the labour hire industry.

The Government has introduced legislation to create a federal criminal offence for intentional wage theft, increase maximum civil penalties for underpayment-related civil remedy provisions in the Fair Work Act, and amend the defence to sham contracting to disincentivise employers from contracting out of paying entitlements to workers who should be classified as employees.

Commitment to gender equality and women's safety in the workplace

The Government's reforms have embedded principles of job security and gender equality in the FWC's decision-making processes. The FWC has commenced research on the occupations and industries where there is gender pay inequity and potential undervaluation of work and qualifications. Findings will be incorporated into future AWR decisions. The Government has also established expert panels for Gender Pay Equity and the Care and Community Sector in the FWC and appointed gender pay equity, anti-discrimination and care and community sector experts to sit on these panels. These initiatives ensure the FWC has the expertise to appropriately address gender-based undervaluation and help improve pay and conditions in low-paid, feminised workforces.

In efforts to promote accountability and narrow the gender pay gap, the Government has passed reforms to the *Workplace Gender Equality Act 2012* to improve the transparency of gender pay gaps.

From early 2024, the Workplace Gender Equality Agency will publish the gender pay gaps of eligible employers with 100 or more employees.

At the Government's request, the FWC has started a targeted review of modern awards. The FWC will, as part of the review, consider modern awards settings in the context of the new job security and gender equality objects in the Fair Work Act. The review will include research on the impact of modern awards on work and care and explore opportunities to make awards easier to use and more accessible.

The Government has also committed to implementing all the recommendations of the Respect@Work Report. We have already implemented the recommendation to strengthen the Respect@Work Council by giving business and unions a permanent seat at the table, along with government and civil society. Key legislative reforms passed last year included the introduction of a positive duty in the Sex Discrimination Act 1984 requiring employers to take reasonable and proportionate measures to eliminate sexual harassment and an express prohibition on sexual harassment in connection with work in the Fair Work Act.

These actions align with the Government's broader approach to gender equality discussed in the section on Reducing barriers to work.

An evolving system in a changing labour market

The Government is focused on updating Australia's workplace relations system to reflect the changing nature of work, including the evolving role of the gig economy and the use of labour hire.

The Fair Work Legislation Amendment (Closing Loopholes) Bill 2023 will improve the workplace relations system, to provide greater certainty, fairness and a level playing field for both business and workers. It is closing loopholes that undermine wages and conditions, including job security. These reforms would also prevent the use of labour hire from undercutting bargained wages in enterprise agreements, and criminalise intentional wage theft.

The reforms will also modernise how employment standards apply to the gig economy by giving the FWC jurisdiction to set minimum standards for some employee-like workers who perform work through digital labour platforms. Currently, gig economy workers are generally engaged as independent contractors, so employee protections such as the National Employment Standards and minimum wages do not apply. The reforms give the FWC the ability to set appropriate minimum standards, which could include payment terms, deductions, working time and insurance. The reforms will also allow some digital labour platforms to voluntarily make collective agreements with registered organisations representing employee-like workers, and provide protections for employee-like workers against unfair deactivation from a digital labour platform.

These reforms acknowledge the legitimacy and ongoing value of the gig economy. They do not convert gig workers to 'employees' of platforms or add requirements that undermine the flexible nature of this work, such as setting rostering or overtime requirements. Instead, they recognise the evolution of forms of work and allow core workplace relations practices, including bargaining, to apply in appropriate ways.

Reforms to labour market institutions and frameworks set the foundations for more secure, well-paid jobs, and form a part of a broader strategy set out in the remainder of this Roadmap.

2 Modernising industry and regional policy

Table R.2 Actions to modernise industry and regional policy

Implemented

Set national priorities

- Legislated emissions reduction targets of 43 per cent by 2030 and net zero by 2050
- Defined seven national priority areas through the National Reconstruction Fund, ranging from value-add in resources to medical science
- Established the Critical Technologies List, including AI, quantum, robotics, advanced manufacturing, clean energy tech and biotechnology
- Introduced the Regional Investment Framework to ensure investments are delivering for regions
- Established the National Energy
 Transformation Partnership and
 National Transformation Principles
 with states and territories to
 coordinate the renewable energy
 and broader net zero transition
- Established the National Cyber Security Coordinator
- Made targeted investments in priority areas, including \$100 million equity investment in the Australian Made Battery precinct
- Established Music Australia and Creative Workplaces, and delivered a National Cultural Policy

Underway

Coordinating strategic investment

- Convening investor roundtables to unlock investment in priority areas
- Investing in net zero through initiatives like the Capacity Investment Scheme
- Establishing a Sustainable Finance
 Strategy to attract green finance
- Rebuilding capabilities through the National Reconstruction Fund and the Industry Growth Program
- Refreshing Australia's National Science and Research Priorities
- Developing strategies for AI and cyber security
- Delivering the Buy Australian Plan
- Supporting Australia's transition to a circular economy by 2030

Investing in modern infrastructure

- \$120 billion infrastructure pipeline focused on improving productivity, supply chains and economic growth
- \$20 billion Rewiring the Nation to modernise our electricity grid
- \$1.1 billion Better Connectivity
 Plan to boost digital foundations
- \$4 billion in Northern Australia
 Infrastructure Facility
- \$1 billion in the Growing Regions and Regional Precincts and Partnerships Program
- Delivering a mission-based approach to innovation through \$3.4 billion Defence Advanced Strategic Capabilities Accelerator
- Strengthening biosecurity and disaster resilience systems

Future reform directions

Back people, regions and industries

- Invest in people, their mobility and adaptability
- Invest in places, especially through periods of transition
- Broaden and deepen Australia's industrial base, including through the Critical Minerals Strategy and National Battery Strategy

Become a renewable energy superpower

- Set strong foundations for a net zero economy, including through sectoral decarbonisation plans
- Realise net zero industrial opportunities
- Provide strategic coordination through the Net Zero Authority

Promote tech adoption

- Support businesses to adopt technologies
- Foster an innovative science and technology sector
- Build trust and certainty in technologies, including by developing responsible AI guardrails and cyber security capabilities
- Improve access to digital skills

A broader and deeper industrial base will increase national resilience and build capacity for people to adapt to change. Significant forces, including the net zero transformation and the fragmentation of supply chains, present both challenges and opportunities for our economy. Sound and coordinated industry and regional policy, combined with a strong enabling environment, policy certainty and leadership, will position Australia's industrial base for the future. This will support our vision for a

dynamic and inclusive labour market in which everyone has the opportunity for secure, fairly paid work and people, businesses and communities can be beneficiaries of change and thrive.

The Government has made significant progress in defining a clear vision for Australia's industrial and regional potential. We are laying the foundations to realise this potential through the National Reconstruction Fund, Industry Growth Program and the Net Zero Authority. Through our ambitions for a future where more is made in Australia, we have invested in regional foundations such as the NBN, and over \$40 billion across over 50 policies and measures in our plan for becoming a renewable energy superpower. We are putting regions and their people at the centre of decision-making which is formalised through the Regional Investment Framework. We are supporting people through economic transformation, equipping our workforce to benefit from productivity-enhancing technologies, and expanding access to critical and emerging technologies. This will create opportunities across our nation, increase our productivity, and support our decarbonisation ambitions.

The Government is taking a coordinated and strategic approach to industry and regional policy. We are bringing a clearer perspective on the role of Government: promoting and crowding-in investment, supporting commercialisation and innovation, modernising national infrastructure, and enabling place-based solutions.

The Government's approach recognises that tailored industry and regional policies have an important national role when:

- There are significant opportunities to build Australia's future prosperity. Industry policy should be aligned with areas where Australia is likely to have a sustained comparative advantage. Investments should support long-term fiscal sustainability and advance clearly defined and articulated goals. Broad policy levers including signalling, coordinating and crowding-in private investment can support addressing externalities and investment in public goods.
- There are critical risks arising in our economy that markets alone cannot solve. In recent decades globalisation has underpinned substantial economic efficiency gains for Australia and the global economy. However, it has also increased our economic vulnerabilities in some areas. Building resilience to critical risks will ensure our economy can continue to function under a range of adverse scenarios. The Government will take a national perspective in assessing these risks and ensuring they are appropriately and proportionately mitigated.

Backing people, regions and industries through transitions

The Government is empowering people and regions to adapt to change and take advantage of opportunities. In many cases, providing equitable access to government services and building adaptive systems will help people manage changes in employment opportunities. However, targeted assistance may be required to support regions through periods of structural change where:

- There are concentrated costs to transformation, but widely shared benefits. In these cases, the Government should act to ensure these costs do not fall solely on the impacted communities. This recognises that equitable and fair policies work in the national interest to promote social cohesion.
- There is a risk of disadvantage becoming entrenched. Closure of a main employer has the potential to contribute to entrenched disadvantage within a community. While the states and territories have primary responsibility for regional development, Commonwealth support should be coordinated across governments, to make investments work better for regions. Where appropriate, consideration should also be given to the use of place-based approaches.



In line with this approach, the Government is investing in people to help them adapt to new opportunities in a changing economy, and investing in places to promote the ongoing development of diverse and vibrant local economies, including supporting the growth of low-emissions industries in regions with emissions-intensive industries.

Investing in people

The rising prominence of Australia's services-oriented economy means we are reconsidering how we invest for future productivity and growth — investing in people and their human capital is the best way to help them prosper through change. We are investing in people's skills, training and education by supporting access to high-quality regional education opportunities, including through establishing up to a further 20 Regional University Study Hubs. This will enable students in rural, regional and remote Australia to complete higher education within their own community. We are also supporting worker mobility, by improving the supply of social and affordable housing through the Housing Australia Future Fund, as well as establishing a permanent National Housing Supply and Affordability Council.

Responsive policy is fundamental to help people adapt to change. Tailored and evidence-based employment services represent an investment in our workforce's potential. Significant disruptions to employment may warrant a more active response – as the net zero transformation takes place, the Government's employment services system can offer additional services through periods of concentrated change. As discussed further in the Partnering with communities section, we are taking a place-based approach and partnering with communities, and collaborating across governments, employers, and workers to tailor our response to support people's potential.

Investing in places

The Government recognises that strong connections to place and community are a source of stability through periods of change. The Government's Regional Investment Framework is taking a place-based approach to boosting regional adaptive capacity that reflects each region's specific circumstances and needs. The Government is attracting capital and businesses to support transitioning regions. The Powering the Regions Fund is supporting regional Australia to reduce emissions in existing industries, foster new clean energy industries, and develop associated workforces.

Going forward, the Government's approach to place-based support will have a focus on being timely and targeted, and tailored to the specific challenges being faced. Government is working closely with communities to understand regional priorities. Through \$1.35 billion in investment in community and economic infrastructure, the Government is investing in places to unlock productivity, create jobs and improve liveability. We are working towards a national approach to cities, suburbs and regions, which will be formalised through the National Urban Policy. Every community in Australia will be able to apply for grants, either through the Growing Regions or Thriving Suburbs programs for funding that supports their region's strategic priorities. In addition, processes such as the refresh of the White Paper on Developing Northern Australia is a 20-year plan for investment and collaborative support to unlock the strategic potential of Northern Australia and underpin the Northern Australia Action Plan. The Government is also working in partnership to expand economic opportunities for Aboriginal and Torres Strait Islander communities, as discussed in the Partnering with communities section.

Our approach will be evidence-based, proportionate, and leverage existing mechanisms where possible, including cooperation with all levels of government and affected businesses. The Government's response to the independent strategic review of the Infrastructure Investment Program will ensure it is focused on projects which improve long term productivity, supply chains and economic growth. For example, investment in high-speed rail could support regions such as the Hunter

realise productivity gains. Achieving these goals will require ongoing assessment to ensure industry support represents value-for-money. Businesses and industries that are viable in the long-term without subsidies are an important element of thriving regions.

Investing in industry

The Government is acting to broaden and deepen our industrial base, investing in capabilities critical to Australia's future.

The \$15 billion National Reconstruction Fund will provide finance to projects to leverage Australia's natural and competitive strengths in the following priority areas: renewables and low emission technologies; medical science; transport; value-add in the agriculture, forestry and fisheries sectors; value-add in resources; defence capability; and enabling capabilities. This includes up to \$1 billion for advanced manufacturing. In addition, the new Industry Growth Program will support innovative small and medium businesses take advantage of opportunities in National Reconstruction Fund priority areas. Together these programs will diversify and transform Australian industry, create secure, well-paid jobs, and boost sovereign capability.

We are taking a mission-based approach to investing in the technologies and the innovation needed for our national security, as identified by the Defence Strategic Review. To support our national security capabilities, the Government is providing \$3.4 billion over 10 years from 2023–24 through the Advanced Strategic Capabilities Accelerator to lift capacity to rapidly translate disruptive new technologies into defence capability. Close partnership with Australian industry, research, and government partners will support our innovation ecosystem.

The Government is taking a more strategic approach to invest in and support priority areas. Recognising the importance of the arts, entertainment and cultural sector to our economic and social fabric, the Government is supporting Creative Australia to revive arts in Australia. Creative Australia is supporting the delivery of National Cultural Policy — Revive. The Government is also investing \$1 billion in biosecurity over the next four years from 2023–24, to support our farmers and safeguard our agricultural industry. We are providing funding to improve Australia's resilience to natural disasters, including by uplifting capacity of the National Emergency Management Agency. Other investments in areas of strategic importance include our Critical Minerals Strategy 2023–2030 and our forthcoming National Battery Strategy.

Becoming a renewable energy superpower

Australia's renewable energy resources, abundant and valuable raw materials, skilled workforce, and geographic proximity to other inputs and key destination markets provides a unique opportunity to become a renewable energy superpower. This economic opportunity will support jobs growth, especially in regions that have traditionally powered Australia, and can support improvements in productivity across the economy. The Government has a plan to realise Australia's renewable energy potential, focused on taking a strategic approach to decarbonising existing industries, being deliberate about building new comparative advantages and facilitating coordination across governments, investors, industries and communities.



Foundations for a net zero economy

The Government has set out clear goals for decarbonising Australia's economy. We have legislated our commitment to reduce emissions by 43 per cent below 2005 levels by 2030, and to reach net zero emissions by 2050. We have reformed the Safeguard Mechanism to provide clarity on emissions pathways for heavy emitters. We have set a target of 82 per cent renewables for electricity generation by 2030. We have completed an Independent Review of Australian Carbon Credit Units to ensure the integrity of carbon credits and enable efficient abatement across the economy, and support all recommendations in principle. We are delivering on our Nature Positive Plan for a nature positive economy and creating more environmentally sustainable jobs, including by establishing Environment Protection Australia and Environment Information Australia.

Over the next year, the Government will define a clear pathway to net zero, by developing six sectoral decarbonisation plans, collectively covering the entire economy. This will be the most significant effort to identify clear industry decarbonisation pathways and growth opportunities in Australia. It will require investments in clean energy infrastructure and technologies. Partnership and collaboration are a feature of our approach — we will work with unions, First Nations communities, and academia, alongside states and territories to ensure a coherent national vision. Through this process, actionable sectoral plans will be produced outlining pathways to decarbonise each sector of the economy:

- Electricity and energy
- Industry
- Resources
- The built environment
- Agriculture and land
- Transport

The sectoral plans will inform decarbonisation efforts, ensuring Australia's plan to reach net zero is practical, efficient and coordinated. Sectoral plans will complement actions being taken to implement Australia's Nature Positive Plan, which includes establishing a nature repair market which will make it easier for businesses and individuals to invest in nature.

By developing a clear, shared pathway to net zero, the Government is providing business and investors with the information needed to invest in Australia's low-carbon industrial potential. Australia's sustainable finance taxonomy, being developed in partnership with industry, will provide credible and consistent definitions for green finance. Actions under the Government's Sustainable Finance Strategy, like the issuance of Green Bonds and the introduction of mandatory climate risk disclosures, will attract further green investment capital to invest in Australia's net zero transformation.

Realising net zero industrial opportunities

The net zero transformation is creating new opportunities to broaden and deepen Australia's industrial base. Our strategic and disciplined approach to industry policy recognises the importance of investing in shared infrastructure, diffusing new innovations and creating a good business environment with the right regulatory settings to enable businesses to seize new opportunities.

The Government has already invested more than \$40 billion in our plan to make Australia a renewable energy superpower, covering over 50 policies and measures. This includes significant investments in transmission infrastructure, de-risking investment in firmed renewables and storage through the Capacity Investment Scheme, and supporting diffusion of clean energy technologies through the

Australian Renewable Energy Agency. We are also modernising environmental approvals to quicken the decarbonisation of our economy.

Australia has grown the geostrategic and economic footprint of our critical minerals sector by becoming a globally significant producer of raw and processed critical minerals. The Critical Minerals Strategy 2023–2030 will guide development of our critical minerals sector to help become a renewable energy superpower. The Strategy looks to unlock our vast potential as a major supplier of the critical minerals needed to decarbonise the global economy. Australia's critical minerals sector will help the world decarbonise, including enabling Australia to reach our net zero ambitions.

Going forward, the Government is focused on realising the synergies emerging between industrial, environmental and geostrategic objectives. Where abundant renewable energy can underpin sustained comparative advantage in the longer term for some new and emerging industries, targeted investments in developing these industries may be warranted. For example, green hydrogen is a critical input to decarbonising key industrial processes and Australia and its trading partners are expected to have significant demand for this new product. Through the Hydrogen Headstart program and the Guarantee of Origin scheme — which will certify the emissions embodied in energy-intensive exports, the Government is accelerating the development of Australia's hydrogen industry and positioning it to play a key role in global supply chains. The Government is also looking ahead through the Future Gas Strategy to ensure the gas industry is positioned to support Australia's energy system to reach 82 per cent renewables by 2030, while maintaining our international reputation as a trusted energy supplier to our longstanding trading partners.

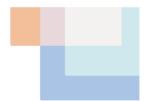
Improving the resilience of supply chains is at the centre of this approach to de-risking without de-coupling. There is scope to add more value to Australian resources and improve linkages between existing industries, such as the collaboration between Australian battery manufacturers and critical minerals producers which will be supported by the Powering Australia Industry Growth Centre. Through new preferential deals like the Climate, Critical Minerals and Clean Energy Transformation Compact with the United States and initiatives like the Critical Minerals International Partnerships program, the Government is ensuring Australians are the beneficiaries of the significant investments being made in the net zero transformation internationally.

Strategic coordination

Coordinated action across regions, industries, investors, workers, communities and governments is necessary to fully realise net zero opportunities. Some groups may need additional support to take advantage of the net zero transformation. This is why the Government is establishing the independent Net Zero Authority to:

- help investors and companies engage with net zero transformation opportunities
- coordinate programs and policies across government to support regions and communities to attract and take advantage of new clean energy industries and set those industries up for success
- support workers in emissions-intensive sectors to access new employment, skills and support.

This will include a focus on regions and industries that have traditionally powered Australia's economy, and working to ensure that as traditional industries adapt and transform, new industries are coming online, and workers, communities and regions are supported through change.



Promoting tech adoption

Technology can support workers to move into higher productivity tasks and jobs, including in sectors where there are already persistent shortages. Driving adoption of technology is the key to unlocking productivity and increasing wage growth – 98 per cent of Australian businesses rely on adoption of established technologies and practices for productivity improvements. Yet on average the pace at which Australian firms adopt cutting-edge technologies appears to have slowed since the early 2000s. Increasing technological adoption will require trust and certainty in new and emerging technologies, and investing in digital as a foundation skill throughout our education and training systems is needed. These are core principles that set out the Government's approach to reaching our target of 1.2 million people in tech-related jobs by 2030.

Supporting businesses to adopt technologies

Governments can support greater technology adoption through supportive business settings, encouraging the growth of innovative firms and creating a competitive environment. Businesses will need to upskill staff and adopt new processes and technologies, including investing in improving managerial capability. The Government is increasing awareness of technology use cases, from building digital foundation skills to increased engagement with emerging technologies and their applications.

The Government is providing an enabling environment to support businesses to invest in the technologies needed for the 21st century. We are providing over \$100 million to support the development of critical technologies in Australia. This includes supporting the National AI Centre in its role in supporting responsible AI usage through developing governance and industry capabilities. We are also committed to government as an exemplar for the adoption of new technologies, including through initiatives like a whole-of-government AI taskforce supporting public sector capability building.

Fostering an innovative science and technology sector

Alongside supporting businesses adopting new technologies, the Government recognises the importance of a flourishing science and technology sector to future economic growth and new job creation. For example, advances in biotechnology and clean energy research and commercialisation can underpin Australia's future geographic competitiveness as the world transitions to a net zero future and will generate new kinds of employment prospects for Australians. Science education and training initiatives, as well as producing scientists, support the development of critical thinking, problem-solving and technical skills that are transferrable across industries. The Government is revitalising Australia's National Science and Research Priorities and National Science Statement to connect science and innovation with helping solve the nation's pressing challenges.

Building trust and certainty in technologies

The Government is supporting greater adoption of technologies by increasing trust and security in them. We have released a consultation paper on safe and responsible AI, as a part of ensuring that our economic and regulatory settings are well positioned to take advantage of the productivity enhancing potential of this technology in a safe, trusted, and responsible manner. The Government is taking action to address increasing cyber risks in our economy. We are investing to support and uplift cyber capabilities in Australia, including by establishing the Coordinator for Cyber Security, and supporting small businesses build in-house capability to protect against cyber threats.

Improving access to digital skills

The Government is supporting the workforce to adopt and adapt to new technologies by supporting expanded access to digital skills. Supporting workers to develop sufficient baseline skills, including in digital skills, is fundamental to our approach, and will help people to participate to their fullest in the labour market. The Government is delivering incentives to support small and medium businesses train and upskill employees and boost their digital and tech capacity through a \$1.5 billion Technology Investment Boost and the Skills and Training Boost. This will support up to 3.8 million businesses to invest in training employees to be more productive and ready for an increasingly digitalised economy.

3 Planning for our future workforce

Table R.3 Actions to plan for our future workforce

Implemented

Leveraged workforce planning

- Established Jobs and Skills
 Australia and 10 new,
 industry-specific tripartite Jobs
 and Skills Councils
- Launched the National Teacher Workforce Action Plan
- Established a tripartite Agricultural Workforce Working Group
- Instituted a new annual Jobs and Skills Report by Jobs and Skills Australia

Targeted workforce shortages

- Delivered around 215,000
 Fee-Free TAFE enrolments with the states and territories in areas of skills shortage
- Established an Industry Labour Agreement for Aged Care
- Expanded the Australian Apprentice Support Loans to non-trade priority occupations
- Invested in workforce skills and training measures for the early childhood education and care sector
- Funded an interim 15 per cent pay increase for aged care workers to attract and retain staff in the sector

Underway

Tailoring industry specific solutions

- Developing a National Strategy for the Care and Support Economy, with an early focus on our regulatory settings
- Working towards 1.2 million tech-related jobs by 2030
- Delivering a further 300,000
 Fee-Free TAFE places in areas of skills shortage from 2024
- Implementing the APS Digital Traineeship Program
- Funding up to 20 nationally competitive PhD scholarships through the Next Generation Quantum Graduates Program
- Attracting and training home-grown, job-ready Al specialists through the Next Generation Al Graduates program
- Developing a South Australian Defence Industry Workforce and Skills Plan
- Reviewing the National Freight and Supply Chain Strategy

Building our labour market evidence base

- Undertaking a National Study of Adult Literacy, Numeracy and Digital Skills
- Updating the Australian and New Zealand Standard Classification of Occupations to reflect modern technologies and roles

Future reform directions

Coordinate skill priorities and policies

- Introduce a single consolidated occupation list for temporary skilled migration
- Embed joint stewardship of the VET sector with states and territories to better identify and train students in areas of national priorities
- Promote innovation in qualifications and lifelong learning to ensure our ability to meet industry needs

Plan for the care and support economy

 Build capacity and steward the care economy market and workforce as a whole, to deliver quality care and support with quality jobs

Grow our workforce to support the net zero transformation

- Identify skill needs through the Clean Energy Capacity Study
- Plan our energy workforce through the National Energy Workforce Strategy

Expand our digital skills base

- Partner with industry to improve pathways into tech careers
- Develop targeted strategies for priority areas, including AI, robotics and cyber security

Meeting demand for Australia's changing skills needs will be crucial for future productivity growth and labour force participation. Better identifying future trends will better equip workers with the skills and capabilities they need in the workplaces of the future, particularly in growing areas of the economy such as care, net zero and digital, set out in Figure R.2, as well as for meeting other objectives such as building enough housing. Workforce planning will help governments, industry, education and training providers and people prepare and adapt to these changes and unlock the potential of our workforce.

Education and training systems need to equip young people with skills for the future and facilitate targeted investments in upskilling for people who are already working. They must also consider the barriers that lead to gender segregation in key industries and workforces of the future.

Changes in wages are not always an effective signal of which skills and occupations will be in demand, particularly in emerging sectors. Without workforce planning, it is more difficult for workers and education and training systems to predict and respond to future skill needs (Broadening access to foundation skill section). Tailored, industry-specific solutions may be required.

Fostering collaboration between business, unions, governments and education providers is crucial to navigate workforce shortages more effectively. The establishment of Jobs and Skills Australia (JSA) has created a forum for planning for future workforce needs and coordinating skills priorities across policy areas. JSA brings together perspectives from educators, industry, and workers, to inform development of targeted strategies to address acute skills shortages. JSA is building world-class expertise in workforce planning, 'now-casting' employment by region and occupation each month, integrating data and analysis with industry intelligence, and considering education planning alongside workforce attraction and utilisation.

Figure R.2 Forces shaping the labour market



Transformation to net zero

The **clean energy supply** workforce is projected to increase by around **127%** by 2033.



Digitalisation of the economy

Australia's **digital and technology** workforce is projected to grow by around **21%** by 2033.



Growing care economy

The **care and support** economy is forecast to grow by **22%** by 2033.

Leveraging this new institution, the Government is developing tailored responses to industry challenges. We have established 10 Jobs and Skills Councils (JSCs) across industry sectors. JSA will work in partnership with the JSCs which are adopting the same collaborative tripartite approach to workforce planning. The Government will embed a more strategic approach to workplace planning, linking JSA and JSC guidance on skills priorities into key policy choices across the VET, higher education and migration systems. In addition to this cross-cutting investment in making responsive systems, we are developing tailored solutions to acute shortages, such as in the care and support economy.

Coordinating skill priorities and policies

To meet Australia's rapidly evolving skills needs, we are aligning Australia's skills system to be more responsive to economic priorities. Decisions made across the VET, higher education and migration systems, including the location and availability of courses, the introduction of a new occupation list for

i Further details on projections are in Chapter 5.



the migration system and accreditation processes, all influence the skills developed. Better coordination and alignment across these policy settings would improve Australia's ability to fill skills needs.

A responsive skills system requires targeted and holistic solutions to acute shortages. Pronounced workforce shortages require a focus on attracting workers to the industry, supporting their journey through accessible and tailored education and training, and retaining the skilled and experienced members of the workforce.

JSA is already making a significant impact. A new annual Jobs and Skills Report will bring together detailed analysis and advice on Australia's jobs and skills needs. JSA is undertaking in-depth capacity studies of national significance for the labour market and the national skills system, including a National Study of Adult Literacy, Numeracy and Digital Skills to assess the current foundation skills across Australia, and a Clean Energy Capacity Study to examine the workforce that Australia needs to transition to a clean energy economy. Advice on specific skill needs has informed the Government's workforce actions to date, for example the design and accelerated delivery of Fee-Free TAFE places that was an outcome of the Jobs and Skills Summit.

The Government is progressing other initiatives to assist with workforce planning. JSCs have been established across:

- Energy, Gas and Renewables
- Agribusiness
- Early Educators, Health, and Human Services
- Arts, Personal Services, Retail, Tourism and Hospitality
- Public Safety and Government

- Manufacturing
- Finance, Technology and Business
- Mining and Automotive
- Building, Construction and Property
- Transport and Logistics

These Councils will provide industry with a stronger voice to ensure Australia's education and training systems deliver better outcomes. They bring together employers, unions and governments in a tripartite arrangement to find solutions to skills and workforce challenges. The ABS is updating the Australian and New Zealand Standard Classification of Occupations (ANZSCO) to ensure official skills classifications reflect contemporary technologies and roles.

Advice from JSA on skill needs will be central to policy development. JSA advice is currently informing the Government's approach to reforming the higher education sector (the Universities Accord), government policy for the VET sector (the next National Skills Agreement) and the migration system (through the Migration Strategy). JSA will continue to provide advice on key areas of future demand, such as digital skills and the clean energy workforce. The Government is also formulating a targeted industry strategy to address the current and future needs of the care and support sector. Other policy actions, such as facilitating greater upskilling and reskilling over a person's lifetime, are discussed in the Investing in skills, tertiary education and lifelong learning section.

Planning for the care and support economy

Meeting the rising demand for quality care and support services requires a shift in how we view the sector. To build the supply of workers, improve quality and support productivity and sustainability, we

need to move from a piecemeal approach to one that values the sector as a whole. This must recognise that currently this sector is highly feminised and low paid.

As the care and support economy grows it will have a larger impact on the economy overall. Meeting this demand will require a bigger workforce, equipped with the right skills and tools to support workers to deliver higher quality care. Projected demand across the care and support workforce will increase to around 801,700 workers by 2033, up from around 657,200 workers today. This growth presents significant opportunities for workers to move into the sector and provide the foundations for better care outcomes.

To address immediate skills needs, the Government has established a new Aged Care Industry Labour Agreement to help employers bring in migrant workers to meet critical workforce shortages.

The Government is also growing our long-term workforce. This includes working with states and territories to prioritise enrolments through the National Skills Agreement, as well as improving pay and conditions to reflect the value of this work. The Government delivered the largest ever pay rise to aged care workers. The Government is investing in a National Worker Registration Scheme, which will help professionalise the aged care sector.

The Government is taking action to better understand workforce needs. JSA is developing an early childhood education and care (ECEC) workforce capacity study. This is in addition to investing in the skills and training of more than 80,000 early childhood educators, with a targeted focus on regional and remote services, and Aboriginal and Torres Strait Islander organisations. HumanAbility, the newly established JSC for Early Educators, Health and Human Services, support strengthened career pathways and workforce professionalisation. The Government is also considering how to build a more effective ECEC system through the Productivity Commission inquiry into ECEC and the Australian Competition and Consumer Commission's pricing inquiry.

Harnessing opportunities in the care and support economy requires considering the sector collectively – recognising that changes in one area such as aged or disability care can have flow-on effects for other areas. The Government will release a National Strategy for the Care and Support Economy to realise the three goals that underpin the Government's vision for sector: quality care and support, quality jobs, and that it is productive and sustainable.

The Government is getting the settings right to attract and retain workers, recognising the increasingly professionalised nature of the workforce. Core to building the workforce is supporting quality working conditions and fair wages. The requirement to undertake unpaid practicum placements discourages many students in care and teaching professions from enrolling and completing courses. For example, Diploma of Nursing students must complete a minimum of 400 hours, typically unpaid, in a clinical placement throughout their course (VET sector), Bachelor of Nursing students must complete 800 hours (higher education sector) and Bachelor of Midwifery must complete in excess of 1,000 hours (higher education sector).

The Government will undertake scoping work on approaches to mitigate financial hardship placed on tertiary students completing unpaid mandatory practicum placements as part of studies in care and teaching professions. With the growing need in the care and support workforce, and many NDIS participants and carers expressing a preference to do more formal work, a future priority will be considering how to help interested carers and NDIS participants move into the care and support workforce given their skills and lived experience.

The Government is also supporting increased quality of care by improving productivity in the sector. For example, streamlined worker screening arrangements can reduce time spent on worker screening checks when employees change their employer or work across sectors. Supporting existing workers to



operate at the top of their scope of practice could improve productivity and deliver quality care. Improving productivity extends to ensuring regulation and funding are fit for purpose. This requires better evaluating and understand how the markets are operating. JSA will play a central role in providing independent advice on workforce topics, including the care and support workforce.

Growing our workforce to support the net zero transformation

Achieving Australia's legislated target of net zero by 2050 will require systematic effort to expand our workforce. While a range of roles and sectors will need to grow, expanding the supply of workers involved in generation, transmission and storage of renewable energy sources will be critical. Deloitte projections for JSA show that the occupations key to the clean energy workforce will need to increase by around 30 per cent by 2033 to deliver the net zero transition. This represents an increase of 213,000 workers. It is likely there will need to be a 127 per cent increase in the clean energy supply workforce alone. The competition across the world for specialised skill sets in clean energy is increasing so we need to plan.

The Government has already started to make focused investments in developing the workforce needed for the net zero transformation. We are supporting the next generation of workers into the clean energy sector and have committed to delivering 10,000 New Energy Apprentices. This is providing direct financial assistance to apprentices in the clean energy sector, incentivising for example more civil engineering technicians, electrical line workers, general electricians and metal fabricators.

Transforming our economy and our energy systems to net zero requires a systematic and sustained effort to scale up our clean energy workforce. Facilitating pathways into the sector needs to harness the breadth and depth of policies available. This will require reskilling and upskilling workers, broadening the pool of workers we hire from to consider more diverse candidates, and broadening where we hire from to attract experts from around the world. The JSA Clean Energy Capacity Study will map out the workforce requirements, outline the workforce pathways and make recommendations on the policies required to get us there.

Building on the JSA study, the Government is working to develop workforce pathways to increase the pipeline of workers in the sector. We are developing the National Energy Workforce Strategy to be released by the end of 2024. The Strategy will seek to address key challenges for the energy workforce, including attracting and retaining workers, ensuring productive quality careers in energy supply and demand sectors, and improving coordination between the Australian, state and territory governments. The Government will also work with the newly established JSC for the energy sectors, Powering Skills Organisation, to leverage their insight on addressing skills and workforce challenges in the energy sector.

In addition, the Government has formalised its commitment to gender equality in the clean energy transition by signing up to the equal pay, equal leadership and equal opportunity objectives of the global Equal by 30 campaign. This involves working to close the gender gap across the Australian clean energy sector, including by creating an Australian Women in Energy Roundtable, working across government agencies to build a Women in Energy Resources Hub, and expanding engagement across domestic and international forums within the energy sector by championing diversity and gender equality.

ii JSA defines the clean energy supply workforce as the workers whose employment relates directly to the generation of renewable energy and including hydro-electricity generation, hydrogen, offshore wind generation, wind generation and solar generation.

Expanding our digital skills base

Our economy is becoming increasingly digital and more workers need to perform tech-related tasks. We need to uplift foundation digital skills across our workforce and expand the supply of workers with specialist digital skills in our economy. Victoria University projections for JSA show tech occupations will grow by 12 per cent over the next five years to 2028, and by around 21 per cent over the 10 years to 2033. Tech-related shortages are spread across the economy and are not constrained to one sector, making it challenging to address in a targeted manner. Achieving the Government's goal of 1.2 million tech-related jobs by 2030 will require a broad-based approach and better collaboration between industry, the education and training systems and the migration system.

Better coordination, analysis and planning for the tech workforce are vital to unlocking productivity opportunities across the country. The Government has taken a first step in this direction by establishing the Future Skills Organisation, a JSC that covers key areas of the tech industry and works in partnership with JSA to align workforce planning for the tech sector.

A challenge to growing the pipeline of digitally skilled workers is a lack of awareness of technologies and associated jobs. This leads to a lack of diversity and narrows the pool of potential workers. Building stronger and more inclusive foundations in science and technology will better equip workers for the modern job market. Women, older Australians and regional Australians are under-represented in digital jobs. Ensuring training and pathways into tech jobs are fit for purpose will help increase the diversity of workers coming into the sector.

The Government has already taken action to boost training opportunities. Technology and digital skills courses are a core part of the Government's Fee-Free TAFE places delivered in 2023, with more than 16,700 technology and digital enrolments in the first half of 2023. The Government is also leading the way in relation to its own workforce, by introducing the new APS Digital Traineeships Program. The Government's cyber warden program will support small businesses to train more than 50,000 in-house 'cyber wardens' to guard against threats, building small business cyber resilience through an accessible education tool.

The Australian Digital Capability Framework describes the broad digital capabilities required by the Australian workforce. This will create a common language and collaboration on the implementation of digital skills for the VET reform pathways and help build the digital capability of the nation's workforce. Using common, easily understood language, and a simple, intuitive structure, the Framework is helping to align and strengthen a wide variety of efforts to build the digital capability of the nation's workforce.

Greater collaboration across the digital skills ecosystem will be a focus of the Government's future approach. This will enable workers and businesses to harness the opportunities from the growing digital economy. The Government established a Digital and Tech Skills Working Group as a practical mechanism to take forward the compact between Government, unions and employers announced at the Jobs and Skills Summit. The Working Group's final report confirmed that earn while you learn models will be an important part of broader digital and tech skills development efforts to support Australia's rapid technological advancement. The Government is considering the Working Group's advice on design and delivery models.

iii JSA tech occupations do not include tech-related jobs which are included in the Government's commitment to 1.2 million tech-related jobs.

4 Broadening access to foundation skills

Table R.4 Actions to broaden access to foundation skills

Implemented

Made child care cheaper and invested in better outcomes

- Invested \$4.6 billion through the Cheaper Child Care Package to increase Child Care Subsidy rates for families earning up to \$530,000 per annum
- Introduced a base entitlement to 36 hours of Child Care Subsidy per fortnight for Aboriginal and Torres Strait Islander children
- Developed the Early Childhood Care and Development Policy Partnership to improve outcomes for First Nations children

Increased support for students and the teacher workforce

- Expanded the High Achieving Teachers Program
- Reformed NAPLAN to raise the standard and better identify students who need additional support
- Launched the National Teacher Workforce Action Plan

Underway

Making early childhood education and care cheaper, better and more accessible

- Examining child care costs through ACCC inquiry
- Identifying opportunities to improve the early childhood education and care sector through a Productivity Commission inquiry
- Developing an Early Years Strategy to support early learning, wellbeing and development

Building a better, fairer school system

- Undertaking an Expert Panel Review to Inform a Better and Fairer Education System
- Encouraging high-quality candidates to study teaching through scholarships of up to \$40,000 each

Boosting adult foundation skills

- Undertaking a National Study of Adult Literacy, Numeracy and Digital Skills
- Redesigning and broadening eligibility for the Skills for Education and Employment program
- Including foundation skills as a focus area for National Skills Agreement negotiations

Future reform directions

Chart a course to universal early childhood education and care

 New principles in this Roadmap will guide reforms for establishing universal access to early childhood education and care

Improve equity of school outcomes

- Negotiate new National School Reform Agreement to improve equity and student outcomes
- Work with states and territories to have every school on a path to 100 per cent of its fair funding level

Improve access to foundation skills training programs

- Better integrate foundation skills with employment services to help job seekers get the skills they need to improve economic participation outcomes and overcome disadvantage
- Establish new coordinated efforts to lift the foundation skills of Australian adults with states and territories

The Government's aim is to ensure all Australians have the foundation skills they need to participate fully in the labour market and in their community, undertaking activities that many people take for granted. Foundation skills enable participation, build an adaptable workforce, and form the basis for developing specialised skills that make us more productive and engaged. These skills include language, literacy, numeracy, and digital literacy as well as employability skills such as critical thinking, organising, problem solving, creativity, communication and teamwork. Education plays a key role in developing these skills. Through investments in early childhood education and care (ECEC), school and foundation skills programs, we will deliver foundation skills and education to Australians.

More attention on foundation skills development is urgently needed. One in five adult Australians have low literacy skills, numeracy skills or both. NAPLAN testing has shown educational gaps that start early tend to persist or even get worse. These gaps are more difficult to address later in life. Adults who have fallen behind need more support to build their foundation skills. Without action, too many Australians will be left without the skills they need to participate in the future labour market.

The Government's intent is for all Australians to be equipped with adequate foundation skills. This means increasing access to quality ECEC and a renewed focus on improving the quality of student learning outcomes and attainment, including year 12 or equivalent completions. The Government intends to better incorporate foundation skills training within our employment services system, continuing our commitment to ensuring there is 'no wrong door' for foundation skills training.

The Government has made child care more affordable for around 1.2 million families from July 2023. This will allow more children to benefit from quality child care, more parents and unpaid carers to participate in paid work and ease some of the cost-of-living pressures families are facing. The Government has also invested in attracting more and better-prepared teachers to our schools. These are the first steps in making sure our children have strong foundation skills.

Work underway includes major inquiries by the ACCC and PC to explore options for significant reform of the ECEC sector. Work is also underway to develop a new Early Years Strategy. The Review to Inform a Better and Fairer Education System will report on the targets and reforms in the next National School Reform Agreement (NSRA) to drive improvements and support better outcomes for all students. In addition, the Government has been working with states and territories on a new National Skills Agreement with a specific focus on foundation skills.

Going forward, the Government's goal is for people to have access to foundation skills development throughout their lives. The reform pathway seeks to embed foundation skills development within our education system – ECEC and schools through to adult learning – and within the employment services network.

Charting a course to universal early childhood education and care

Expanding access to ECEC is critical to our labour market policy objectives. Quality care and education for children in their early years sets them up for later life achievement and provides a strong basis for learning foundation skills necessary to engage in their community and gain employment. In particular, preschool has been found to support children's cognitive and social development. Expanding access to ECEC supports parents to make the best choices for their families and enables their participation in the labour force.

Expanding access to ECEC is complex. There is a clear need to improve access, particularly for children from disadvantaged backgrounds who stand to benefit the most. Ensuring care is of high quality is also necessary if we are to achieve good outcomes for children. Growing supply in this sector while maintaining quality care environments that nurture children will require a skilled and sustainable workforce that is valued and respected.

The Government has already increased assistance with ECEC fees through changes to the Child Care Subsidy, which has delivered cheaper child care from July 2023. This reform is intended to deliver more affordable ECEC and support parents' workforce participation. In addition, the Government has introduced a base entitlement to 36 hours per fortnight of subsidised care for families with Aboriginal and Torres Strait Islander children, regardless of activity hours or income level. The Government is also working in partnership with First Nations representatives and state and territory governments through the Closing the Gap Early Childhood Care and Development Policy Partnership to guide further reforms to improve access to high-quality and culturally safe ECEC for First Nations children and families.

The Government is building the evidence base on how to achieve its vision for universal ECEC. Through a comprehensive inquiry into Australia's ECEC system, the PC will make recommendations to support affordable, accessible, equitable and high-quality ECEC that reduces barriers to workforce participation



and supports children's learning and development. The Government has also commissioned the ACCC to conduct an inquiry into the market for the supply of child care services. The ACCC inquiry will examine how ECEC costs and prices differ by geographic location, service size, type of operator, and care types.

The Government will use these reviews to underpin policy reforms to deliver high-quality, equitable, affordable, accessible ECEC. The Government's approach to the provision of ECEC is captured in the reform principles on charting a course for universal ECEC (Box R.3) in a fiscally responsible and sustainable manner.

The purpose of these principles is to support the delivery of two benefits. The first is to reduce barriers to work faced by many families. Access to affordable ECEC is vital for supporting labour market participation and ensuring Australians can make the best choices for their families without being unduly influenced by their ability to find care. High-quality ECEC is also part of the Government's broader approach to lifting human capital. A good start in life supports attainment through school and sets up children to succeed. Investment in ECEC is a recognition that building our future labour force starts early in life, with strong foundations.

Box R.3 Universal access to early childhood education and care

The Government is committed to charting the course for universal access to ECEC in Australia that is high-quality, equitable, affordable and accessible in a fiscally responsible and sustainable manner. The education journey starts early. Brain development occurs most quickly in the first 5 years of life, making these years the best opportunity for children to get a positive start. ECEC helps children develop cognitive function, social skills, and emotional health that are fundamental to lifelong learning and achievement throughout life. It also boosts parent and carer engagement in education, training and the workforce, particularly for women.

ECEC, which includes preschool, long day care, family day care and out of school hours care, has significant benefits to child learning and development, helping to break cycles of disadvantage, and providing a foundation for our children's future well-being and success.

An accessible, affordable ECEC system is also a key enabler of workforce participation, especially for women. Barriers to workforce participation are more pronounced for women, who are overrepresented in part-time and casual employment, and twice as likely as men to be working part-time or casually from age 35. Supporting families to access ECEC is integral to Australia's economic prosperity as a powerful lever for increasing workforce participation.

High-quality ECEC requires that services are delivered by a qualified workforce, are culturally inclusive and responsive, and meet standards in providing learning and development outcomes for children to ensure that they are engaged as lifelong learners. A sustainable ECEC workforce who are valued and respected as will be central to maintaining quality ECEC.

An accessible and affordable ECEC system would ensure all families can reasonably access ECEC services regardless of geographical and cultural barriers; and services are flexible enough to meet the differing needs of children, families and communities, including culturally appropriate ECEC for First Nations families. Equitable ECEC will help make sure children have the same opportunity to benefit from ECEC services, regardless of their circumstances or background.

A strong ECEC system which meets these objectives of affordable, accessible, equitable and high quality will deliver outcomes now, and into the future, for Australia's children and their families.

Improving equity of school outcomes

Education is helping all children reach their potential. But while Australia's education system performs well for many students, that is not the case for all. Education outcomes need to be improved across the board, but especially for students in disadvantaged cohorts, including students with disability, who are at higher risk of falling behind.

School outcomes are often strongly linked to socio-economic status – decoupling these links is a critical step in lifting learning and attainment outcomes. Supporting teachers to be effective, supporting the wellbeing that enables students to learn, and evidence-based resources are also essential to achieving these objectives. Seeking to lift education opportunities and achievement for all children and young people is at the core of our plan to lift productivity growth by raising human capital levels across the future workforce.

Supporting teachers to be effective is a precondition to improving student outcomes. The Government is addressing teacher workforce shortages through the National Teacher Workforce Action Plan. This includes investments in additional university places, employment-based pathways and scholarships, and a strong focus on improving the status of the profession. The next NSRA provides a significant opportunity to tie funding to reforms needed to lift student outcomes. Building on efforts to date, the Government will look to drive increased transparency and accountability in school systems to improve the community's visibility of the links between expenditure and educational outcomes and their ability to identify and address areas for improvement. A new NSRA that better targets funding at children most in need will significantly improve equity in educational outcomes and ensure fair opportunities for all children.

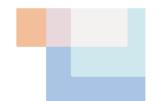
With this in mind, the next NSRA could establish new targets and specific reforms, focused on students who have fallen behind or are at risk of falling behind, underpinned by increased transparency and accountability to support success. The final report of the Review to Inform a Better and Fairer Education System will be provided to Education Ministers by the end of October 2023 and will guide future reform in schools. The development of the next NSRA will reflect the Government's commitment to working with states and territories to have every school on a path to 100 per cent of its fair funding level and lift attainment outcomes for all students, especially those from priority equity cohorts.

Education is central to supporting people to reach their full potential. Going forward, improving the outcomes for all students, regardless of background, will remain a core focus of the Government. Lifting attainment among those Australians who fall behind is one of the biggest opportunities to improve long-term labour market productivity, economic activity and standards of living.

Improving access to foundation skills training programs

Strengthening foundation skills at any stage in life can deliver great benefits to individuals and communities. Improving access to foundation skills for adults will allow them to pursue further learning, boost their employment prospects and participate more fully in the community. Expanding access to all adults, including those experiencing shifts in their industry or job, will help facilitate structural change in the economy while lifting the level of human capital in the workforce.

The Government will deliver stronger and more inclusive foundation skills training through the redesign of the Skills for Education and Employment (SEE) program. Previously, the SEE program was accessible only to registered job seekers, leaving out a large portion of society. From July 2024, the redesigned program will provide more pathways and improve access to foundation skills training for



around 27,000 Australians aged over 15 years and who have left school. Delivery will be through a mix of national and local solutions to broaden access and include specific place-based First Nations-led support for First Nations people. The program will also support projects within workplaces for workers who face insecure work challenges as a result of low foundation skills.

To inform future reform directions, JSA is completing a national Foundation Skills Study. The study will provide up-to-date evidence on the level of foundation skills among Australian adults. It will provide a critical evidence base on the state of foundation skills in Australia and inform how governments can better target support for foundation skill development in adults. This is an example of how the Government intends to use new insights generated by JSA to guide policy.

Delivering robust foundation skills for more Australians requires collaboration between all levels of government and better data to inform policy decisions. The new National Skills Agreement currently being negotiated with states and territories will recognise that increasing access and removing barriers to foundation skills programs is a shared priority of governments and will complement the work to redesign the SEE program. Building on the new Agreement and the JSA Foundation Skills Study, the Government will shape national coordination of practical policies to lift foundation skill levels for adult Australians. This is part of the Government's broader approach to lifting human capital across the workforce, starting in the compulsory education system and continuing throughout people's lives.

All workers should be able to develop through lifelong learning – future reforms will be targeted at improving core foundation skills for all Australians, including through employment services reform to better integrate foundation skills training. Through stronger foundation skills, we will be in a better position to upskill workers in the face of major shifts in the economy, improve labour market dynamism and contribute to productivity growth.

5 Investing in skills, tertiary education and lifelong learning

Table R.5 Actions to invest in skills, tertiary education and lifelong learning

Implemented

Broadened opportunities for people to study in areas of skills shortage

- Expanded the Australian Apprenticeships Priority List
- Delivered around 215,000 Fee-Free TAFE enrolments with the states and territories in areas of skills shortage

Implemented targeted action within the tertiary education sector on priority areas

- Established the TAFE Technology Fund to help TAFEs upgrade and expand their facilities
- Launched New Energy Apprenticeships and the New Energy Skills Program to support workers in new energy industries
- Established Startup Year to support students' participation in startup courses

Developed partnerships with industry

- Supported the new Digital and Tech Skills Compact to grow the tech sector
- Extended the Women in STEM Cadetships and Advanced Apprenticeships program to give women more opportunities to work in STEM careers

Underway

Growing and strengthening Australia's vocational education sector

- Investing an additional \$3.7 billion in a new National Skills Agreement with states and territories
- Delivering a further 300,000 Fee-Free TAFE places in areas of skills shortage from 2024
- Building diversity in apprenticeships and driving completions, including through a new Australian Apprentices Support Services model
- Undertaking a VET Workforce Blueprint
- Turbocharging TAFE Centres of Excellence to fast track their establishment
- Introducing 'higher apprenticeships' to deliver advanced tertiary skills responsive to industry needs

Improving outcomes and broadening access to university

- Developing a Universities Accord
- Delivering 20,000 additional university places for students from under-represented backgrounds
- Delivering an additional 4,000 university places in STEM courses
- Establishing new Regional and Suburban University Study Hubs
- Ceasing the 50 per cent pass rule
- Introducing demand driven university places for all First Nations students

Improving skills recognition

Defining the scope, outcomes and benefits of a National Skills Passport in consultation with industry, unions, tertiary institutions and across government to help people more easily demonstrate their skills to employers and reduce barriers to lifelong learning

Future reform directions

Promote a larger share of Australians studying in areas of high skills need

- Leverage Jobs and Skills Australia to forecast skills needs and guide a responsive tertiary sector to respond to changing demands
- Promote greater participation in tertiary education of under-represented groups, including regional students

Boost collaboration in the tertiary sector

- Develop collaborative institutions including TAFE Centres of Excellence, with focuses on priority areas
- Develop new innovative qualifications, which combine the best of the tertiary education system, like higher apprenticeships

Remove barriers to lifelong learning

- Encourage ongoing learning in the workplace
- Support people to better demonstrate their skills to employers



A high performing tertiary education system, working in a more collaborative and joined-up way, will help the labour market respond to the forces shaping our economy. Australia's labour force will shift towards jobs that require greater levels of skills and knowledge, requiring our tertiary education system to grow. Investment in tertiary education will deliver greater opportunities for workers to undertake education and training throughout their lives. By expanding opportunity and facilitating growth in priority industries, the education and training systems can promote productivity and wage growth and support the achievement of full employment.

The vocational education and training (VET) sector is not perceived as having the same status as higher education, skewing flows into each system. Completion rates for apprenticeships, especially for priority cohorts, are low. There needs to be a more student-centred approach to delivering tertiary education and increased collaboration with industry to ensure there are clear pathways into growing sectors and secure work.

The Government is already addressing these issues by taking a comprehensive approach to tertiary education. We want more people to be studying in areas that provide them with opportunities, so they are best positioned to participate in the labour market. We also want to increase collaboration across the tertiary system, particularly in priority areas and we are working to remove barriers so people are encouraged to continue learning throughout the course of their lives.

Work is already underway to elevate the status of VET and improve the quality of and access to education and training. The Government is delivering Fee-Free TAFE, implementing the Australian Skills Guarantee and negotiating a new five-year National Skills Agreement with the states and territories to address national priorities. Work is also underway to drive greater collaboration between the tertiary sector and industry through the Digital and Tech Skills Compact. The Australian Universities Accord will inform how to better join-up the tertiary sector so it works more cohesively. It will consider the intent of recommendations from the 2019 review of the Australian Qualifications Framework and opportunities to work with education providers, unions and employers to best position the higher education and VET sectors to design innovative, fit-for-purpose qualifications which recognise skills alongside knowledge.

Going forward, more needs to be done to increase the number of Australians studying in areas of high skills need. Better collaboration between all governments, the tertiary sector and industry is needed to manage the forces shaping the economy over the coming years.

Promoting a larger share of Australians studying in areas of high skills need

Tertiary education will need to keep pace with Australia's changing industry composition and the evolving mix of skills required by business. Students need to be informed to better align their interests with strong employment prospects. We need to increase the number of Australians with a tertiary qualification, particularly in the areas that best position them to take advantage of future opportunities. A significant portion of growth in tertiary attainment will need to come from cohorts currently under-represented in tertiary education. Achieving this will require coordinated efforts to address barriers to access and course completion in the tertiary system.

To support these goals, the Government committed to 480,000 Fee-Free TAFE places, with 180,000 to be delivered in 2023 and a further 300,000 to be delivered from 2024. The Government also committed to an additional 20,000 Commonwealth supported places at universities. Both initiatives are targeted in areas of national priority and seek to engage priority groups such as Aboriginal and Torres Strait Islander

Australians and people with disability. In the first six months of Fee-Free TAFE delivery, almost 215,000 Australians enrolled in a Fee-Free course, surpassing the target of 180,000 places. This includes over 51,000 care and support sector enrolments and over 16,700 technology and digital enrolments. Women make up around 60 per cent of these Fee-Free enrolments, and over 50,000 job seekers, more than 15,000 people with disability and more than 6,800 First Nations people have also enrolled in Fee-Free TAFE. The Government is also acting on the five immediate priority actions identified in the Accord Interim Report, which focus on improving access to and experience at university for students from under-represented backgrounds. These include establishing more Regional University Study Hubs and new Suburban University Study hubs and extending demand-driven funding to all First Nations students.

The analysis produced by Jobs and Skills Australia (JSA) will help inform students of the potential labour market outcomes of their qualification choices. To support this, negotiations on the new National Skills Agreement will embed joint stewardship of the VET sector, including collaboration between the Commonwealth and the states and territories to identify areas of national priority and ensure delivery of high-quality, relevant training to students.

In the future, effective student support services and outcomes monitoring are required to ensure we make progress on improving access to and outcomes from tertiary education. Whole-of-tertiary attainment targets are potential avenues to track progress towards lifting post-school educational attainment. A particular focus on apprenticeship completions is needed to ensure we can address longstanding skills shortages in trade occupations. The new Australian Apprentices Support Services model, which will commence in July 2024, will complement the new National Skills Agreement by ensuring more apprentices in priority cohorts have access to specialised mentoring and support.

Better alignment between industry and the tertiary sector is essential if students are to study in the areas of need. Future reforms will be driven by collaboration between stakeholders. The new Jobs and Skills Councils (JSCs) will work with JSA to align effort across industry to improve education and training responsiveness, while the Australian Universities Accord process is a model for a collaborative approach to improving the higher education sector. The principle of working with stakeholders to ensure the tertiary sector is responsive to industry needs is at the centre of ensuring students study in areas with strong future prospects.

Boosting collaboration in the tertiary sector

Strong education and training systems that meet the skills needs of all Australians will need more collaboration between tertiary sectors and industry. This includes collaboration that results in greater innovation in course delivery and in developing new qualifications. Currently, significant barriers such as inconsistent funding arrangements, different regulatory systems, and limited credit transfer, prevent different providers from collaborating with each other and with industry.

The Government has committed to partnering with the states and territories to establish TAFE Centres of Excellence as a flagship model under the new National Skills Agreement. Building on this momentum, the Government is providing additional funding to fast track the establishment of up to six TAFE Centres of Excellence. TAFE is at the heart of VET and will play an important leadership role in reforms to boost collaboration within the tertiary sector and with industry to address some of the critical challenges facing the economy. TAFE Centres of Excellence will enrich students' learning experience through applied research and work directly with industry to respond to immediate and future demand. These new TAFE Centres of Excellence add to a rich and growing ecosystem of innovative tertiary models in Australia – building a strong institutional platform to support the future labour market.



By accelerating the establishment of TAFE Centres of Excellence, the Government will facilitate new innovative models of tertiary collaboration. Employers and workers are demanding a more responsive approach to skills acquisition, with many noting the need for workforce skills to be at increasingly higher levels. Examples of innovative models of teaching and learning are already emerging across the country (discussed in Chapter 5). Universities, TAFEs, JSCs and industry are working together to develop in demand skills, co-design new qualifications, including microcredentials, and address key challenges in the economy. The Government's additional investment into TAFE Centres of Excellence will expedite work to marshal the efforts of industry, universities, and governments to address challenges in the key areas of the net zero, digital transformation, and care and support.

The Government will also collaborate to explore opportunities for new higher apprenticeships. TAFE Centres of Excellence will be instrumental in facilitating this. Higher apprenticeships will combine structured on the job training via apprenticeships with degree-level study and allow students to develop advanced skills in areas such as net zero, care and support, and digital, not offered under existing models. These pathways will also allow learning to be contextualised through on-the-job training so the skills learned are tailored to meet industry needs. Local universities will be key partners with TAFEs to rapidly develop and expand delivery of high-quality courses in these sectors, alongside industry, other VET providers, JSCs and state and territory governments. A future expanded higher education and VET system, adept at providing widely accessible core and higher skills, is at the heart of a responsive tertiary system — one where there is greater achievement by key equity groups, high standards of teaching, and an adaptive training and education curriculum that evolves with the labour market and shifts in the economy.

Removing barriers to lifelong learning

A key role of government in facilitating greater upskilling and reskilling over a person's lifetime is removing barriers, and promoting access, to lifelong learning. The current education and training systems emphasise initial formal education. However, as the nature of work changes more rapidly, people will need to upskill and reskill throughout their lives.

The Government is promoting lifelong learning by helping to build up the microcredentials ecosystem. Microcredentials are short, stackable qualifications that workers can undertake to build their skills portfolio. Uncertainty around the recognition of microcredentials can make it difficult for individuals to demonstrate the skills they have gained to employers, and hard for both parties to verify their quality.

The Government is consulting with industry and across government to define the scope, outcomes and benefits of a National Skills Passport, to reduce barriers to lifelong learning. Stakeholders have long called for the creation of a tool to help Australians demonstrate their qualifications to prospective employers. A skills passport could combine a person's qualifications across VET and higher education to more effectively demonstrate their skills to employers.

The scoping of a National Skills Passport is illustrative of the Government's future focus on encouraging lifelong learning. The Government's approach is to encourage a joined up tertiary system linked to what businesses are looking for, to promote ongoing learning in the workplace. Employers need to be part of this future direction through supporting employees to upskill and access relevant courses. Lifelong learning initiatives are part of a broader suite of measures the Government is taking to smooth the pathway into work, such as cheaper child care, helping people stay in work and aiding continual development across their careers.

6 Reforming the migration system

Table R.6 Actions to reform the migration system

Implemented

Taken action to address backlogs and restore integrity to the visa system

- Accelerated visa processing and reduced visa backlog
- Provided more funding to Australian Border Force to address exploitation
- Raised the Temporary Skilled Migration Income Threshold
- Ended pandemic event measures
- Completed the Rapid Review into the Exploitation of Australia's Visa System

Taken action to address skills shortages

- Extended post-study work rights for students in areas of labour shortage
- Increased the permanent migration planning level in 2022–23, including tripling the places for regional Australia

Put permanency back at the heart of the migration system

- Provided a pathway to permanent residency for all temporary skilled visa holders
- Introduced a direct pathway to citizenship for eligible New Zealanders

Underway

Creating a Migration Strategy for a more prosperous and secure Australia

- Responding to the 2023 Review of the Migration System with new vision, objectives and roadmap
- Strengthening integrity in international education
- Improving recognition of priority qualifications, including by responding to the Independent Review of Health Practitioner Regulatory Settings

Taking further measures to combat worker exploitation

- Introducing criminal penalties for exploitation
- Consulting with business, unions and civil society on whistleblower protections for temporary visa holders
- Designing the firewall between the Fair Work Ombudsman and the Department of Home Affairs

Future reform directions

Better target skilled migration

- Deliver a new temporary skilled migration system that is effective at targeting Australia's evolving skills needs
- Develop an improved occupation list in partnership with Jobs and Skills Australia
- Introduce new permanent skilled visa settings, including exploring a revised points test

Realise migrants' employment potential

- Take further action to combat migrant worker exploitation
- Improve skills assessments

Improve employment outcomes for international students

 Improve pathways to work in higher skilled roles

Further reforms will be outlined in the Migration Strategy

Working alongside our high-quality education and training sector, effective migration settings have the power to address skills shortages and boost productivity, while providing fair access to labour markets for migrant and local workers. To harness these benefits, the Government is focused on aligning migration settings with Australia's skills needs, and ensuring migrants are supported to work to their capacity and provided with the mobility to move across the workforce into roles that suit their skills.

The Review of the Migration System Final Report found that Australia's migration program is not fit-for-purpose. Australia can do more to attract the most highly skilled migrants and support businesses to access these skilled workers. Moreover, evidence has emerged of exploitation of migrants, driven by a focus on 'temporariness' over clear pathways to permanency and visa settings that tie migrant workers to their employer.

To realign the migration system with Australia's labour market priorities, we are undertaking significant reform and refocusing of the system. To date, the Government has focused on strengthening integrity and strong management of the migration system. This includes significantly reducing the visa backlog



and streamlining visa processing, ending pandemic concessions and increasing the Temporary Skilled Migration Income Threshold (TSMIT) from \$53,900 to \$70,000, as well as other complementary measures.

The Government will continue to build on these actions and shift to more structural reform through its new Migration Strategy, which will be based around five key objectives:

- Raising living standards for Australians by boosting productivity, meeting skills shortages and supporting exports
- Ensuring a fair go in the workplace by complementing the jobs, wages and conditions of all workers and preventing migrant worker exploitation
- Building stronger Australian communities by better planning the migration intake and giving migrants the opportunity to invest in their lives in Australia through permanent residence and citizenship
- Strengthening international relationships by building stronger economic and social connections with our region and international partners
- Making the system work by being fast, efficient and fair for migrants and employers.

Better targeting skilled migration

Skilled migration can play a critical role in addressing skill and labour shortages so long as it is not used as a substitute for training Australians. Migrants with specialist skills, such as wind turbine engineers, bring with them critical expertise and global knowledge that will help us to meet future challenges. Specific areas of our economy facing acute shortages, such as the care economy and agricultural sector, also benefit from migrants working in these areas. More generally, high-skilled migrants can complement Australia's education and training system to meet our skills needs. When designed well, skilled migration will lead to productivity gains for firms, increased knowledge transfer to Australian workers and address key workforce shortages.

The new Migration Strategy will outline Australia's new temporary skilled migration system, to ensure Australia has the skills needed to drive future economic prosperity and security. The new approach will define three clear pathways for temporary skilled workers:

- a fast, simple pathway for specialised, highly skilled workers to drive innovation in our economy and build the jobs of the future
- a mainstream temporary skilled pathway to bring in core skills, using an improved approach to determining skills needs, informed by advice from Jobs and Skills Australia (JSA)
- further consideration of a regulated pathway for workers with essential skills, such as in sectors in the care and support economy.

This flexible, responsive and innovative model is at the heart of our future strategy for better targeting skilled migrants. It will be supported by reforms to those visa settings that currently contribute to a minority of employers exploiting migrant workers, including by increasing mobility for migrant workers and restoring permanency to the heart of the skilled migration system.

The Migration Strategy will also outline areas for further work on how we select permanent residents, including exploring reforms to the points test to better select for migrants who will best drive Australia's long-term prosperity. The Government is progressing this as a priority, and will take the time to get settings right, including through building in a greater role for JSA.

Realising migrants' employment potential

Even for migrants employed in Australia, we do not always realise their full potential. Too often migrants work below their skill level or the system takes too long to allow them to work in areas of need. A lack of permanent residency and work experience is reported by students as among the main reasons they do not work in a job that fully utilises their skills and education. Migrants are also too often subject to exploitation and unfair work conditions — with some estimates that up to 16 per cent of recently arrived migrants are paid less than the minimum wage. Realising the employment potential of migrants by addressing these issues will allow us to achieve better skills matching, higher productivity, lower rates of exploitation, and a higher performing labour market better able to adapt to major shifts in the economy.

The Government has already acted by commissioning the Rapid Review into the Exploitation of Australia's Visa System and taking action to address the exploitation of migrants. We will expand the time temporary migrants have to find a job and have already provided additional funding for compliance measures. The Government is committed to supporting migrants who are exploited to speak out. To this end, we will consult with business, unions and civil society to develop pilot initiatives to enhance safeguards and protections for migrant workers, including design of the firewall between the Fair Work Ombudsman and the Department of Home Affairs.

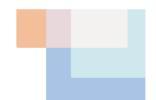
The Migration Strategy will progress this further and identify additional protections and further areas of work that will help design out migrant worker exploitation from visa settings in the migration system, including new measures to protect the integrity of our international education system.

Realising the potential of migrants also requires concerted efforts to help migrants work at their skill level, including reforms to skills assessments that will help recognise the existing skills of migrant workers. The Migration Strategy will outline how the Government intends to improve the skills assessment process through enhanced assurance, standards and reporting. This will complement the Discussion Paper released in September 2023 by the Minister for Skills and Training, which seeks feedback from stakeholders on the new standards for skilled migration assessing authorities. This will be particularly important for migrant health workers, who are vital contributors to the workforce.

We also intend to work with states and territories to ensure migrants are able to work where they are most needed. It is particularly important to ensure that health professionals – who are essential for our large and growing care workforce – are able to migrate to Australia. Additionally, JSA will help states and territories select the migrants they need most and identify where migrants can better achieve their employment potential in the labour market. In the future we will continue to take a collaborative, systems-focused approach to making sure we help all migrants who come to Australia realise their employment potential.

Improving employment outcomes for international students

Australia plays a critical role in training the next generation of global talent. However, the current system does not best equip international students and graduates to meet Australia's skills needs. More than 50 per cent of international student graduates end up in jobs at the lowest two skill levels despite being qualified for the top level, compared to 20–30 per cent for domestic students. Ineffective graduate visa pathways, a lack of work experience and lower English language proficiency than required for other skilled visas and in some other comparable countries all contribute to this. There is an opportunity to reform migration settings to better support international students to reach their



potential in the labour market. This includes making sure they have the right training and support to find employment and can follow efficient pathways into in-demand areas.

The Government has already taken action to retain international students with in-demand skills. We have extended post-study work rights for international students working in priority areas, such as in health, teaching and agricultural fields.

The Migration Strategy will outline measures that will support international students in their transition to skilled work. Employers have little confidence that international students will have access to a graduate visa with work rights at the end of their study, because student visa holders can only apply for a graduate visa after they have graduated, and processing times are long. The Migration Strategy will look to develop a more streamlined visa application process to speed up the transition from study to skilled work. The Government will also look to commence work with JSA to better understand the barriers international students face in the labour market and will consider how to support international students to access work-integrated learning opportunities. Improvement in these areas should help resolve skills mismatches that are particularly apparent for some students who have occupation specific skills, such as engineers.

We can also do more to make sure graduate visa settings do not just leave students 'permanently temporary'. The Government will ensure that those students with the right skills, targeted to our labour market needs, transition into work after study in Australia. Better connection between work visas and a student's course of study is a promising avenue for improving student labour market outcomes and is one area where JSA can help link education provision with the migration system and the labour market.

The Government is focused on strengthening integrity in international education, closing loopholes and supporting genuine international students. A first package of integrity measures was announced in August 2023 and further integrity measures will be announced in the Migration Strategy. These measures will also have positive labour market outcomes as they focus on ensuring international students use students visas for study, rather than primarily for work.

7 Building capabilities through employment services

Table R.7 Actions to build capabilities through employment services

Implemented

Immediate improvements to employment services programs

- Suspended compulsory participation in ParentsNext
- Launched Veteran Employment Program to support transitions into the civilian workforce
- Better-embedded employment in National Disability Insurance Scheme plans
- Extended the Time to Work Employment Service, assisting First Nations people in prison to access the support to find work post-release
- Launched the Indigenous Skills and Employment Program, connecting First Nations people with jobs, training, and career advancement opportunities

Underway

Consulting on and co-designing reforms to employment services programs

- Conducting a first-principles review of Workforce Australia
- Developing a new remote jobs program in consultation with First Nations people and remote communities, including undertaking a trial that is creating up to 200 jobs in remote areas
- Designing a new program to replace ParentsNext in consultation with parents and stakeholders
- Reforming the Local Jobs Program to align with best practices in place-based policy design, and expanding eligibility for projects to more people seeking work

Future reform directions

Reform employment services

 Establish clear processes to reform employment services guided by new principles in this Roadmap

Engage with local labour markets

 Apply place-based policy design best practices to employment services programs

Evaluate and learn in employment services

Embed evaluation into policy reform processes, and the design of ongoing programs

A quality employment services system can deliver social and economic benefits by building more efficient, inclusive labour markets. An effective employment services system strengthens growth and productivity through lifting participation, skills, and facilitating high-quality job matches between people seeking work and employers seeking workers. It can smooth the effects of labour market disruptions, such as industry change and retrenchment, and provide supported pathways to employment for people facing barriers to work, earning and social participation. For employers, a quality employment services system can connect them to a broader pool of applicants and, through collaboration, enables them to use a range of training and support services that help them to meet recruitment needs.

The Australian Government delivers a suite of employment programs including Workforce Australia, the Community Development Program and Disability Employment Services, as well as complementary programs such as the Local Jobs Program. Chapter 6 identifies that the current employment services system does not meet the needs of the most disadvantaged job seekers, nor meet the needs of employers seeking to fill workforce shortages. Poorly tailored obligations can have negative effects.

To better support people facing barriers to work and to help address skills shortages, employment services will build people's capability and stronger, more inclusive labour markets.

The Government has taken steps to improve pre-employment and employment programs. After suspending compliance arrangements in ParentsNext, the Government has committed to introducing a new voluntary, co-designed replacement program that better supports parents. The Veteran Employment Program has been launched to support veterans to transition into the civilian workforce. The Indigenous Skills and Employment Program (ISEP) is supporting local organisations to design place-based solutions for Aboriginal and Torres Strait Islander job seekers in partnership with



communities. The Government is also working with First Nations stakeholders and remote communities to replace the Community Development Program with a new remote jobs program with real jobs, proper wages and decent conditions.

The Government has established processes to strengthen Australian Government employment services. A House of Representatives Select Committee is undertaking a first-principles review of Workforce Australia, examining the design, implementation and performance of the new system. The Committee will make recommendations on future reforms with its final report due in November 2023. Disability Employment Services are being redesigned in consultation with stakeholders, with a new model that can better support people with disability, starting in July 2025.

Supporting these developments, the Government is committed to reforming the employment services system in line with the eight key reform principles outlined below. The Government will develop detailed reforms after it considers the Select Committee's report.

Reforming employment services

It is time to rethink employment services as part of our vision for a stronger and more inclusive economy. The Government has established eight key principles (Box R.4) to guide reforms of Disability Employment Services, the Community Development Program and Workforce Australia, including the Government's response to the Select Committee's recommendations.

These principles set the direction for how the Government will support people seeking jobs, and businesses finding workers. The relationship will be based on protecting people's dignity and individual rights, and helping people achieve their individual employment goals and aspirations. The system will invest in people's potential, building their human capital and connecting with broader social services to help them overcome barriers to participation and build pathways to decent jobs.

The employment services reform principles will guide future improvements to the system for businesses and regions, ensuring it is used by more employers and industries seeking suitable workers. In remote regions with very thin labour markets, the Government may need to promote job creation to help give local opportunities to people seeking work. The Government will seek to build a more active stewardship role for the Australian Public Service, combined with a vibrant diversity of providers, including a greater role for Aboriginal and Torres Strait Islander community-controlled organisations.

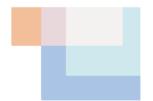
Box R.4 Our plan for employment services – eight principles for reform

- Services are viewed as an investment that unlock individual potential, address employer needs and work with industry to bolster growth.
 - a) the system builds human capital and ensures job placements are appropriate
 - b) services help businesses and communities to grow by connecting people to jobs.
- There is strong Australian Public Service stewardship in the system and the outcomes it delivers to ensure that individuals are not left behind.
- 3 Services protect the dignity and respect rights of individuals.
 - a) services help individuals meet their employment and personal development goals
 - b) services are designed and delivered in a culturally responsive and inclusive way that meets communities' needs.
- 4 Services provide a pathway towards decent jobs that provide the flexibility and security that individuals need.
 - a) the Government may need to promote the creation of jobs to alleviate entrenched community disadvantage where labour markets are very thin and where individuals face very high barriers to work.
- 5 Employers use employment services to help meet their workforce needs, and can access guidance on innovative job design, recruitment practices and inclusive approaches to workforce development.
- 6 Employment services are designed through collaboration with individuals, employers and the community.
 - a) the participation of Aboriginal and Torres Strait Islander Community Controlled Organisations, and community-based organisations, is boosted in the delivery of employment services
- 7 Services help people at the earliest opportunity, informed by fit-for-purpose assessment processes.
- 8 Reforms are grounded in evidence, high quality evaluation and continuous learning and improvement.

Evaluating and learning in employment services

One component of the principles for employment services reform is rigorous policy evaluation which is essential to effective public policymaking. Evaluation can help improve the design and implementation of policies and programs. It is especially important in policy areas like employment services where the effectiveness of these services can be critical in achieving inclusive full employment. This can in turn lead to better outcomes for Australians and contribute to better public accountability, learning, and increased public sector effectiveness through improved decision-making.

As Principle Eight suggests, employment services system design should be based on clear evidence — both domestic and international — and be open to continuous learning and improvement. To support the Government's new direction in employment services, we are committed to building the evidence base, including using evaluations and other strategies. Evaluations can reveal how policies affect different groups in different ways. These insights can be used to design and adapt programs to ensure they work for diverse experiences.



Engaging with local labour markets

Employment services need to work for local communities and local labour markets. Engaging at the local level can support the effectiveness and coordination of programs. Those on the ground, and especially communities themselves, are often best placed to identify and develop targeted solutions based on their specific needs. Place-based approaches involve communities as active participants in the design of policies and programs and provide opportunities to target local labour market responses.

The Local Jobs Program helps bring a local focus to employment services. The Government is undertaking a two-stage reform process of the Local Jobs Program to better focus its policy intent and embed best practice place-based policy design principles – supporting better employment outcomes for people seeking work in local labour markets.

Initial changes to the Local Jobs Program will include: broadening eligibility for projects funded through the Local Recovery Fund to include more people, including those who are not receiving income support but need help connecting with work, strengthening governance structures to enhance community representation, strengthening APS support in Employment Facilitator services in several micro employment regions with thin labour markets, and enhancing local and regional data and information to inform decision-making processes.

The Government is also exploring options for the future design of the Local Jobs Program. The Government's reform direction will explicitly consider the scope and priorities for investment to support the smooth functioning of the labour market and the optimal geographic spread to address business capability, industry transitions and the adaptive capacity of local labour markets. Evaluation will play an important role in the program's design over time.

More broadly, employment services need to operate in collaboration with local communities (Principle Six). They should contribute to the local service infrastructure and community fabric to deliver the best possible outcomes particularly for people facing complex socio-economic disadvantage in collaboration with other services. This focus will be threaded through all programs to create opportunities that work for individuals and communities.

Replacing the Community Development Program

The Government is delivering on its election commitment to replace the Community Development Program (CDP) with a new program with real jobs, proper wages and decent conditions — developed in partnership with First Nations people and remote communities. The current program's one size fits all approach does not work across the diversity of over 1,000 remote communities.

As a first step towards a new program, in August 2022, the Minister for Indigenous Australians hosted the Remote Employment Roundtable, leading into the Jobs and Skills Summit. At the Roundtable, the Minister announced that CDP providers can re-direct around 25 per cent of their funding to work with remote communities to trial new approaches to securing real jobs for participants. The Government's trials to help inform the design of the program are underway and will continue until October 2024. The trials involve local people being paid proper wages to deliver services to their communities, such as care, hospitality, small manufacturing and retail, art and culture, municipal services, gardening, and cleaning. In addition, consultations on the new program were held in over 100 remote communities in the first half of 2023. Remote communities have been clear that they want skills to help them take up work.

8 Reducing barriers to work

Table R.8 Actions to reduce barriers to work

Implemented

Implemented measures to end violence against women

- Committed to implementing all Respect@Work recommendations, including having legislated a positive duty for employers to prevent sexual harassment
- Invested \$2.3 billion in measures to end violence against women in the October and May Budgets

Promoted flexible and inclusive workplaces

- Legislated 10 days of paid family and domestic violence leave
- Improved access to flexible work and unpaid parental leave through changes to the Fair Work Act

Strengthened working age payments

- Increased the rate of working age and student payments by \$40 per fortnight
- Expanded eligibility for higher rate of JobSeeker Payment for recipients aged 55 and over
- Expanded eligibility for Parenting Payment (Single)
- Increased maximum rate of Commonwealth Rent Assistance

Acted on disincentives to work

- Implemented a temporary \$4,000 work bonus upfront credit for pension recipients
- Improved affordability of early childhood education and care

Underway

Addressing workplace gender segregation

- Encouraging shared care by increasing the Government's Paid Parental Leave, and improving flexibility in how parents share it
- Establishing the National Construction Industry Forum
- Undertaking a Pathway to Diversity in STEM Review

Acting on disincentives to work

- Smoothing the transition between income support and work by extending the nil rate period
- Supporting pensioners who are working by permanently enhancing the Work Bonus for age pensioners

Broadening employment opportunities for people with high support needs

- Leveraging the new National Disability Data Asset
- Implementing a new Disability Employment Services Quality Framework
- Establishing a Disability
 Employment Centre of Excellence

Boosting supply of secure, affordable housing

- Increasing investment in social and affordable housing through the Housing Australia Future Fund, Social Housing Accelerator and National Housing Infrastructure Facility, building housing where job opportunities are
- Working with states and territories to deliver 1.2 million new homes over five years from 1 July 2024, and to harmonise and strengthen renters' rights

Future reform directions

Promote gender equality

 Release a National Strategy to Achieve Gender Equality, which will include a focus on women's economic equality

Further address disincentives to work

- Better support parents with caring responsibilities through improved access to early childhood education and care
- Consider further ways to support participation, including for working-age payment recipients

Provide high-quality supports for people with disability

 Reform Disability Employment Services

Opportunities in Australia are not always shared equally. The Government will support more people to work to their capacity and share in opportunities, as part of pursuing sustained and inclusive full employment. Achieving this will help address skills shortages and boost economic potential. The Government needs to get policy settings right to remove disincentives to work and provide



targeted support to those who face barriers in the labour market, including women, Aboriginal and Torres Strait Islander people and people with disability.

Existing policy settings have not done enough to reduce intergenerational disadvantage and break down barriers to employment. The proportion of people on income support who have been on payment long term has continued to grow. The employment rate for people with disability has been stagnant for 20 years. In addition, Australia has further to go to achieve gender equality. Women continue to experience a significant gender pay gap, and care responsibilities are overwhelmingly borne by women. In combination, this contributes to women's lower workforce participation, and lower lifetime earnings.

The Government has already introduced substantial measures that reduce barriers to work, including making it easier for parents and unpaid carers, particularly women, to participate in the workforce. From July 2023, the Government introduced Cheaper Child Care for around 1.2 million families. Changes to the Government's Paid Parental Leave Scheme have also improved flexibility and accessibility, making it easier for both parents to take time off work to be with their children while remaining connected to their employer. The Government has also increased eligible working age and student income support payments, including JobSeeker Payment and Youth Allowance, by \$40 per fortnight. In addition, we provided more support for single parents, by expanding eligibility for Parenting Payment (Single) to single parents with dependent children aged under 14, of whom 91.1 per cent are women.

The Government has measures underway to remove barriers to promote participation and retention of people from under-represented backgrounds in the workforce, through actions such as the Australian Skills Guarantee and the Pathway to Diversity in STEM review. This is critical to addressing gender segregation by occupation and industry which can exacerbate skills shortages and hold our economy back. The framework will put the views and experiences of people with disability at the forefront of how Disability Employment Services provider performance is measured. In addition, the Government has committed to an ambitious housing reform agenda which will boost the supply of secure, affordable housing. This will reduce barriers to labour mobility and improve the ability for people to live close to job opportunities.

Going forward, the Government will continue to focus on implementing policies that go to improving equality and supporting participation for all Australians, including those who face challenges to fully participating in the labour market. The National Strategy to Achieve Gender Equality will build on the White Paper by outlining ways to enhance women's economic equality. The Government is addressing disincentives within the income support system to support people into work. We will also provide high-quality supports for people with disability, including establishing a Disability Employment Centre of Excellence and reforming Disability Employment Services by July 2025.

Promoting gender equality

A persistent gender pay gap, lack of workplace flexibility, gender segregation by occupation and industry, high financial disincentives for some secondary earners and an unequal distribution of care responsibilities mean women do not have the same opportunities to participate in, and benefit from, paid work as men. To improve women's economic equality further, Government, employers, and communities need to work together to address the intersecting barriers women face.

The Government recognises that workplaces must be safe so that all employees can thrive. To address sexual harassment in the workplace, the Government is implementing all recommendations of the Respect@Work report. This includes having legislated a positive duty for employers to prevent sexual

harassment, amendments to the *Fair Work Act 2009* (Fair Work Act) to expressly prohibit sexual harassment in the workplace and empowering the Fair Work Commission to deal with workplace sexual harassment disputes.

Recognising the impact of family and domestic violence on economic participation, the Government has also legislated 10 days of paid family and domestic violence leave and supported small businesses on the introduction of this reform. The Government's significant investments to prevent, respond to, and ultimately end family, domestic and sexual violence will work to tackle this significant barrier to workforce participation, which is overwhelmingly experienced by women.

The Government has taken steps to encourage sharing of care responsibilities between parents with significant changes to the Paid Parental Leave Scheme. From July 2023, instead of differentiating between primary and secondary carers, there is a single payment that both parents can claim, with two weeks of the scheme reserved for each parent to support them both to take time off work. Fathers and partners can be eligible regardless of the mother's residency status, are able to take government-funded leave at the same time as any employer-paid leave and have increased flexibility in choosing how they take paid parental leave days. As the scheme expands to 26 weeks, the Government will consider advice from the Women's Economic Equality Taskforce in finalising what component of leave will be reserved for fathers and partners.

These changes complement amendments to the Fair Work Act that have improved access to flexible work arrangements and strengthened the right to request an extension of unpaid parental leave. As set out in the Broadening access to foundation skills section, the Government has also made child care more affordable, helping to lower a barrier many women face to working, or working more hours. To further address disincentives to work, we will consider how to better support parents with caring responsibilities. This will include identifying opportunities to improve the early childhood education and care sector through a Productivity Commission inquiry, and improving access to care so parents are able to increase their participation if they want to.

Tackling gender segregation in education and industries has also been a focus for the Government. Targets have been set to increase women's participation in the tech sector through the Digital and Tech Skills compact with business and unions. The Australian Skills Guarantee includes targets for the proportion of apprentice/trainee hours to be undertaken by women on major Commonwealth construction and ICT projects. The National Construction Industry Forum has been established to consider the challenges facing the industry, including how to improve safety, culture, diversity, and gender equality. And to increase diversity and inclusion across the STEM sector, the Government is undertaking a Pathway to Diversity in STEM Review.

Much more needs to be done to improve gender equality. The Government is developing a National Strategy to Achieve Gender Equality. The Strategy will build on the White Paper by outlining ways to enhance women's economic equality. The Strategy will be informed by consultation with people around Australia to ensure diverse voices are heard, as well as the existing evidence base and advice from the Women's Economic Equality Taskforce. The Strategy will consider the broad range of factors that constrain or enhance gender equality, including the intersecting issues that can influence women's economic equality. This will include a focus on women who face complex and intersecting forms of disadvantage, as well as looking at ways we can better value and share care work, ensure safe and respectful workplaces, reduce industrial and occupational segregation, and remove barriers to leadership, positions of influence, and career progression.

Release of the Strategy will be an opportunity to bring together Government policy action to drive gender equality in the long term.



In addition, the Government will use the opportunities of the net zero transformation and the growing care and support economy to reduce industrial and occupational segregation. The Government has joined the international Equal by 30 campaign, which aims to achieve gender equality in the energy sector through committing to equal pay, equal leadership and equal opportunities for women by 2030. As outlined in the Planning for our future workforce section, implementation of the National Strategy for the Care and Support Economy will work to realise the goal of quality jobs for workers. This will have a disproportionate impact on women as they make up the majority of workers in the care and support economy.

The Government will focus on narrowing the gap in superannuation balances between women and men. The main driver of the gender gap in superannuation balances is the difference in lifetime earnings between women and men. Policies that target increasing women's participation in paid work and encouraging a more gender equal sharing of caring responsibilities will flow through to higher superannuation balances in future generations. We will look to pay the superannuation guarantee on Government-funded Paid Parental Leave when fiscal circumstances permit, boosting the superannuation balances of those taking paid parental leave. Additionally, we will consult on the retirement phase of superannuation with an aim to improve the outcomes all Australians get from their superannuation savings.

Addressing disincentives to work

Australia's income support system is designed to balance adequacy of payments with incentivising more participation in the workforce where possible. Many people who receive income support combine their payment with work or move on and off payment as their situation changes. An increasing proportion of income support recipients has been receiving payment for longer than a year, and there are real and perceived barriers preventing people from working more. The transition from income support to employment should be as smooth as possible – with people supported to get back into work without fear that the safety net will not be there if they need it again.

There are levers built into the income support system that facilitate workforce participation, but there is an opportunity to improve these to better support people to re-engage with work. The Government has already committed to a number of actions and will continue to explore further ways to reduce disincentives to participation, including for working-age payment recipients.

It is often reported that the risk of losing access to concession cards and child care subsidies, or needing to reapply for payment if a job doesn't work out, can discourage job seekers from taking on work. This is particularly true in circumstances where available roles are short term. Evidence indicates that people who have some work are twice as likely to ultimately exit income support than those who don't. It is critical that people are not deterred from taking on job opportunities.

To help smooth the transition between income support and work, and encourage more people to take up work, the Government will extend the nil rate period from 6 to 12 fortnights (subject to the passage of legislation). The 'nil rate period' enables job seekers who enter employment to remain connected to the social security system for a period, in case their job does not work out, and to continue accessing concession cards associated with receiving social security. This extension will give income support recipients more confidence to take up work opportunities, with less need to worry about reapplying for payment and associated benefits.

Access to the nil rate period is also being expanded to recipients who take up full-time work and therefore no longer meet the definition of being unemployed under the *Social Security Act 1991*. This will encourage people to take up full-time opportunities where they may previously have been

concerned that, if the job didn't work out, they would need to reapply for payment. As a result of these changes, people will be better supported to get back into work and have greater certainty they can access income support should they need it again.

As an outcome of the 2022 Jobs and Skills Summit, the Government increased the availability of work credits to age pensioners and veteran pensioners until 31 December 2023. Rather than needing to first accumulate credits, age pensioners received a temporary upfront credit of \$4,000 to their Work Bonus that could immediately be drawn upon, with the maximum limit in their Work Bonus Income Bank increased to \$11,800. The pension Work Bonus is designed to specifically reward pensioners who are working. It provides incentives that mean pensioners with employment income can earn more before their pension is affected.

To support the participation of pensioners on an ongoing basis, the Government will permanently provide a \$4,000 upfront Work Bonus to all new pension entrants over Age Pension age and retain the elevated maximum Work Bonus balance limit of \$11,800. This will mean pensioners are able to earn an additional \$4,000 before their pension is affected.

Providing high-quality supports for people with disability

The employment rate of people with disability has not shifted significantly in two decades. People with disability can face several unique and compounding barriers to workforce participation. These include discrimination, and the lack of understanding of reasonable adjustments that may need to be made in their workplaces.

Change is needed to improve the quality of support provided by government, service providers and employers. As set out in Australia's Disability Strategy 2021–2031, our goal is for a more inclusive and accessible society where all people with disability can fulfil their potential as equal members of the community. This is underpinned by *Employ My Ability – the Disability Employment Strategy* which strives to create inclusive workplace cultures where people with disability thrive in their careers. Employers need to create inclusive workplace cultures and support must be evidence-based, targeted and acknowledge that people with disability are not a homogenous group.

The Government has already introduced changes to improve the quality of support available to people with disability who are looking for work. Since July 2023, a new Disability Employment Services Quality Framework has been in place. The new Framework is designed to achieve the delivery of high-quality, tailored services for people with disability. It will ensure providers are listening and responding to the needs of individuals and employers to drive meaningful and sustained quality improvement. This is part of the ongoing reform of Disability Employment Services.

The Government is also investing in creating ongoing employment opportunities for people with disability with high support needs, while helping the supported employment sector to evolve to better meet community expectations. This includes enabling the supported employment sector to evolve their business models through the Structural Adjustment Fund and supporting organisations, including Australian Disability Enterprises, to transition to the revised Supported Employment Services Award by providing training and information. The Government is also consulting on a disability business procurement initiative and looking at how procurement can be leveraged to create sustainable jobs for people with disability.

The National Disability Data Asset will give a more complete picture of the life experiences of people with disability, including their employment outcomes, and ultimately improve the way services are targeted and how people with disability interact with governments and service providers. The disability



community is involved in designing and creating the asset, which is essential for its success. All states and territories have agreed to deliver the Asset with formal agreements to be signed later this year.

More needs to be done to ensure disability employment services are better linked with other programs and services, such as the NDIS and Workforce Australia, as well as understanding the requirements of employers and helping them to be part of the necessary shift to improve outcomes for people with disability, their families and unpaid carers. Better linkages between programs would ensure holistic, joined up support for people with disability.

Drawing on the employment services principles in Box R.4, the Government is working with people with disability, employers and providers on the design and implementation of a new specialist disability employment services model to ensure it supports both people with disability to find and maintain employment, and businesses who employ people with disability to ensure their employment is successful. The new service will be introduced in 2025. Consultation and design of the Disability Employment Centre of Excellence is ongoing. It will provide examples of best practice and support not only for job seekers but also employers and employment service providers.

Alongside these reforms, an Independent Review Panel will complete a review into the operation of the NDIS by October 2023. The NDIS review is examining the design, operations and sustainability of the NDIS and ways to build a more responsive, supportive, and sustainable market and workforce. The overarching objective of the review is to put people with disability back at the centre of the NDIS while ensuring the sustainability of the scheme into the future. An effective NDIS will improve outcomes for people with disability and their unpaid carers, including meaningful employment opportunities and broader social and economic benefits.

9 Partnering with communities

Table R.9 Actions to partner with communities

Implemented

Funded a Targeting Entrenched Disadvantage package

 Extended Stronger Places, Stronger People, a community-led initiative to address disadvantage through local, evidence-based solutions

Strengthened local First Nations community initiatives

 Funded foundation skills training for First Nations people through Aboriginal and Torres Strait Islander community-controlled organisations

Invested in broader social policy initiatives

 Supported victim-survivors of family, domestic and sexual violence; supported community sector; and supported mental health and suicide prevention research

Underway

Working towards improving outcomes

- Co-designing the Outcomes Fund and delivering the Social Enterprise Development Initiative
- Developing a partnership with philanthropy through the Investment Dialogue for Australia's Children
- Developing the Life Course Data Asset to improve our understanding of how communities experience disadvantage
- Doubling the number of Indigenous rangers and expanding the Indigenous Protected Areas Programs by 2030

Working together through policy partnerships

- Scoping a First Nations Economic Partnership
- Identifying ways to back the social enterprise sector, and provide more employment and training opportunities for Australians facing disadvantage

Future reform directions

Boost place-based approaches

- Better align programs and delivery across governments
- Put data in the hands of communities and give them a say in how funding is directed, with appropriate government controls
- Expand the role of communities in decision-making over time

Partner with First Nations people

 Improve progress on Closing the Gap in economic participation and development outcomes, by working in partnership with First Nations people

Back social enterprise

 Build capacity to get people into jobs and create job pathways by supporting the growth of the social enterprise sector

Even in a strong labour market, a growing proportion of job seekers face multiple significant barriers to employment, and existing services are often siloed and fragmented. While mainstream approaches work for many, a tailored and integrated set of services is needed to help some people facing complex barriers or experiencing entrenched disadvantage to fulfil their potential. Partnerships with communities, service providers and others offer the opportunity to genuinely respond to local needs and improve outcomes over the long term.

The Government has committed funding through the Targeting Entrenched Disadvantage package to improve the coordination and quality of investments made by governments, philanthropy, and the private sector. This includes extending the existing Stronger Places, Stronger People initiative and backing social enterprises with a Social Enterprise Development Initiative. We have funded a new Outcomes Fund that is being co-designed in partnership with key stakeholders, including with states and territories and service providers, to fund projects that deliver outcomes in communities. The government is also developing a partnership with leading philanthropists through an Investment Dialogue for Australia's Children.

The Government's broader social policy agenda helps put people in a better position to take up work. Significant new support for family, domestic and sexual violence survivors includes investment in pilot programs to support victim-survivors through Primary Health Networks across Australia. Other



initiatives include grant funding support for community sector organisations and working closely with stakeholders on options to create a stronger, more diverse and independent community sector. There is also funding for mental health and suicide prevention, including mental health research to broaden the focus of suicide prevention to include employment factors such as unemployment, underemployment, precarious employment, work-related stress, and financial distress.

Tackling entrenched disadvantage concentrated in communities requires collaboration, commitment, and a mix of strategies. Universal social services play a significant role in providing Australians with the support they need, however, there is an opportunity to take a new approach and integrate services to address the complex barriers some Australian communities face through support for place-based ways of working. This will require working with First Nations communities and building community capacity, including through social enterprises.

Boosting place-based approaches

Place-based approaches can assist with developing targeted strategies that are right for local communities. Strong local leadership and coordination of resources can address the local drivers of disadvantage that help achieve inclusive full employment. Place-based approaches can support better investments in communities experiencing concentrated intergenerational disadvantage and improve the wellbeing outcomes for individuals, families and communities. Central to this is directing funding to communities in ways that help them address local issues, ensuring communities have access to data to guide local decision-making, and setting up appropriate systems and processes to achieve this.

The Government is moving to tackle entrenched disadvantage by extending what works and building upon it in an integrated way – partnering with philanthropists, empowering communities, and enhancing place-based approaches.

We have extended the Stronger Places, Stronger People program, a community-led, collective impact initiative, stewarded by the Australian Government in partnership with state and territory governments and 10 communities across Australia. It seeks to disrupt disadvantage and create better futures for children and their families through locally tailored and evidence-driven solutions to local problems, in partnership with local people.

The Government is developing a whole-of-government framework to address community disadvantage, which will underpin the changes needed to deliver on our future direction working in partnership with communities to address local challenges. The framework will design the practical ways in which government can work with communities to:

- better align programs and delivery across governments and portfolios
- put data in the hands of communities and give them a say in how funding is directed, with appropriate government controls
- expand the role of communities in decision-making over time.

Developing new data sets, such as the National Disability Data Asset and Life Course Data Asset – and making better use of data in partnership with communities – will be critical to further embed the use of place-based approaches.

Partnering with First Nations people

The Government is partnering with the Coalition of Peaks to scope a First Nations Economic Partnership.

The Partnership will improve progress against Closing the Gap Outcome Eight (economic participation and development) and Priority Reform One (formal partnerships) and be an important mechanism for shared decision-making – giving effect to the Government's commitments under the Closing the Gap agreement.

The Government and the Peaks want the partnership to be centred on the strengths of Aboriginal and Torres Strait Islander people, communities and community-controlled organisations, supporting job creation, and translating First Nations people's knowledges, assets, interests and rights into tangible, sustainable social and economic benefits for their communities.

In line with Priority Reform One of Closing the Gap, the Government is committed to a future where policymaking that impacts the lives of First Nations people is done in full and genuine partnership based on the principles of shared decision-making and self-determination. Giving First Nations people a say in the policies affecting their lives delivers better policies and outcomes.

Doubling the number of Indigenous rangers

The Government is committed to working with First Nations communities. For 65,000 years, First Nations people have been custodians and caretakers of Australia's flora and fauna, land, rivers and sea. Today, Indigenous rangers protect nature and maintain connection to Country and culture, while delivering environmental, cultural, social, and economic development outcomes.

Around Australia, 128 Indigenous Rangers Programs work with First Nations people to manage Country in line with Traditional Owners' aspirations. The Government is on track to deliver its commitment to double the number of Indigenous rangers to 3,800 by 2030.

Backing social enterprise

The Government is backing social enterprises to further help people facing labour market disadvantage. Social enterprises are critical to improving employment outcomes for marginalised cohorts in local communities across Australia. There are over 12,000 social enterprises with a workforce of over 206,000 people in Australia. Approximately 58 per cent of certified social enterprises are employment-focused. This growing sector offers employment opportunities to people experiencing disadvantage through inclusive employment opportunities, job training and on-the-job support to people facing complex barriers to work. The Government's reform direction is to draw on the expertise of the social enterprise sector and build capacity to improve the labour market outcomes of people who experience entrenched disadvantage.

The government is already partnering with the social enterprise sector to advance common objectives. A Social Enterprise Development Initiative will support organisations such as social enterprises and charities to build their capability and support improved social outcomes. Additionally, under the Outcomes Fund, the Commonwealth will explore partnerships with states, territories and service providers to tackle disadvantage by funding projects that deliver outcomes in communities.

As a next step, the Government will investigate opportunities to work with social enterprises to address persistent labour market disadvantage, with a focus on the role social enterprises could play in creating jobs and career pathways.

10 Promoting inclusive, dynamic workplaces

Table R.10 Actions to promote inclusive, dynamic workplaces

Implemented

Strengthened protections in the Fair Work framework

- Committed to amend the Fair Work Act to include subjection to family and domestic violence in the list of protected attributes
- Made breastfeeding, gender identity and intersex status protected attributes in the Fair Work Act

Made gender pay gaps visible

- Legislated for the Workplace
 Gender Equality Agency to publish
 gender pay gaps of employers with
 100 or more employees
- Banned pay secrecy

Supported employers to adopt new hiring practices

- Co-designed entry-level work programs with employers through the Launch into Work program
- Launched the Carer Inclusive Workplace Initiative

Underway

Shaping outcomes through Government's purchasing power

- Establishing the Secure Australian Jobs Code to ensure government procurement supports secure jobs
- Introducing the Australian Skills Guarantee, with targets for women on major Government projects

Partnering with employers

- Co-developing a disability employment pilot with the Business Council of Australia
- Delivering a Visitor Economy
 Disability Employment pilot to
 deliver place-based employment
 outcomes by connecting small
 businesses, employment service
 providers and job seekers with
 disability

Improving information about experiences in work

 Funding the ABS to improve data on unpaid care, job security and outcomes of employment services and income support programs

Future reform directions

Promote innovative recruitment and job design

- Encourage workplace cultural change and job co-design
- Expand First Nations employment opportunities in the APS

Improve policy evaluation and partnerships

- Embed robust evaluation into policy design, especially for employment services
- Reform employment services to better support employers' recruitment needs
- Co-develop work experience principles for job seekers who are disadvantaged

Improve transparency on workforce diversity

 Ensure data leads to change including through setting measurable targets

Workplaces around the country will ultimately be the engine room for achieving full employment, productivity growth, and secure, fairly paid jobs. They are critical to facilitating the lifelong learning needed to help build our skilled and adaptable workforce.

Despite labour market tightness, consultation for this White Paper reported there have been limited changes to hiring practices and workplace flexibility to manage skills shortages. While there are some practical barriers businesses face when hiring people with specific needs, more needs to be done to promote inclusion and diversity in the workplace. Respectful and inclusive workplaces will help share the benefits of work with more people. The Government is setting targets for its own recruitment, including a target for 5 per cent First Nations employment in the Australian Public Service by 2030.

Employers can improve the diversity and inclusivity of their workforce with considered hiring practices, and by implementing strategies that create more open and inclusive workplaces. Employers can also consider how better job design can support a wider range of people to participate and fulfil their potential. The barriers, real and perceived, that stop employers from hiring diversely need to be understood and overcome.

For workplaces to be inclusive they need to be free from discrimination. Through our strengthened Fair Work framework, the Government has made breastfeeding, gender identity, and intersex status protected attributes under the Fair Work Act to prohibit discrimination against employees on this basis

in the workplace. Strengthening protections against discrimination in the workplace remains a priority for the Government with a proposal currently before Parliament to include 'subjection to family and domestic violence' in the list of protected attributes.

The Government is improving transparency and encouraging employers to identify and eliminate sources of bias and discrimination in their organisation. To do this, the Government has strengthened requirements for employers to report their gender pay gaps and to develop strategies to improve gender equality in the workplace.

We are working in partnership with employers to find new ways to help people into work. This includes developing a disability employment pilot with the Business Council of Australia and its members, and a Disability Employment Tourism Local Navigators pilot. Going forward employers, unions, communities and governments will need to work in closer partnership to make workplaces more diverse, inclusive and dynamic. More can be done to embed partnerships with employers in some of the largest government programs, particularly employment services. We are also partnering with social enterprises and the not-for-profit sector to target entrenched disadvantage, as discussed in the Partnering with communities section.

Promoting innovative recruitment and job design

Australians deserve a chance to work in a job that matches their skills. Enabling this for more people will help broaden opportunities and support productivity improvements. The Government will continue to drive cultural change by providing support to businesses to embrace diverse hiring and innovative job design, as well as through using its purchasing power.

The Workforce Australia Employer Liaison Officer program helps large businesses find the staff they need by exploring alternative hiring practices and sharing insights from industry experts. The Carer Inclusive Workplace Initiative will enable businesses, in particular small businesses, to self-identify as a carer inclusive organisation. The Government is developing a set of best practice principles alongside unions and employers to guide meaningful work experience opportunities and workplace-based mentoring programs for people experiencing disadvantage. We are also working with the Australia's top 200 businesses to strengthen First Nations employment and economic opportunities.

The Indigenous Procurement Policy has demonstrated the potential of procurement policies to achieve social outcomes by stimulating Indigenous entrepreneurship and supporting First Nations employment outcomes. Building on its success, we will introduce the Secure Australian Jobs Code as part of our Buy Australian Plan to prioritise secure work in government contracts. The Government is also exploring opportunities for a disability business procurement initiative, as discussed in the Reducing barriers to work section. We are supporting employers, particularly small businesses, to overcome the practical challenges of hiring by providing a 'hiring employees' checklist and an employment contract builder on business.gov.au.

Improving partnerships

Partnering with employers, unions and the community will help ensure approaches to broaden opportunity and improve workplaces are pragmatic and effective. The Government is partnering with employers to improve employment outcomes for job seekers, including people with disability and First Nations people.



The next stage of reform is to support employers to hire people who may require additional support, through training and capacity building, to be productive employees. More needs to be done to embed partnership with employers in our biggest programs, particularly employment services. As set out in the Building capabilities through employment services section, the Government wants employment services to help meet employer's workforce needs, and access guidance on innovative job design, recruitment practices and inclusive approaches to workforce development.

Engaging employers, unions and the community in the design of guidance materials for workplaces can help ensure materials are relevant and effective. The Launch into Work program provides opportunities for job seekers to build their skills and work readiness and for employers to fill entry-level roles. We are working with unions and employers to develop a set of best practice principles to guide meaningful work experience opportunities and workplace-based mentoring programs for people experiencing disadvantage.

The Government is also exploring new partnership opportunities to leverage existing expertise and understanding of the barriers to employment that people face, for example with social enterprises. To do this we are working to develop their capacity through programs like the Social Enterprise Development Initiative, discussed in the Partnering with communities section.

Improving transparency on workforce diversity

Improvements in employment outcomes for under-represented groups and narrowing the gender pay gap will only be possible if we can track them. Transparent reporting on workplace diversity and the gender pay gap reflects the standards the community expects workplaces to meet. The Government will continue to strengthen reporting and transparency, as well as making sure the collection of data is used to implement positive change.

Transparency is a key tool to help reduce the gender pay gap. The Government has passed reforms to the *Workplace Gender Equality Act 2012* to improve the transparency of gender pay gaps. From early 2024, the Workplace Gender Equality Agency (WGEA) will publish the gender pay gaps of eligible employers with 100 or more employees. In addition, we have strengthened existing reporting standards to require employers with 500 or more employees to develop policies or strategies against indicators to improve gender equality in their workplaces. Allowing public access to gender pay gap data promotes accountability, empowers workers to make informed career choices and advocate for better conditions for themselves, and encourages businesses to be transparent and fair from the outset. It also contributes to important public discussions about the state of gender equality across sectors and individual organisations, and what progress needs to be made.

The Government is leading by example, with all Commonwealth public sector employers with 100 or more employees now required to report to WGEA as part of the response to the Respect@Work report. The Secure Jobs, Better Pay Act has also increased transparency by prohibiting pay secrecy clauses in employment contracts and given employees a right to disclose or not disclose their remuneration.

As outlined in Chapter 2, quality data is not available for many cohorts who face entrenched disadvantage and poor labour market outcomes. Going forward, the Government will work to ensure quality data is available for more cohorts.

The Government will fund the ABS to work with First Nations people on methods to produce more frequent employment data and enable more effective monitoring of labour market outcomes. The ABS is also being funded to integrate Labour Force Survey, income support and employment services data

to provide a more holistic picture of labour market activity and an improved capability to understand successful transitions and outcomes. Alongside the National Disability Data Asset and the Life Course Data Initiative, this data will provide Australia with a much clearer picture of labour market outcomes and interactions with income support and employment services programs.

To help increase the visibility of the social and economic value of unpaid care, the ABS has been funded to collect data that will support more accurate estimates of the amount and value of unpaid care. This will be an annual release as part of the Labour Account, using a combination of the Time Use Survey and Labour Force Survey data. This was recommended by the Senate Select Committee into Work and Care and will better inform policy development around the availability and affordability of care services, and support for unpaid carers.

Ensuring there is quality data available to inform change is not only up to the Government. Collecting diversity data of current staff is another important way the private sector can support an inclusive workplace. However, the collection of diversity data must be done in a culturally safe way, and part of a broader commitment to inclusion and diversity. While reporting and data are essential to understanding the labour market, collecting this data must lead to positive change. The WGEA is consulting on how employers could safely collect and report more detailed diversity data, and how employers could set and achieve gender equality targets.

Improving the quality of evaluation across government

The best possible evidence should inform decision-making and there is room to improve evaluation of programs and policies across government, including of policies related to the labour market. Work done for the *Our Public Service*, *Our Future* Independent Review of the Australian Public Service found that the quality of evaluation was 'piecemeal'. The Government spends a considerable amount of money on evaluation. A report from the Australian Evaluation Society estimated that in 2021–22, the Commonwealth procured 224 evaluations from external consultants, at a total cost of \$52 million. Yet many evaluations have been insufficiently rigorous.

The Government is determined to build up its evidence base, and to make decisions based on the highest quality evidence. We have already established the Australian Centre for Evaluation within the Australian Treasury. The Centre will collaborate with federal agencies to conduct high-quality evaluations, carried out within a robust ethical framework, including in employment services. The Centre will also look for opportunities to share learning with states, territories, philanthropic foundations and academic experts.

The Government's commitment to evidence-based policy underpins the findings in this White Paper and our future approach. Where high-quality evidence exists, we have drawn on it to produce the key analysis. Going forward, where the evidence is limited, we will consider options and mechanisms to build the evidence base, in order to shape better policies.



Ongoing collaboration

As well as resulting in a program of immediate actions to address Australia's economic challenges, the Jobs and Skills Summit started nation-wide consultations underpinning the development of this White Paper. Over 400 public submissions were received by Treasury, from community groups, peak bodies, businesses, individuals, think tanks, unions and governments across every state and territory.

Over 2022 and 2023, delegations from Treasury's Employment Taskforce visited every state and territory and met with employers, industry representatives, state and local governments, community groups, education providers, employment service providers and individuals. In total, the Taskforce met with over 250 stakeholders, including people with lived experience of unemployment or underemployment through a series of focused roundtables.

This spirit of collaboration is what the Government intends to bring to implementing our Roadmap. We cannot do it alone. Strong partnerships with governments, employers including large, medium and small businesses, unions, civil society and the broader community will be essential to position our labour market for the future. We are committed to building a bright working future.

Actions to support a dynamic and inclusive labour market

1 Strengthening our economic foundations

Implemented

Set clear, strategic objectives

- Introduced a new, bolder full employment objective
- Made full employment, real wages growth, and women's economic equality core objectives of our **Economic and Fiscal Strategy**
- Added job security and gender equality to the objects of the Fair Work Act

Established a better evidence base for policy development

- Introduced gender responsive budgeting and a national wellbeing framework: Measuring What Matters
- Established the Australian Centre for Evaluation
- Refreshed the Tax Expenditures and Insights Statement
- Released a new Intergenerational Report to guide our understanding of future workforce needs and opportunities
- Established a Women's Economic Equality Taskforce to provide advice on priorities for women's economic equality

Supported the lowest paid

- Advocated for pay rises through submissions to Fair Work Commission Annual Wage Reviews
- Fully funded the largest ever increase to award minimum wages through aged care work value case
- Legislated to expand access to bargaining for small businesses and industries with low levels of bargaining

Underway

Strengthening economic institutions

- Implementing RBA Review recommendations
- Renewing the Productivity Commission
- Empowering the Fair Work Commission to set minimum standards for employee-like work
- Better coordinating strategic planning across economic institutions, including Jobs and Skills Australia and the new Net Zero Authority
- Promoting inclusion by working with new advisory forums, including the Economic Inclusion **Advisory Committee**
- Legislating reforms to close loopholes that undercut wages and conditions, and to criminalise intentional wage theft
- Funding the ABS to address priority gaps in labour market data

Improving productivity

- Elevating productivity reform on National Cabinet's agenda
- Working across portfolios to realise productivity growth opportunities, including through the Competition Review, Migration Strategy, National Strategy for the Care and Support Economy and a Net Zero 2050 plan

Future reform directions

Elevate full employment in decision-making

- Embed sustained and inclusive full employment as a strategic objective
- Better measure and monitor progress to full employment, especially underemployment and outcomes across cohorts
- Address structural sources of underutilisation

Progress a five pillar productivity

- Create a more dynamic and resilient economy
- Build a skilled and adaptable workforce
- Harness data and digital technologies
- Deliver quality care more efficiently
- Invest in cheaper, cleaner energy and the net zero transformation

Embed the fundamentals for secure, well-paid jobs

- Promote labour market dynamism, including investigating non-compete agreements
- Further address migrant worker exploitation through Migration Strategy initiatives
- Improve gender equality and safety in the workplace

2 Modernising industry and regional policy

Implemented

Set national priorities

- Legislated emissions reduction targets of 43 per cent by 2030 and net zero by 2050
- Defined seven national priority areas through the National Reconstruction Fund, ranging from value-add in resources to medical science
- Established the Critical
 Technologies List, including AI, quantum, robotics, advanced manufacturing, clean energy tech and biotechnology
- Introduced the Regional Investment Framework to ensure investments are delivering for regions
- Established the National Energy Transformation Partnership and National Transformation Principles with states and territories to coordinate the renewable energy and broader net zero transition
- Established the National Cyber Security Coordinator
- Made targeted investments in priority areas, including \$100 million equity investment in the Australian Made Battery precinct
- Established Music Australia and Creative Workplaces, and delivered a National Cultural Policy

Underway

Coordinating strategic investment

- Convening investor roundtables to unlock investment in priority areas
- Investing in net zero through initiatives like the Capacity Investment Scheme
- Establishing a Sustainable Finance
 Strategy to attract green finance
- Rebuilding capabilities through the National Reconstruction Fund and the Industry Growth Program
- Refreshing Australia's National Science and Research Priorities
- Developing strategies for AI and cyber security
- Delivering the Buy Australian Plan
- Supporting Australia's transition to a circular economy by 2030

Investing in modern infrastructure

- \$120 billion infrastructure pipeline focused on improving productivity, supply chains and economic growth
- \$20 billion Rewiring the Nation to modernise our electricity grid
- \$1.1 billion Better Connectivity Plan to boost digital foundations
- \$4 billion in Northern Australia
 Infrastructure Facility
- \$1 billion in the Growing Regions and Regional Precincts and Partnerships Program
- Delivering a mission-based approach to innovation through \$3.4 billion Defence Advanced Strategic Capabilities Accelerator
- Strengthening biosecurity and disaster resilience systems

Future reform directions

Back people, regions and industries

- Invest in people, their mobility and adaptability
- Invest in places, especially through periods of transition
- Broaden and deepen Australia's industrial base, including through the Critical Minerals Strategy and National Battery Strategy

Become a renewable energy superpower

- Set strong foundations for a net zero economy, including through sectoral decarbonisation plans
- Realise net zero industrial opportunities
- Provide strategic coordination through the Net Zero Authority

Promote tech adoption

- Support businesses to adopt technologies
- Foster an innovative science and technology sector
- Build trust and certainty in technologies, including by developing responsible AI guardrails and cyber security capabilities
- Improve access to digital skills

3 Planning for our future workforce

Implemented

Leveraged workforce planning

- Established Jobs and Skills Australia and 10 new. industry-specific tripartite Jobs and Skills Councils
- Launched the National Teacher Workforce Action Plan
- Established a tripartite Agricultural Workforce Working Group
- Instituted a new annual Jobs and Skills Report by Jobs and Skills Australia

Targeted workforce shortages

- Delivered around 215,000 Fee-Free TAFE enrolments with the states and territories in areas of skills shortage
- Established an Industry Labour Agreement for Aged Care
- Expanded the Australian Apprentice Support Loans to non-trade priority occupations
- Invested in workforce skills and training measures for the early childhood education and care sector
- Funded an interim 15 per cent pay increase for aged care workers to attract and retain staff in the sector

Underway

Tailoring industry specific solutions

- Developing a National Strategy for the Care and Support Economy, with an early focus on our regulatory settings
- Working towards 1.2 million tech-related jobs by 2030
- Delivering a further 300,000 Fee-Free TAFE places in areas of skills shortage from 2024
- Implementing the APS Digital Traineeship Program
- Funding up to 20 nationally competitive PhD scholarships through the Next Generation Quantum Graduates Program
- Attracting and training home-grown, job-ready Al specialists through the Next Generation AI Graduates program
- Developing a South Australian Defence Industry Workforce and Skills Plan
- Reviewing the National Freight and Supply Chain Strategy

Building our labour market evidence

- Undertaking a National Study of Adult Literacy, Numeracy and Digital Skills
- Updating the Australian and New Zealand Standard Classification of Occupations to reflect modern technologies and roles

Future reform directions

Coordinate skill priorities and policies

- Introduce a single consolidated occupation list for temporary skilled migration
- Embed joint stewardship of the VET sector with states and territories to better identify and train students in areas of national priorities
- Promote innovation in qualifications and lifelong learning to ensure our ability to meet industry needs

Plan for the care and support economy

Build capacity and steward the care economy market and workforce as a whole, to deliver quality care and support with quality jobs

Grow our workforce to support the net zero transformation

- Identify skill needs through the Clean Energy Capacity Study
- Plan our energy workforce through the National Energy Workforce Strategy

Expand our digital skills base

- Partner with industry to improve pathways into tech careers
- Develop targeted strategies for priority areas, including AI, robotics and cyber security

4 Broadening access to foundation skills

Implemented

Made child care cheaper and invested in better outcomes

- Invested \$4.6 billion through the Cheaper Child Care Package to increase Child Care Subsidy rates for families earning up to \$530,000 per annum
- Introduced a base entitlement to 36 hours of Child Care Subsidy per fortnight for Aboriginal and Torres Strait Islander children
- Developed the Early Childhood Care and Development Policy Partnership to improve outcomes for First Nations children

Increased support for students and the teacher workforce

- Expanded the High Achieving Teachers Program
- Reformed NAPLAN to raise the standard and better identify students who need additional support
- Launched the National Teacher Workforce Action Plan

Underway

Making early childhood education and care cheaper, better and more accessible

- Examining child care costs through ACCC inquiry
- Identifying opportunities to improve the early childhood education and care sector through a Productivity Commission inquiry
- Developing an Early Years Strategy to support early learning, wellbeing and development

Building a better, fairer school system

- Undertaking an Expert Panel Review to Inform a Better and Fairer Education System
- Encouraging high-quality candidates to study teaching through scholarships of up to \$40,000 each

Boosting adult foundation skills

- Undertaking a National Study of Adult Literacy, Numeracy and Digital Skills
- Redesigning and broadening eligibility for the Skills for Education and Employment program
- Including foundation skills as a focus area for National Skills Agreement negotiations

Future reform directions

Chart a course to universal early childhood education and care

 New principles in this Roadmap will guide reforms for establishing universal access to early childhood education and care

Improve equity of school outcomes

- Negotiate new National School Reform Agreement to improve equity and student outcomes
- Work with states and territories to have every school on a path to 100 per cent of its fair funding level

Improve access to foundation skills training programs

- Better integrate foundation skills with employment services to help job seekers get the skills they need to improve economic participation outcomes and overcome disadvantage
- Establish new coordinated efforts to lift the foundation skills of Australian adults with states and territories

5 Investing in skills, tertiary education and lifelong learning

Implemented

Broadened opportunities for people to study in areas of skills shortage

- Expanded the Australian Apprenticeships Priority List
- Delivered around 215,000 Fee-Free TAFE enrolments with the states and territories in areas of skills shortage

Implemented targeted action within the tertiary education sector on priority areas

- Established the TAFE Technology Fund to help TAFEs upgrade and expand their facilities
- Launched New Energy Apprenticeships and the New Energy Skills Program to support workers in new energy industries
- Established Startup Year to support students' participation in startup courses

Developed partnerships with industry

- Supported the new Digital and Tech Skills Compact to grow the tech sector
- Extended the Women in STEM Cadetships and Advanced Apprenticeships program to give women more opportunities to work in STEM careers

Underway

Growing and strengthening Australia's vocational education sector

- Investing an additional \$3.7 billion in a new National Skills Agreement with states and territories
- Delivering a further 300,000 Fee-Free TAFE places in areas of skills shortage from 2024
- Building diversity in apprenticeships and driving completions, including through a new Australian Apprentices Support Services model
- Undertaking a VET Workforce Blueprint
- Turbocharging TAFE Centres of Excellence to fast track their establishment
- Introducing 'higher apprenticeships' to deliver advanced tertiary skills responsive to industry needs

Improving outcomes and broadening access to university

- Developing a Universities Accord
- Delivering 20,000 additional university places for students from under-represented backgrounds
- Delivering an additional 4,000 university places in STEM courses
- Establishing new Regional and Suburban University Study Hubs
- Ceasing the 50 per cent pass rule
- Introducing demand driven university places for all First Nations students

Improving skills recognition

Defining the scope, outcomes and benefits of a National Skills Passport in consultation with industry, unions, tertiary institutions and across government to help people more easily demonstrate their skills to employers and reduce barriers to lifelong learning

Future reform directions

Promote a larger share of Australians studying in areas of high skills need

- Leverage Jobs and Skills Australia to forecast skills needs and guide a responsive tertiary sector to respond to changing demands
- Promote greater participation in tertiary education of under-represented groups, including regional students

Boost collaboration in the tertiary sector

- Develop collaborative institutions including TAFE Centres of Excellence, with focuses on priority areas
- Develop new innovative qualifications, which combine the best of the tertiary education system, like higher apprenticeships

Remove barriers to lifelong learning

- Encourage ongoing learning in the workplace
- Support people to better demonstrate their skills to employers

6 Reforming the migration system

Implemented

Taken action to address backlogs and restore integrity to the visa system

- Accelerated visa processing and reduced visa backlog
- Provided more funding to Australian Border Force to address exploitation
- Raised the Temporary Skilled Migration Income Threshold
- Ended pandemic event measures
- Completed the Rapid Review into the Exploitation of Australia's Visa System

Taken action to address skills shortages

- Extended post-study work rights for students in areas of labour shortage
- Increased the permanent migration planning level in 2022–23, including tripling the places for regional Australia

Put permanency back at the heart of the migration system

- Provided a pathway to permanent residency for all temporary skilled visa holders
- Introduced a direct pathway to citizenship for eligible New Zealanders

Underway

Creating a Migration Strategy for a more prosperous and secure Australia

- Responding to the 2023 Review of the Migration System with new vision, objectives and roadmap
- Strengthening integrity in international education
- Improving recognition of priority qualifications, including by responding to the Independent Review of Health Practitioner Regulatory Settings

Taking further measures to combat worker exploitation

- Introducing criminal penalties for exploitation
- Consulting with business, unions and civil society on whistleblower protections for temporary visa holders
- Designing the firewall between the Fair Work Ombudsman and the Department of Home Affairs

Future reform directions

Better target skilled migration

- Deliver a new temporary skilled migration system that is effective at targeting Australia's evolving skills needs
- Develop an improved occupation list in partnership with Jobs and Skills Australia
- Introduce new permanent skilled visa settings, including exploring a revised points test

Realise migrants' employment potential

- Take further action to combat migrant worker exploitation
- Improve skills assessments

Improve employment outcomes for international students

 Improve pathways to work in higher skilled roles

Further reforms will be outlined in the Migration Strategy

7 Building capabilities through employment services

Implemented

Immediate improvements to employment services programs

- Suspended compulsory participation in ParentsNext
- Launched Veteran Employment Program to support transitions into the civilian workforce
- Better-embedded employment in National Disability Insurance Scheme plans
- Extended the Time to Work Employment Service, assisting First Nations people in prison to access the support to find work post-release
- Launched the Indigenous Skills and Employment Program, connecting First Nations people with jobs, training, and career advancement opportunities

Underway

Consulting on and co-designing reforms to employment services programs

- Conducting a first-principles review of Workforce Australia
- Developing a new remote jobs program in consultation with First Nations people and remote communities, including undertaking a trial that is creating up to 200 jobs in remote areas
- Designing a new program to replace ParentsNext in consultation with parents and stakeholders
- Reforming the Local Jobs Program to align with best practices in place-based policy design, and expanding eligibility for projects to more people seeking work

Future reform directions

Reform employment services

Establish clear processes to reform employment services guided by new principles in this Roadmap

Engage with local labour markets

Apply place-based policy design best practices to employment services programs

Evaluate and learn in employment services

Embed evaluation into policy reform processes, and the design of ongoing programs

8 Reducing barriers to work

Implemented

Implemented measures to end violence against women

- Committed to implementing all Respect@Work recommendations, including having legislated a positive duty for employers to prevent sexual harassment
- Invested \$2.3 billion in measures to end violence against women in the October and May Budgets

Promoted flexible and inclusive workplaces

- Legislated 10 days of paid family and domestic violence leave
- Improved access to flexible work and unpaid parental leave through changes to the Fair Work Act

Strengthened working age payments

- Increased the rate of working age and student payments by \$40 per fortnight
- Expanded eligibility for higher rate of JobSeeker Payment for recipients aged 55 and over
- Expanded eligibility for Parenting Payment (Single)
- Increased maximum rate of Commonwealth Rent Assistance

Acted on disincentives to work

- Implemented a temporary \$4,000 work bonus upfront credit for pension recipients
- Improved affordability of early childhood education and care

Underway

Addressing workplace gender segregation

- Encouraging shared care by increasing the Government's Paid Parental Leave, and improving flexibility in how parents share it
- Establishing the National Construction Industry Forum
- Undertaking a Pathway to Diversity in STEM Review

Acting on disincentives to work

- Smoothing the transition between income support and work by extending the nil rate period
- Supporting pensioners who are working by permanently enhancing the Work Bonus for age pensioners

Broadening employment opportunities for people with high support needs

- Leveraging the new National Disability Data Asset
- Implementing a new Disability Employment Services Quality Framework
- Establishing a Disability
 Employment Centre of Excellence

Boosting supply of secure, affordable housing

- Increasing investment in social and affordable housing through the Housing Australia Future Fund, Social Housing Accelerator and National Housing Infrastructure Facility, building housing where job opportunities are
- Working with states and territories to deliver 1.2 million new homes over five years from 1 July 2024, and to harmonise and strengthen renters' rights

Future reform directions

Promote gender equality

Release a National Strategy to Achieve Gender Equality, which will include a focus on women's economic equality

Further address disincentives to work

- Better support parents with caring responsibilities through improved access to early childhood education and care
- Consider further ways to support participation, including for working-age payment recipients

Provide high-quality supports for people with disability

 Reform Disability Employment Services

9 Partnering with communities

Implemented

Funded a Targeting Entrenched Disadvantage package

Extended Stronger Places, Stronger People, a community-led initiative to address disadvantage through local, evidence-based solutions

Strengthened local First Nations community initiatives

Funded foundation skills training for First Nations people through Aboriginal and Torres Strait Islander community-controlled organisations

Invested in broader social policy initiatives

Supported victim-survivors of family, domestic and sexual violence; supported community sector; and supported mental health and suicide prevention research

Underway

Working towards improving outcomes

- Co-designing the Outcomes Fund and delivering the Social **Enterprise Development Initiative**
- Developing a partnership with philanthropy through the Investment Dialogue for Australia's Children
- Developing the Life Course Data Asset to improve our understanding of how communities experience disadvantage
- Doubling the number of Indigenous rangers and expanding the Indigenous Protected Areas Programs by 2030

Working together through policy partnerships

- Scoping a First Nations Economic Partnership
- Identifying ways to back the social enterprise sector, and provide more employment and training opportunities for Australians facing disadvantage

Future reform directions

Boost place-based approaches

- Better align programs and delivery across governments
- Put data in the hands of communities and give them a say in how funding is directed, with appropriate government controls
- Expand the role of communities in decision-making over time

Partner with First Nations people

Improve progress on Closing the Gap in economic participation and development outcomes, by working in partnership with First Nations people

Back social enterprise

Build capacity to get people into jobs and create job pathways by supporting the growth of the social enterprise sector

10 Promoting inclusive, dynamic workplaces

Implemented

Strengthened protections in the Fair Work framework

- Committed to amend the Fair Work Act to include subjection to family and domestic violence in the list of protected attributes
- Made breastfeeding, gender identity and intersex status protected attributes in the Fair Work Act

Made gender pay gaps visible

- Legislated for the Workplace
 Gender Equality Agency to publish
 gender pay gaps of employers with
 100 or more employees
- Banned pay secrecy

Supported employers to adopt new hiring practices

- Co-designed entry-level work programs with employers through the Launch into Work program
- Launched the Carer Inclusive Workplace Initiative

Underway

Shaping outcomes through Government's purchasing power

- Establishing the Secure Australian Jobs Code to ensure government procurement supports secure jobs
- Introducing the Australian Skills Guarantee, with targets for women on major Government projects

Partnering with employers

- Co-developing a disability employment pilot with the Business Council of Australia
- Delivering a Visitor Economy
 Disability Employment pilot to
 deliver place-based employment
 outcomes by connecting small
 businesses, employment service
 providers and job seekers with
 disability

Improving information about experiences in work

 Funding the ABS to improve data on unpaid care, job security and outcomes of employment services and income support programs

Future reform directions

Promote innovative recruitment and job design

- Encourage workplace cultural change and job co-design
- Expand First Nations employment opportunities in the APS

Improve policy evaluation and partnerships

- Embed robust evaluation into policy design, especially for employment services
- Reform employment services to better support employers' recruitment needs
- Co-develop work experience principles for job seekers who are disadvantaged

Improve transparency on workforce diversity

Ensure data leads to change including through setting measurable targets

Endnotes

- 1 Victoria University, Projections for Jobs and Skills Australia, (2023).
- 2 Deloitte, Projections for Jobs and Skills Australia, (2023).
- 3 Victoria University, Projections for Jobs and Skills Australia, (2023).
- 4 Coates, B., Wiltshire, T., and Reysenbach, T., Short-changed: How to stop the exploitation of migrant workers in Australia, (Grattan Institute 2023).

Appendix A Glossary of terms

Capital deepening: an increase in the ratio of capital to labour either through an increase in the capital stock or through a decrease in the number of workers.

Child care: services that provide education and care services to children aged zero to school age including centre-based day care, family day care and outside school hours care, but excluding preschool and school.

Collaborative robotics: a form of robotic automation built to work safely alongside human workers in a shared, collaborative workspace. In most applications, a collaborative robot is responsible for repetitive, menial tasks while a human worker completes more complex and thought-intensive tasks.

Consumer Price Index (CPI) inflation: the most commonly used measure of household inflation. It measures the change in the price of a representative 'basket' of goods and services.

Employability skills: the non-technical skills needed to get a job, including communication, teamwork, problem solving, initiative, planning and organising, decision-making and self-management.

Employed: when a person works in paid employment for one hour or more per week.

Foundation skills: competencies that underpin workforce participation, productivity and social inclusion, including English language, literacy, numeracy, digital and employability skills.

Gross National Income (GNI): measures how much Australia earns, rather than what output is produced in the economy. It is used as an indicator of Australia's standard of living. GNI measures total income received in Australia from its residents and businesses in Australia and abroad. It can be measured in real or in nominal terms similar to GDP.

Job carving: an employment strategy used to assist with overcoming labour market challenges of people who face barriers. Job carving involves analysis and rearranging of tasks within an organisation to customise duties or create tailor-made employment opportunities to make the most of individual skills and abilities.

Labour force: the total number of employed people and unemployed people, aged 15 years and over.

Labour force participation rate: the labour force expressed as a percentage of the civilian population aged 15 years and over.

Labour market scarring: a negative effect of unemployment that reduces a worker's chance of re-entering employment, or has long-term impacts on income even once re-employed.

Labour productivity: a measure of output per hour worked. Growth in labour productivity can be decomposed into capital deepening and multifactor productivity (MFP). Capital deepening measures increases in capital per hour worked. MFP captures how efficiently labour and capital are used together to produce output and is considered the main driver of economic growth in the long term.

Labour shortages: where there are more vacancies in the labour market than available workers. Labour shortages can exist across the economy or they can exist for particular occupations, skills or in particular areas. For most markets, shortages resolve through changes in price. For labour, this is complicated by factors such as labour mobility, worker preferences, life circumstances, and policy settings.

Labour underutilisation: the extent to which people's desire for work is not being met, including people who are not working but want to work, and those who are working but want to work more hours. Labour underutilisation can be due to cyclical or structural reasons.

Long-term unemployment (LTU): people who have been unemployed for 12 months or more. LTU may be a result of mismatch in the labour market, skills deficiency or other factors that inhibit a person from gaining employment.

Matching efficiency: refers to the effectiveness and speed with which unemployed workers find jobs and vacancies are filled.

Microcredentials: are a certification of assessed learning or competency, with a minimum volume of learning of one hour and less than an Australian Qualification Framework (AQF) award qualification that is additional, alternate, complementary to or a component part of an AQF award qualification.

Multi-factor productivity: a ratio of output to a combined input of multiple factors, including labour and capital.

Mutual obligations: tasks and activities people agree to do in return for certain income support payments.

Non-Accelerating Inflation Rate of Unemployment: the level of unemployment that is consistent with stable wage or price inflation.

Not in the labour force: people of working age, who do not meet the ABS criteria for being employed or unemployed. People may be temporarily out of the labour force for a specific reason (for example, child raising) or may have permanently left the labour force (for example, retirees).

Preschool: a structured, play-based learning program delivered by a qualified teacher aimed at children in the year or two before they commence full-time schooling.

Productivity: the efficiency with which inputs are transformed into outputs using capital, labour, and other resources. The most common measure of productivity is labour productivity.

Safeguard mechanism: sets a baseline limit on how much CO₂-equivalent can be emitted by a facility in a year.

Underemployed workers: employed people aged 15 years and over who want, and are available for, more hours of work than they currently have.

Unemployed: when a person is not employed, but is looking for work and is available to work in the reference week.

Unemployment rate: the number of underemployed workers expressed as a percentage of the labour force

Wage Price Index (WPI) inflation: A commonly used measure of wage growth which measures changes in the price of labour in the Australian labour market. In a similar manner to CPI inflation, WPI inflation follows wage growth for a fixed 'basket' of constant-quality jobs.