OXFORD ECONOMICS AUSTRALIA

LABOUR COST ESCALATION: FORECASTS TO 2030/31

PREPARED BY OXFORD ECONOMICS AUSTRALIA FOR VICTORIAN DISTRIBUTION NETWORK SERVICE PROVIDERS

OCTOBER 2024

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EXECUTIVE SUMMARY

Oxford Economics Australia (OEA) was engaged by Victorian Distribution Network Service Providers (DNSPs) to provide price forecasts of labour relevant to Victoria's electricity distribution industry for the period 2026/27 (FY27) to 2030/31 (FY31). Forecasts for wage cost escalation will be used by the Victorian DNSPs to develop their operating and capital expenditure forecasts. These forecasts, in turn, will be included Victorian DNSPs regulatory submission to the Australian Energy Regulator (AER) - with the regulatory period covering the five-year period from 2026/27 to 2030/31 (FY27 to FY31) inclusive.

Note that most of the references to historical data and forecasts of wages are in nominal terms unless specifically stated that the data/forecasts are in real (inflation-adjusted) terms. The forecasts in this report were finalised in Mid-September 2024 and incorporate the latest data and macro-economic forecasts as at Mid-September 2024.

Labour Cost Escalation

For **electricity network related labour**, Oxford Economics Australia forecasts that total wage costs for Victoria Electricity, Gas, Water and Waste Services (EGWWS or 'Utilities') sector — expressed in Wage Price Index (WPI) terms — will average 3.7% per annum over the five-year period from FY27 to FY31 inclusive, equal to the Australian EGWWS WPI average of 3.7% over the same period. In real (inflation-adjusted) terms, the Victoria EGWWS WPI is forecast to average 1.2% p.a. over the five years to FY31 (see Table 1.1 below).

Note that the wage price index measure does not include the Superannuation Guarantee charge (SGC). As the SGC is in effect a labour 'on-cost', in terms of escalating wage costs over the forecast period, **the full annual 0.5% for the SGC therefore needs to be added to the forecast increases in the WPI** for each of the years from FY25 and FY26.

Over the forecast period, the Australian and Victoria EGWWS WPI growth is expected to push above and remain higher than the All Industries WPI average, with the national All Industries WPI forecast to average 3.4% over the five years to FY31. This means that the Australian EGWWS WPI is expected to be 0.3% higher than the All Industries average, which is slightly lower than the 0.4% historical difference of the decade to FY21.

Utilities wages are forecast to increase by more than the national average over the forecast period because of the following factors:

- the electricity, gas and water sector is a largely capital intensive industry whose employees have higher skill, productivity and commensurately higher wage levels than most other sectors
- strong union presence in the utilities sector will ensure outcomes for collective agreements, which cover 62% of the workforce, remain above the wage increases for the national 'all industry' average. In addition, with the higher proportion of employees on EBAs, compared to the national average (35%), and EBAs wage rises normally higher than individual agreements, this means higher overall wage rises in the EGWWS sector.

- increases in individual agreements (or non-EBA wages) are expected to remain elevated as the labour market remains tight, with the unemployment rate now around 4.1% and expected to remain around 4% over the next year and only rise to a peak of around 4.5% in FY26, before again tightening over the FY27 to FY30 period.
- the overall national average tends to be dragged down by the lower wage and lower skilled sectors such as the Retail Trade, Wholesale Trade, Accommodation, Cafés and Restaurants, and, in some periods, also Manufacturing and Construction. These sectors tend to be highly cyclical, with weaker employment suffered during downturns impacting on wages growth in particular, such as occurred in the wake of the COVID-19 impacts. The EGWWS sector is not impacted in the same way due to its obligation to provide essential services and thus retain skilled labour.

Table 1.1 EGWWS, Construction and All Industries Wage Price Index

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Average 2027-31 (f)
	Actuals									Forecasts		Regulatory Determination Period					
Nominal Wage Changes																	
Electricity, Gas, Water and Waste Services WPI - Victoria (a)	3.3	2.9	2.8	3.0	3.3	2.1	1.6	2.7	2.7	3.7	4.2	3.7	3.5	3.8	3.8	3.7	3.7
Electricity, Gas, Water and Waste Services WPI - Australia (b	2.4	2.2	2.0	2.8	2.7	1.8	1.5	3.5	4.1	4.2	4.0	3.5	3.5	3.7	3.8	3.7	3.7
Construction WPI - Victoria (c)	2.5	2.8	1.8	2.4	2.2	1.0	3.2	3.5	4.1	3.9	4.1	3.3	3.2	3.8	3.9	3.6	3.6
Construction WPI - Australia (b)	1.6	1.7	1.9	1.9	1.5	1.3	2.6	3.7	4.1	3.9	3.7	3.5	3.4	3.8	3.9	3.7	3.7
All Industries WPI - Victoria	2.3	1.9	2.3	2.6	2.4	1.4	2.4	3.4	3.6	3.5	3.4	3.2	3.1	3.4	3.6	3.5	3.4
All Industries WPI - Australia (b)	2.1	2.0	2.1	2.3	2.1	1.5	2.4	3.5	4.1	3.6	3.6	3.2	3.1	3.4	3.6	3.5	3.4
Consumer Price Index (headline) (d)	1.4	1.7	1.9	1.6	1.3	1.6	4.4	7.0	4.2	3.0	3.5	2.6	2.5	2.5	2.5	2.5	2.5
Real Wage Changes (e)																	
Electricity, Gas, Water and Waste Services WPI - Victoria (a)	1.9	1.2	0.9	1.4	1.9	0.5	-2.8	-4.4	-1.5	0.7	0.7	1.2	1.0	1.3	1.3	1.2	1.2
Electricity, Gas, Water and Waste Services WPI - Australia (b	1.0	0.5	0.0	1.1	1.3	0.2	-2.9	-3.5	-0.1	1.2	0.5	1.0	1.0	1.2	1.3	1.2	1.2
Construction WPI - Victoria (c)	1.1	1.1	-0.1	0.7	0.9	-0.7	-1.2	-3.6	-0.1	0.9	0.7	0.7	0.7	1.3	1.4	1.1	1.0
Construction WPI - Australia (b)	0.2	0.0	-0.1	0.2	0.2	-0.3	-1.8	-3.3	-0.2	0.9	0.3	1.0	0.9	1.3	1.4	1.2	1.1
All Industries WPI - Victoria	1.0	0.2	0.4	1.0	1.1	-0.2	-2.1	-3.7	-0.6	0.5	-0.1	0.6	0.6	0.9	1.1	1.0	0.9
All Industries WPI - Australia (b)	0.7	0.2	0.1	0.7	0.8	-0.1	-2.1	-3.6	-0.1	0.6	0.1	0.6	0.6	0.9	1.1	1.0	0.9

Source: ABS, RBA, Oxford Economics Australia

(a) Electricity, Gas, Water and Waste Services (EGWWS) Wage Price Index (WPI) for Victoria
(b) Australian sector wage forecasts provided for comparison
(c) Construction Sector Wage Price Index (WPI) for Victoria
(d) Inflation forecasts are RBA forecasts for the next 2-3 years from latest 'Statement of Monetary Policy'. Beyond that, inflation forecasts are based on the mid-point of RBA inflation target (2.5%).
(e) Real price changes are calculated by deducting the inflation rate from nominal price changes.
(f) Average Annual Growth Rate for 2026/27 to 2030/31 inclusive, ie for the revenue determination or regulatory period.

Given service providers outsourced labour is mostly supplied by firms in the construction industry, we proxy Victorian DNSPs **external labour cost escalation** by wages growth (as measured by the WPI) in the Victorian construction sector. Our research has shown that construction activity (ie work done in the sector) normally has a strong influence on construction wages, although changes in wages tend to lag construction (in work done terms) by around one year. Hence, our wage forecasts are based on Oxford Economics Australia forecasts of construction activity by state (which includes residential and non-residential building, plus engineering construction) as well as predicted movements in the construction wages at the national level.

Our forecast is for the Australian and Victorian Construction WPI to average 3.7% and 3.7%, respectively, over the five years from FY27 to FY31 inclusive (Victorian DNSPs regulatory period) – or 1.2% and 1.2% per annum on average in real (inflation adjusted) terms (see Table 1.1).

The Australian Construction WPI has seen three years of strengthening growth, rising from 1.3% in FY21 to 4.1% in FY24. FY24 has recorded the strongest year of growth since FY12. Construction wage growth is forecast to maintain it elevated level over the next year as construction activity increases and activity levels surpass the previous highs of FY18 and FY13. Underpinning higher wage growth will be worsening of the currently acute skills shortage as labour demand strengthens. Construction wages

growth then eases over FY26 to FY28 as growth in activity softens, but then picks up again from FY29 as growth ramps up. Higher levels of residential and non-residential building will be key drivers, while engineering construction will be driven by higher electricity and mining investment and a plethora of publicly funded transport infrastructure projects (particularly in the eastern states of the nation).

Discussion on escalator used for wage growth

The AER has typically permitted the escalation of electricity wages in Victoria proxied by the Victorian EGWWS WPI, which captures average wage growth across the electricity, gas, water and waste services sectors. Historical data would suggest that the electrical workforce has consistently received higher wage growth than the outcomes captured in the WPI. We suggest this is due to two factors:

- The inclusion of other sectors in the EGWWS WPI which are not directly related to the electricity sector (i.e., the inclusion of gas, water and waste services).
- The DNSPs electrical workforce is unionised at a relatively higher rate than other sectors, wherein wage growth is typically determined through enterprise bargaining agreements, whereas the WPI is weighted average of individuals who have pay set through award only, individual agreements and collective agreements.

Victorian 'current' EGWWS EBA outcomes have outpaced the Victorian EGWWS WPI by **+0.5 percentage points** between FY04-FY24 (a similar trend of +0.5 percentage points is observed over the past ten years, FY15-FY24).

As discussed later in the report, unionised workers have historically been able to leverage their enhanced bargaining position to earn higher than average sectoral wage growth – this is expected to continue going forward, based on the recent inflationary pressures that have led to a decline in sectoral real wages[1] and the rising infrastructure burden across generation, transmission and distribution assets required for the energy transition over the next decade and beyond.

Further, there is evidence that electricity sector specific EBA outcomes are outpacing the published EGWWS EBA wage growth series (i.e., the inclusion of gas, water and waste services EBA outcomes in the published series has lowered average wage growth in the published data). Australian DNSP EBA outcomes approved in 2024 indicate an annual wage increase of 4.8% over three years. Victorian DNSP EBA outcomes approved in 2024 indicate an annual average wage increase of 5.1% over three years.

The Australian DNSP approved EBA outcomes in 2024 are **+0.4 percentage points** higher than EGWWS approval EBA outcomes in 2024 and **+1.4 percentage points** higher than average wage growth of current EBA agreements for the Australian EGWWS workforce over the same year.

Similarly, Victorian DNSP approved EBA outcomes in 2024 are **+1.2 percentage points** higher than Victorian EGWWS approval EBA outcomes in 2024 and **+1.9 percentage points** higher than average growth of current EBA agreements for the Victorian EGWWS workforce over the same year.

[1] This is more pertinent for the proportion of the electrical workforce on enterprise agreements, because part of the workforce have received wage growth outcomes based on agreements that were struck prior to the inflationary spike in FY23 and thus saw a more pronounced loss of real wage growth.

1. INTRODUCTION

Oxford Economics Australia was engaged was engaged by Victorian DNPs to provide price forecasts of labour that are relevant to Victoria's electricity transmission and distribution industry for the period 2026/27 to 2030/31 (FY26 to FY30). Forecasts for wage will be used by the Victorian DNSPs to develop their capital and operating and capital expenditure forecasts. The forecasts in this report were finalised in mid-September 2024.

The Australian Bureau of Statistics is the primary data source for the consumer price index, wages, employment, real gross value added and investment data, and for a range of other economic variables. The data used in the projections is the latest available as at early September 2024 and includes June quarter 2023 Consumer Price Index (CPI), Producer price Index (PPI) and Wage Price Index (WPI), RBA August 2024 'Statement of Monetary Policy' and the June quarter 2024 National Accounts data releases. Other inflation and interest rate data were sourced from the Reserve Bank of Australia.

Forecasts of the economic variables in this report were mostly sourced from Oxford Economics Australia reports, including the *Australian Macro Service*, *Long Term Forecasts: 2024 – 2038*, *Engineering Construction in Australia 2024-2038* and *Building in Australia 2024-2038,* along with other unpublished forecasts and from Oxford Economics Australia internal research and modelling.

The previous Summary section presents an overview of the outlook for the labour input costs including numerical forecasts which are presented in the summary table.

Section 2 provides a macroeconomic and construction outlook for Australia and Victoria. This section also has forecasts of key economic variables plus a discussion of the drivers and logic underpinning the projections, to provide context for the labour market outlook.

Section 3 discusses Oxford Economics Australia' national wage and CPI projections and discusses the use of the Reserve Bank of Australia forecasts of the CPI for the deflation of nominal wages. Forecasts of the All Industries WPI are also provided in chapter 3. Not that most of the references to historical data and forecasts of wages in Sections 3 and 4 are in nominal terms unless specifically stated that the data/forecasts are in real (inflation-adjusted) terms.

Sections 4 provides the forecasts and rationale of the wage projections for the Electricity, Gas, Water and Waste Services (EGWSS) and Construction for Australia and Victoria as measured by the WPI.

Appendices include an explanation of different wage measures and wage models.

2. MACROECONOMIC AND CONSTRUCTION OUTLOOK

2.1 AUSTRALIAN MACROECONOMIC OUTLOOK

Real Gross Domestic Product (GDP) recovered well from the COVID-related slump in 2020, posting growth of 2.2% and 3.7% over FY21 and FY22 respectively, with Gross National Expenditure (GNE - domestic demand plus change in stocks) experiencing faster growth of 3% and 5% respectively in those years. Solid growth of 3.5% for GNE continued in FY23, with GDP growth slightly lower at 3.1%, due to another negative contribution from net exports.

Growth in the Australian economy continued to slow over FY24, with GDP growth coming in at just 1.5%. This marked the slowest year of annual growth (excluding FY20) in over 30 years. Driving this sluggish figure was weak private consumption, as the high interest rate environment cut disposable incomes and the significant stock of savings built up over the pandemic period faded. Despite the economic headwinds brought about by tight monetary policy, a recession was avoided owing to the strong population over FY23 and again in FY24.

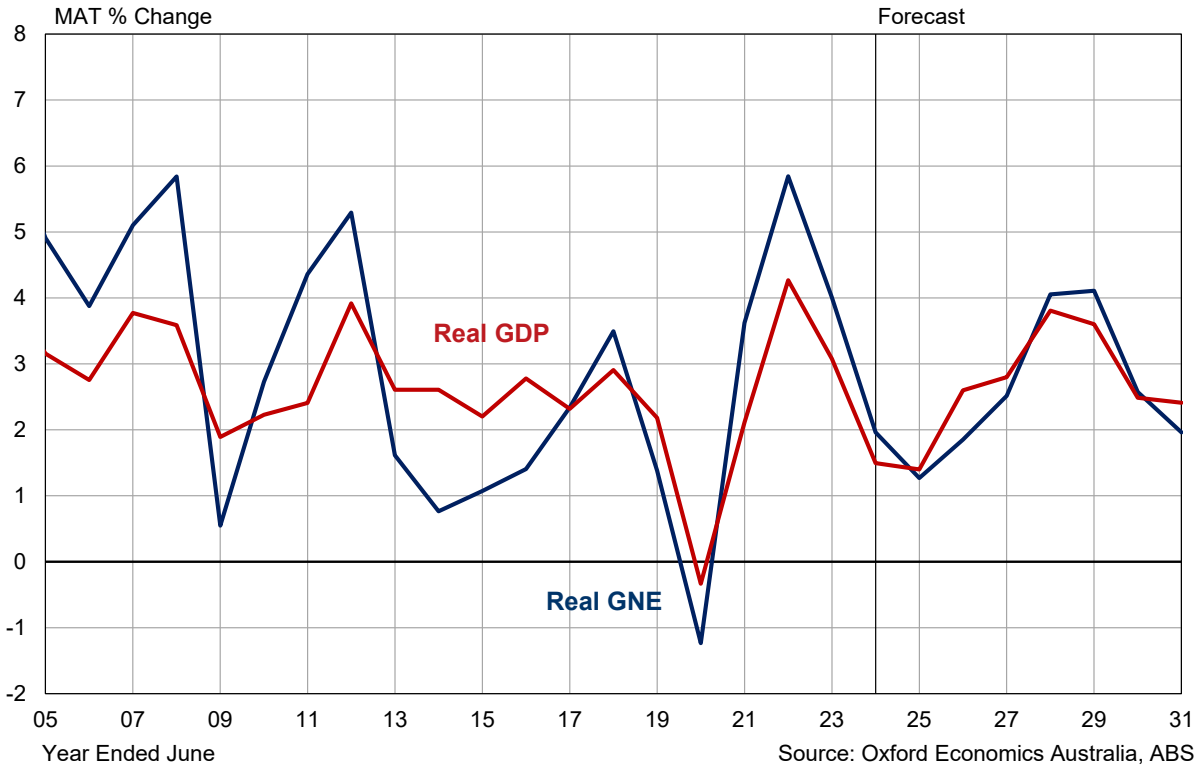
Policy settings has reached its peak impact on consumption, while slowing inflation over FY25 will help support real incomes. But growth in spending will be modest over the remainder of 2024. The savings rate has now fallen to its pre-pandemic level, meaning the scope for households to fund consumption growth by saving less is very limited. The tight labour market and rising wage growth will support incomes. Elevated interest rates and price inflation will keep spending growth weak in the near term. However, the recent July 2024 will provide some support to incomes and consumer spending over the second half of 2024.

The investment outlook is patchy. Private sector business investment weakened in June quarter, falling back -1.5%, although picked up 3.3% over the year. Non-dwelling construction strengthened for a third consecutive year and is expected to continue given strong investment in mining and electricity infrastructure construction. A pipeline of publicly funded transport and health projects will also support growth in the near term, although some commitments have been wound back. Dwelling construction plateaued over the year and is set to weak over FY25 (-3.5%) as builders finish the large backlog of work to be done and falling commencements over FY24 flow on to less work done.

While we expect overall investment to remain strong, the higher cost environment provides downside risk as the viability of some future projects is questioned. Nevertheless, mining investment has picked up over the past three years. With prices for a number of commodities expected to remain at healthy levels over the medium term and strong demand for renewable energy related minerals, we expect further investments to get underway and mining investment to continue to rise and remain strong well into the middle of the decade. Overall, new business investment increased 8.3% and 6.0% in FY23 in FY24 respectively, with a further 5.0% expected in FY25, before growth eases. The strength in business investment will not only drive near term demand but will increase the economy's productive capacity over the long run.

Net exports made a positive contribution to growth over FY24. This is expected to continue over FY25, supported by solid rural export volumes following bumper crops in recent years. Services exports – including inbound tourism and education - are expected to continue to increase and outpace services debits (mainly tourism outflows), with the number of international students in the country surpassing its pre-pandemic level. The outlook for services exports remains positive, but growth will slow from here. Meanwhile, domestic demand growth is slowing in Australia, which will weigh on imports.

Figure 2.1 Australia – Basic Economic Indicators



The labour market continues to track strongly. Employment grew by a solid 2.5% in FY24, following an exceptional 4.4% in FY23. The unemployment rate continued to sit well below pre covid levels, averaging 3.8%, whilst the participation rate remains at record highs. Faster population growth has facilitated strong jobs growth. However, labour demand has recently started to soften, with the unemployment rate pushing up to 4.0% in May. However, job vacancies are still at high levels, suggesting healthy growth in employment in the near term. This strength is the best insurance the economy has against a drastic collapse in growth. But it is adding to inflationary pressures in the economy. While the labour market continues to track in such a strong position, there will continue to be upward pressure on wage growth, which picked up over FY24 and remain elevated in FY25.

One main negative influence on economic growth has been the progressive tightening of fiscal policy, with government consumption expenditure winding back. However, the July2024 tax cuts represent a reversal in this tightening stance and also represent an upside risk to inflation.[2]

After rate hikes at 10 consecutive meetings, the RBA finally paused its hiking cycle in April 2023, but then added another 0.25% increase in May, June and November, the latter due to a higher-than-expected CPI outcome in the September 2023 quarter. The official cash rate has since sat at 4.35%, with the latest June quarter CPI data tracking as expected. Despite easing inflation, domestic cost pressure remains broad and the labour market tight. As such, we don't expect the first rate cut until the June quarter 2025.

Global Economic Outlook

Our baseline forecast for global GDP growth to gradually ease from 3% in 2024 to 2.7% in 2025 and 2.4% in FY25. In the US, we now envisage a more gradual slowdown to sub-trend growth over the course of 2024. Evidence of a soft landing in the US is building and weakening inflation has allowed central banks to begin cutting interest rates. But global GDP growth still looks set to be subdued, even by the standards of the 2010s, and we think that the pace of policy rate cuts by the US Federal Reserve this year will be less than markets envisage. Other advanced economies will remain weak, with Europe's growth at 0.3% in 2024, before picking up to a modest 1.5% in 2025.

The other key development over the past month has been the downward revision to our global inflation forecasts. A swathe of weaker-than-expected inflation data towards the end of 2023 and a reduction in our oil price forecast – we now expect the Brent oil price will remain around US$81 per barrel this year – are the main drivers. We expect world CPI inflation to average 4.1% this year, still above the 2.5%-3% average range in the late 2010s, but considerably lower than last year's 6% increase. The path for inflation remains uncertain and there are still plenty of potential shocks that could slow the normalisation, including the recent Red Sea shipping attacks. Even so, the risk around our forecast are becoming more evenly balanced, with both upside and downside risks present.

We continue to forecast China's GDP will expand by 4.4% in 2024, following an estimated 5.2% expansion in 2023. We think manufacturing has benefitted from government stimulus, adding upside risk to our outlook. However, government stimulus didn't boost consumer spending as much as was hoped. Last year was eventful for China. It became the largest auto exporter globally, its population declined for the first time on record, it contended with waves of negative headlines about property developer non-payment issues, and registered its first ever negative net inward FDI. We think policymakers will struggle to keep private sentiment positive in 2024. China's macroeconomic situation was mixed at the end of 2023. We think policymakers will maintain their "pro-growth" policy tone in 2024. However, not much progress regarding policy implementation has been made over the past month. At China's annual 'Two Sessions' in March the official growth target was set at "around 5%".

[2] The recent federal budget (May 2024) continues the reversal of this trend as the government attempts to balance the line between cost of living relief and avoiding stoking additional inflationary pressures. The budget is broadly expansionary with additional subsidies related to student debt, energy costs, rent rebates and increasing the income threshold for exclusion from the Medicare levy.

Beyond the near-term weakness, we expect global growth will return to its trend pace of around 3% by FY26, and gradually slow over the long term as resident population growth eases. Australia's trading partner growth (weighted by exports) is forecast to grow at a faster pace over the next 5-20 years (between 0.5 to 1% higher), due to the high weights of China, East Asia and India (all of which are expected to outpace the average pace of global growth) in Australia's export mix.

High and rising US interest rates and increased uncertainty has seen a broad-based appreciation of the US dollar since late 2021, which has pushed down the value of the Australian dollar from around US$0.75 in FY21, to US$0.66 in the June quarter 2024. With the main driver of the exchange rate being interest rate differentials between Australia and other major economies (namely the US), our outlook is for the AUD to gradually rise over FY25 as US interest rates fall faster than Australian rates. The AUD with then begin to weakening over FY26 and FY27 as Australian interest rates are cut. Thereafter we expect the AUD to appreciate gradually over the latter years of the decade to the long term average of US$0.75.

Domestic demand and GDP weakened in FY24, improving in FY25

Australian domestic demand is forecast to slow from 2.4% in FY24 to 2.3% in FY25 and 1.7% in FY26. Net exports are expected to provide a positive contribution over the next two years, as tourism and education boost exports, with GDP growth forecast to lift from 1.4% in FY25 to 2.6% in FY26. There is more downside risk to this outlook from a number of factors.

Housing investment is expected to continue declining in FY25 as the current backlog of work is finished and high interest rates impact new dwelling construction. On the other hand, we expect further moderate growth in business investment as deferred investment is undertaken, although some sectors, such as hotel construction and other tourism-related investment, will take longer to recover. Private sector engineering construction will remain buoyant due to higher levels of electricity and telecommunications infrastructure and higher levels of mining investment, particularly oil and gas. Meanwhile, public investment is expected to peak in FY25, as a large pipeline of transport infrastructure and social and institutional buildings projects come through. Meanwhile, government recurrent expenditure has weakened as governments attempt budget repair. The July 2024 tax cuts will help boost household spending in FY25, back to around 2.5%, with real wage increases also helping.

Trade volumes will be a mixed bag. We expect mining export volumes to pick up over the next 2-3 years as new capacity comes onstream. Rural exports bounced back over calendar 2021 and will remain strong over FY24, with bumper seasons in the eastern states boosting grain, other crops and dairy exports. Meat exports will strengthen too. Manufacturing exports will remain constrained due to weak global growth but will pick up over FY25 and FY26 as overseas conditions improve. Overall merchandise export volumes will continue to display moderate growth over FY25 and FY26. Meanwhile, growth in merchandise import volumes improving in FY25, in line with domestic demand.

Service credits and debits are expected to hold firm over FY25. This will have different implications for the all-important tourism and education services trade and related industry sectors. Education exports were worth $37.6 billion in FY19, or almost 39% of overall services exports (compared to only $461m for outbound education import 'debits'). Education exports are now recovering rapidly, while inbound tourism 'exports' will recover well in the medium-term, aided by a low A$. Tourism exports (including

'business travel') were worth $25.3 bn in FY19 (26% of overall services exports), compared to $50.6 billion for outbound services 'imports' – which then accounted for almost 50% of overall services debits. We expect a slower ramp-up in outbound tourism (compared to inbound tourism), with tourism flows unlikely to recover back to their previous levels for a couple of years. The forecasts assume that the tourism and education credits (inbound) will be strengthening above pre-COVID levels over FY25, while outbound tourism debits will not get back to 2018 peaks until FY26.

Economy to remain weak through mid-2020s, before recovering from FY27

The RBA is expected to keep rates on hold in the near-term, with elevated inflationary pressures still expected to be present with unemployment rate at around 4%. Meanwhile, with the benchmark housing variable rate remaining around 8.8% from late 2023 to mid-late 2025, the high interest rates will keep consumer spending restrained and impact housing and business investment over FY25 and into FY26. With government capital spending falling over FY26 and FY27 and recurrent spending still constrained, the end result will see annual domestic demand growth push below 2% in FY26 before picking up from FY27. GDP growth will also be soft.

Interest rate cuts are expected from early-mid 2025 and particularly over FY26 and FY27 in response to the weakening in the economy and because we expect inflation to be comfortably back in the RBA target range of 2%-3%. The large rate cuts will precipitate a very strong rebound in dwelling construction – by mid-decade there will be a very large undersupply of housing, with pent-up demand waiting to be unleashed. The current undersupply is only being exacerbated by high immigration and under-building. As consumers and businesses re-adjust to the 'normalcy' of higher interest rates – although at much lower levels than the 2000s and 2010s – investment and consumer spending will return to long term trend (or potential) rates of growth over the second half of the 2020s with an initial rebound in GDP growth to 2.8% in FY27 and 3.8% in FY28, before subsequently easing back.

Over the longer term, potential growth will slow primarily due to a smaller contribution from labour force growth compared to recent history. Net overseas migration will fall back to a more normal level, and the contribution from natural increase (births minus deaths) will also moderate. The relatively large cohort of Australians aged 65+ moving into retirement will also place downward pressure on the labour force participation rate, although this will continue to be somewhat alleviated by relatively high net immigration.

2.2 VICTORIA MACROECONOMIC OUTLOOK

After outperforming the national economy in 6 years to 2019 inclusive, Victoria experienced a larger-than-average fall in output through the coronavirus downturn, due to the more severe experience of the pandemic which severely restricted activity over 2020 and 2021. The successful vaccination rollout and covid restriction and disruptions easing significantly then led to a strong rebound in economic activity, with State Final Demand (SFD) increasing 7.2% in FY22 and a further 3.9% in FY23. However, FY24 marked a slowdown in growth to just 1.4% as tight monetary policy impacted household demand (0.5% growth) and business investment (-0.5% decline) – the latter of which reflected weakening non-residential building and civil construction related activity. On the construction front, private and public investment are expected to continue decline over coming quarters, as projects are finished, and the backlog of construction activity is exhausted.

SFD growth is expected to remain weak over FY25 and FY26, due to weaker dwelling, business and public investment, and particularly insipid growth in household spending. The Victorian economy benefited from a large external contribution over FY24 and into FY25 with a return to positive net interstate trade and strong growth in international services credits – mainly international students and tourists – which boosted growth in goods exports. SFD growth is forecast to begin improving from 2027 due to a strong upturn in construction, with Victoria subsequently showing above-average growth to the end of the decade. While further growth in tourist and student arrivals will boost activity in 2024, this impetus to growth is fading as the recovery has largely progressed ahead of schedule.

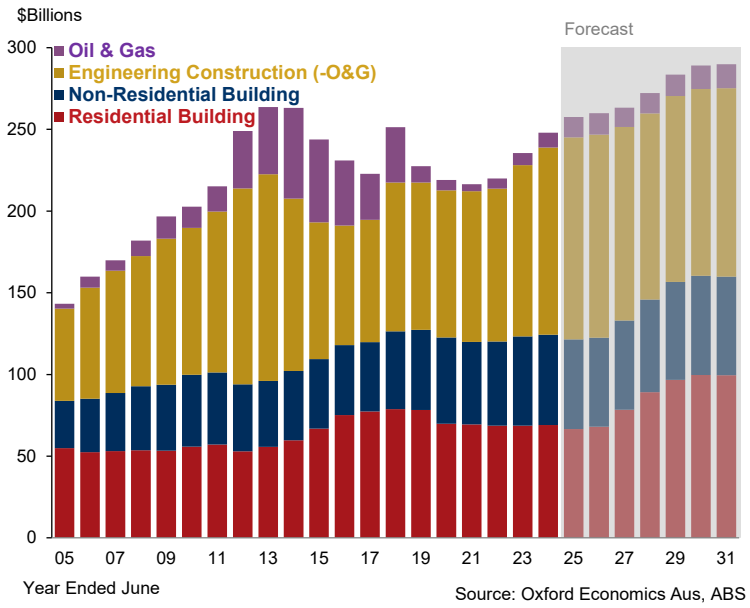
The state's labour market remained resilient over FY24, with the unemployment rate averaging 4.1% - in line with the national average. Softer economic momentum and tighter policy settings will test the resilience of the labour market over the next 2 years, but we expect Victoria's unemployment rate to be only slightly higher than the national average over FY25 to FY27.

In the long run we still expect the state to again outperform the national average, but by less than was evident pre-COVID - Victoria's economy had been partially driven by rapid expansions in higher education and tourism, and there will be permanent losses in these areas. Offsetting this will be the return of relatively stronger population growth, with Victoria's population growth expected to outpace the national average from by around 0.2% p.a. over back half of the 2020's. This will provide an added boost to consumer, housing and infrastructure demand over the medium-to-long run.

2.3 AUSTRALIA CONSTRUCTION OUTLOOK

Beginning in 2018-19, total construction activity, measured in work done terms, saw three years of consecutive declines, which were exacerbated by the outbreak of COVID-19. Nationally, residential building work done is yet to recover from the decline – but a strengthening pipeline of non-residential building and transport and utilities infrastructure drove construction to $249bn in FY24. Excluding oil and gas work done, which typically does not impact local construction capacity to the same extent as other sectors, construction work done reached $240bn in FY24. This represents peak levels of construction activity, with the previous peak equal (excluding oil and gas) equal to $223bn in FY13 (+7.6% in FY24).

Figure 2.2 Construction Outlook - Australia

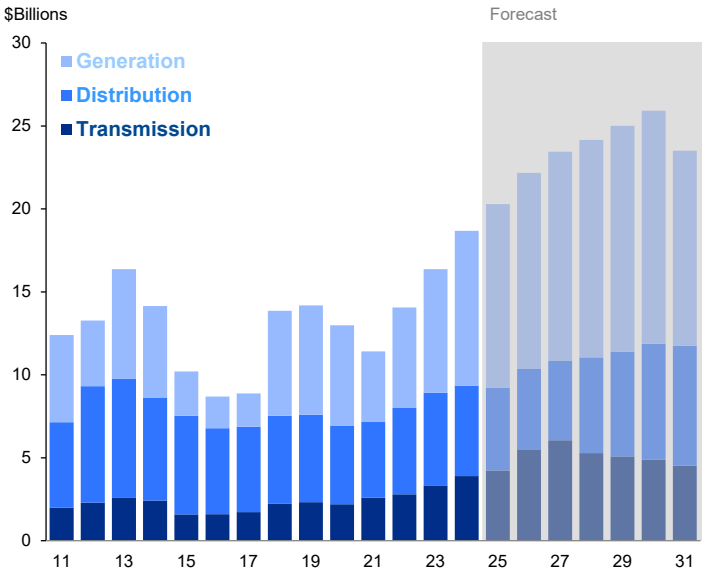


Building (residential and non-residential) construction activity has seen soft growth over the past three years as high building costs and capacity constraints plagued the sector. Further hindrance in the form of higher borrowing costs will see a slight decline in activity over FY25 (-4%) and flatlining activity over FY26. Pent up dwelling demand and easing borrowing costs are then expected to stimulate a surge in construction, namely from residential, with total building activity forecast to lift a cumulative 30% over the three years from FY26 to FY29 – rising from $120bn to a record $156bn.

Engineering construction activity sat at $124bn in FY24 and will continue to rise to a peak of $137bn in FY26, on the back of publicly funded transport infrastructure and renewed mining investment. Although transport infrastructure investment has contributed much to recent growth in activity – we anticipate that this will shift towards the utilities sector, with utilities work done having climbed 49% since FY16, and to sit around $42bn annually out to FY28.

Most relevant to the electricity distribution industry – electricity construction activity is set for sustain growth over the next seven years, rising from $18 billion in FY24 to $26 billion by FY31 – which represents a 41% increase in activity.

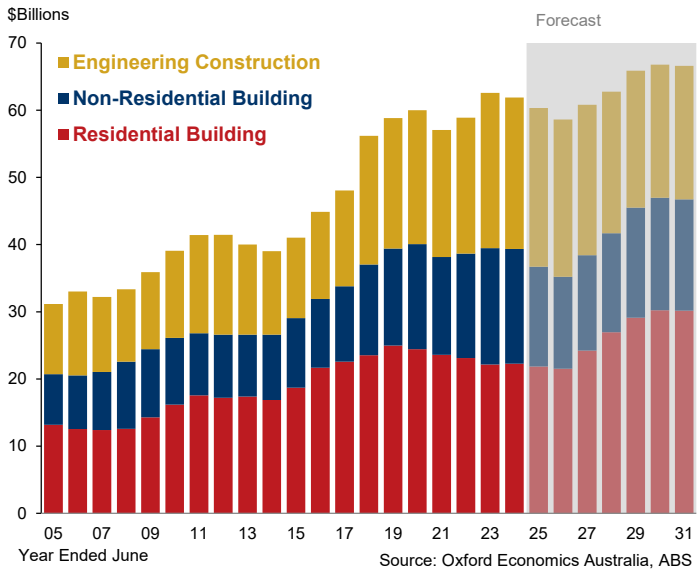
Figure 2.3 Electricity Construction Outlook - Australia



2.4 VICTORIA CONSTRUCTION OUTLOOK

Total construction across the state plateaued in FY24 at $63bn. Total activity has been underpinned by engineering construction, with a strong pipeline of publicly funded transport infrastructure. However, five years of weakening residential construction placed a ceiling on the rise of overall activity over this period. Victoria's total construction activity is expected to see a minor downturn over the next two years, falling around -3% annually to $59bn in FY26. Driving this will be a modest decline in residential construction, and a notable drop off in non-residential. Over the remainder of the 2020's, a decline in engineering activity as major transport projects near completion will be offset by a solid pickup in residential construction. Overall, Victoria's total construction activity is forecast to average 3.4% annual growth over the four years to FY30 – from 59bn in FY26 to $67bn by FY30.

Figure 2.4 Construction Outlook - Victoria



3. WAGES AND INFLATION OUTLOOK

3.1 CONSUMER PRICE INDEX OUTLOOK

Current strong inflationary pressures will be slow to abate

Consumer price inflation was subdued for the five years to the March quarter 2020, with annual (through-the-year or y/y) headline CPI inflation ranging between 1.0% and 2.2%; averaging 1.7%. Meanwhile, underlying (or core) inflation fell below the Reserve Bank's target 2-3% band in March 2016 and stayed there. The onset of COVID-19 in early 2020 then saw considerable volatility in the headline CPI measure over 2020 and 2021, due to volatility in oil prices, government responses to Covid, demand impacts and then supply chain impacts due to Covid – but the CPI remained under 2% over FY20 and FY21.

However, by late 2021/early 2022 it was apparent that inflationary pressures were increasing and broadening. Both core and headline inflation accelerated through 2022, with headline CPI peaking at 7.8% and core inflation peaking at 6.4% in the December quarter 2022, as a number of factors conspired to worsen local and global inflation. These factors included severe supply chain shortages and delays, the zero-Covid policy pursued by China, the outbreak of war in Ukraine (and associated sanctions on Russian oil and other commodity exports). Food prices also jumped in early 2022 because of the impact on wheat and other foods prices from the Ukraine war, while the floods in eastern Australia led to substantial rises in some food prices through 2022. The supply-chain disruption for imported goods were also exacerbated by the decline in the Australian dollar over 2022 and into 2023. Added to this was evidence of rising demand inflation via widening profit margins, as local businesses took advantage of stronger economic conditions.

Another important component of procyclical inflation since mid-2021 was the cost of constructing a new dwelling (which constitutes 8.5% of the CPI 'basket'). Cost inflation in the construction sector has been escalating since late 2020, due to both the surge in construction work generated by the HomeBuilder subsidy, and materials and labour shortages caused by this additional demand and exacerbated by supply bottlenecks and workplace restrictions. The house purchase component increased 10% y/y over the year to June 2023, before easing over the year to 5% y/y in the June quarter 2024. Construction cost inflation will slow further in the coming quarters, but over the next year it will still remain high relative to its pre-covid history.

Price inflation to ease back to RBA target over the next 2 years as supply pressures ease

With most of the above supply-side pressures to ease further and oil and other commodity prices to weaken over FY25, we expect their absence will help subdue headline inflation materially over the coming year. However, demand-driven inflation will be slow to abate, despite RBA attempts to 'cool' strong demand with higher interest rates. Moreover, the tight labour market - with the unemployment rate currently around 4.1% and expected to stay around 4% for the next year - will contribute to wage pressures, which have so far contributed little to the above-average CPI inflation, apart from construction costs. Overall, headline CPI inflation averaged 7% in FY23 and , 4.2% in FY24, with annual

(through-the-year, or y/y) price growth easing back over the past year to 4.7% in the March quarter 2024 and then to 3.8% in the June quarter of 2024 (latest data).

However, some structural factors will add to inflation over the short-to-medium term, such as household energy costs, rising higher rental and elevated food inflation. Rents constitute around 6% of the CPI, electricity and gas 3.4%, while food accounts for over 10% of CPI basket (or over 17% if you include meals out and takeaway food). Rental price growth peaked at 7.8% in the March quarter 2024, before easing slightly to 7.3% in the June quarter. Given the extreme tightness in rental markets currently, the CPI measure of rents is expected to remain quite high over the next 2-3 years as existing rental contracts roll over to new, much higher rents and new supply fails to keep with strong housing demand. Another factor driving inflation over the next 1-2 years will be further sharp increases in electricity prices, which rose 13% y/y in June 2023, and a further 6% in the year to June 2024. It is worth noting that both rent, and energy price rises have been constrained by temporary government subsidies.

Food inflation had averaged around 2.8% p.a. over the 25 years to 2014 but were very weak over the five years to FY19 (averaging only 1.1% p.a.), which was a key factor which muted prices over those years. This was due to intense competition between the major supermarkets and falling or weak global agricultural prices. The supermarkets cannot keep cutting prices (and either their own margins or suppliers' margins), while world agricultural prices will remain elevated over the medium term, now the previous global oversupply has dissipated. So while food inflation has fallen back from the 10% rises of 2022 to 3% y/y in the latest quarter, food prices are unlikely to track back to the sub-2% of the 2015-2019 period.

Underlying and headline CPI inflation are expected to remain somewhat elevated over FY25 and FY26 as the supply and demand pressures slowly abate, the labour market remains tight, and wage growth remains relatively high. Although global inflationary pressures will ease over the next year, they will remain elevated, contributing to higher manufacturing costs and prices over the near term. The sharp decline in the exchange rate from around US$0.72 in the first half of 2022 to US$0.66 in the June quarter 2024 will also add to inflationary pressures in the near term. Conversely, we expect the A$ to appreciate toward US70 cents over the next 1-2 years, which will provide some offsetting pressures over FY25.

Overall, OEA forecasts headline CPI inflation 3.0% in FY25 and 2.8% in FY26. The softer growth in the economy over FY24 to FY26 will see price and wage pressures weaken, with the CPI to ease back to around 2.4% over FY27 and rising to 2.7% by the end of the forecast period (see figure 4.1).

CPI inflation projected to average close to 2.5% over the medium-to-long term

Headline CPI inflation is expected to sit at the mid-point of the RBA's 2-3% target band in the long run based on the following:

- Tradeables inflation, which currently constitutes around one-third of the CPI basket, is forecast to increase by an average of around 1% to 2% per annum contributing around 0.5% to annual inflation. Limited movements in the A$, steady (but subdued) increases in global manufacturing costs and some commodity price increases underpin this projection.

- Non-tradeables inflation comprises the remaining two-thirds of the basket, but this proportion is increasing due to the move toward services and higher price inflation (than tradeables). It is assumed to increase by around 2.5-3% per annum, contributing around 2% to headline inflation. This is weaker than the 3.7% average achieved from 2001 to 2015 when relatively high wage inflation, lower than average productivity growth to 2009 and also large rises in utilities prices pushed non-tradeables inflation to well outside of the RBA's 2 to 3% target range. We expect higher wages growth in the longer term and lower long-term productivity will also contribute to the maintenance of relatively high non-tradeables inflation.

3.1.1 RBA CPI Forecasts are Used to Calculate Real Wages

To calculate real wage and other cost increases, we deflate nominal price growth by deducting expected inflation. For the inflation forecasts, we use the methodology preferred by the Australian Energy Regulator (AER). This methodology involves using the official near-term CPI forecasts from the Reserve Bank of Australia (RBA) and a longer-term average based on the 2.5% mid-point of the RBA's inflation target band (i.e. 2 to 3%).

The RBA's August 2024 'Statement on Monetary Policy' (SoMP) forecast the headline CPI rate to be 3.0% in the December quarter 2024 and 2.8% in the June quarter 2025 - giving a year average of 3.0% for FY25. The RBA's CPI forecast for December 2025 is 3.7% and 3.2% in the June quarter 2026 – giving a year average CPI for FY26 of 3.5%. Beyond the RBA's forecast from the SoMP, we assume the CPI averages 2.5% over the medium-to-long term.

3.2 NATIONAL WAGES

The key determinants of nominal wages growth are consumer price inflation, productivity, the relative tightness of the labour market (i.e. the demand for labour compared to the supply of labour), and compositional (structural) changes in the labour market following the end of the mining investment boom around 2013. The low wage growth of the 2014-21 period was both a product of and key contributor of low underlying inflation. Low wages helped keep business costs down and thus mute upward price pressures, while a significant section of pay deals are set in line with CPI inflation – especially for employees on awards. The unemployment rate and underemployment rate are key indicators of the amount of slack in the labour market. The unemployment rate was just above 5% over the two years to the March quarter 2020, before the COVID impacts. Historically this rate was seen as close to the NAIRU, (the Non-Accelerating Inflationary Rate of Unemployment or the 'natural rate of unemployment'), but our latest research suggests that the natural rate has lowered in recent years, possibly to around 4%[3].

Wage growth will remain elevated as labour market remains tight

Following the covid-inspired slump in wages in FY20 and FY21, wages growth picked up over FY22, with the All Industries wage price index (WPI) increasing to 2.4% in FY22 (from 1.5% in FY21). A further acceleration in wages growth occurred in FY23 – to 3.5%. Strengthening wage growth has persisted

[3] A 4% NAIRU is within the RBA's the lower bound estimate as of 2019. See the RBA's Assistant Governor Luci Ellis' 2019 speech "Watching the Invisibles".

over FY24, rising 4.1% - the highest increase since 2009. We expect wages growth to remain elevated over FY25 and FY26, before easing slightly over FY27 to FY28.

A key element adding to wage pressures over the past three years was the rapid tightening in the national labour market. Employment is now well above pre-COVID levels, with the unemployment rate averaging 3.8% in FY24 and labour force participation rates at record levels. A key to the outcomes over FY22 was little growth in the pool of available labour. The cessation of international migration to Australia since March 2020 saw population growth plummet to just 0.2% in the year to June 2021, while the working age population (above 15 years old) increased by only 50,000 (+0.2%) over FY21 and 206,000 in FY22, compared to over 330,000 persons in FY19. Growth in the labour force has been facilitated by a marked increase in the labour force participation rate to record levels. However, there is now little scope to raise the participation rate further and, with the underemployment rate at historical lows and job vacancies well above pre-COVID levels, wage pressures will remain elevated.

Figure 3.1 Australia: Wages and Prices

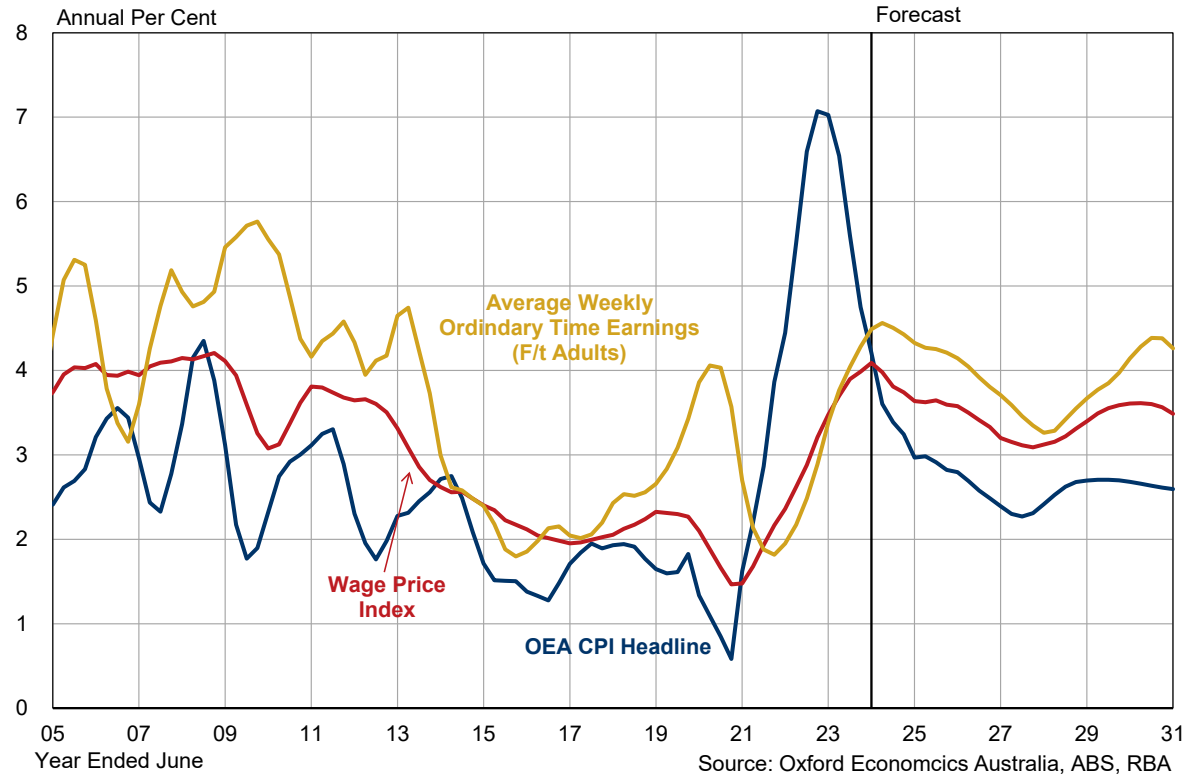
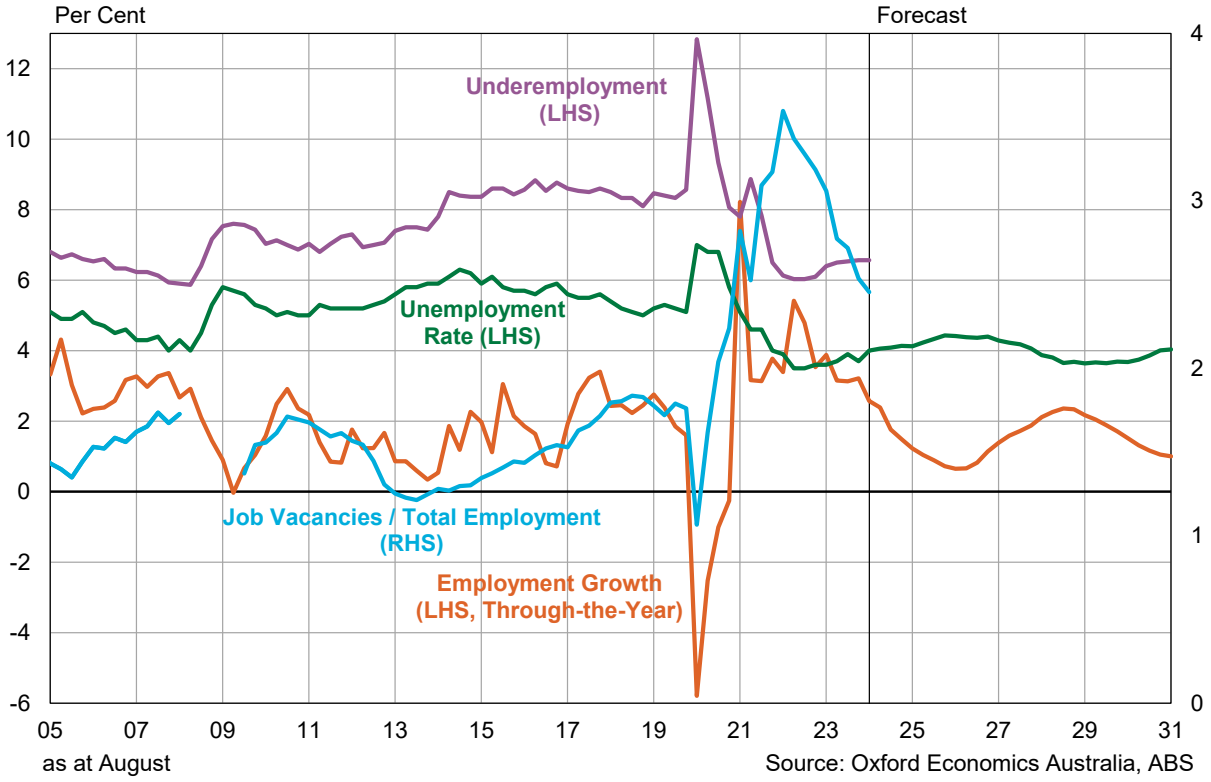


Figure 3.2 Australia: Employment and Unemployment



The economy is expected to remain resilient over the short-to-medium term and, although OEA's economic growth (GDP) forecasts are for modest weakening over FY25, we still expect the labour market to remain tight, with labour demand still relatively strong and the unemployment rate remaining around 4% to early-to-mid 2025. Job ads are still very high – around 40% above pre-Covid levels and well above the levels in early 2022. Furthermore, while our employment growth forecasts are similar over the next year, we expect that the rise in the unemployment rate will be kept in check by falls in the participation rate from current record levels, as employment growth slows. This is likely to occur amongst those currently in the workforce with a 'loose attachment' to the workforce, such as older workers who stayed in the workforce due to strong labour demand. As demand eases, a significant proportion of workers are likely to drop out of the workforce (and hence the labour force statistics) and possibly retire.

Skill shortages, which have already emerged, are expected to remain acute in many parts of the economy, although there has been some recent evidence of shortages of unskilled labour beginning to ease. The tight labour market will see wage pressures remain elevated. Wages have been slower to pick up compared to the inflation rate, due to lags in the transmission of wage increases, particularly in the enterprise bargaining segment, where the duration of agreements runs for 2-3 years.

In the short-term, our wage forecasting methodology involves an analysis of the expected future wage movements in the three main methods of setting pay – for those reliant on awards (13% of the full-time workforce), collective agreements (35% of the workforce) and those who have their pay set by individual arrangements (52%). In terms of those workers on awards who have their pay determined by the Fair Work Commission (FWC) in the annual National Minimum Wage (NMW) case, the increase

given in June 2022 for the 2022/23 financial year was much higher than previous years – with the FWC awarding a 5.2% increase to workers on the minimum wage, although workers on award rates only received a 4.6% increase (minimum $40/week increase for award rates below $870/week). A key element of this decision was the very high CPI inflation rate of 5.1% in the March quarter 2022 (which was then the latest available quarter).

The June 2023 NMW decision (for the 2023/24 financial year) was even higher, driven by CPI inflation of 7% in the March quarter 2023. The Commission awarded an 8.6% in the minimum wage and an increase of 5.75% for workers on awards. This underpinned the lift in wages growth in FY24. The most recent 2024 NMW decision, for the 2024/25 financial year, will see the minimum wage increase by 3.75%, another strong result given CPI will be trending below 3.0%. It is likely that the minimum and award increases provided by the FWC will remain high again in FY26 given elevated CPI inflation and particularly given the support for higher wages from the new Federal Labor government (which the previous government did not support). Although only 13% of full-time workers (a much higher proportion for part-time workers) rely on the annual increase in the minimum and award wage as their primary wage-payment mechanism, a significant proportion of workers are also indirectly influenced by the NMW increase, as it usually flows onto industry awards, with the Fair Work Commission estimating its decisions will affect more than 2.7 million workers (around 20% of the workforce). Accordingly, these FWC decisions will also influence the strength of wage increases given to those who receive their wages via 'individual arrangements' pay setting arrangements, as a significant proportion of wage increases given under individual arrangements are based on awards. Recent inflation outcomes, inflationary expectations and the tightness of the labour market are also key influences in the setting of wage increases under individual arrangements.

It is important to note that wage growth usually lags changes in the labour market, inflation and economic conditions, because of the inherent lags in wage setting mechanisms. Although wage increases related to the NMW and relevant awards are set each July, many of the enterprise agreements – covering 35% of the full-time workforce – run for an average of 2-3 years. These agreements averaged 2.6% over the five years to December 2021, having been set in an environment of low inflation and a much less tight labour market. However, as these previous (low wage increases) agreements expire, we expect the next round of agreements to be materially higher, due to ongoing high CPI inflation and because of widespread skilled labour shortages (with the unemployment rate expected to be below 4%). The latest DEWR (Department of Employment and Workplace Relations) data shows that agreements recently approved have lifted from 2.6% (average annualised wage increases – AAWI) in the September 2022 quarter to an average 4.1% over the past three quarters (September 2023 – March 2024). We expect similar high agreements to be negotiated over coming quarters. Of the other 52% of workers on individual agreements, those of who are on awards will receive an annual pay increase via the FWC increase, while others may receive an annual salary increase, but there are a significant proportion on fixed contracts running over a few years. The bottom line is that the next round of wage rises negotiated by workers will be much higher than recent years.

The Australian All industries WPI is forecast to rise 3.6% in FY25 and remain elevated at 3.6% in FY26, before easing over the subsequent 2 years as the economy cools and the unemployment rate rises firmly back above 4%. Stronger wage growth is then expected over FY29 and FY30 as stronger

economic and employment growth returns from 2028, and the unemployment rate falls back below 4%. Overall, using RBA CPI forecasts, real (inflation-adjusted) WPI growth for the Australian All Industries WPI is forecast to rise 0.6% FY25. This will represent the first year of real wage growth since FY20. Thereafter, with WPI growth remaining high and CPI inflation easing, there will be positive growth in real wages out to FY31. Over the five-year period from FY27 to FY31, the real rate of increase is forecast to average 0.9% p.a., which will be above the 0.6% average of the decade to FY20 inclusive.

The **Victorian All Industries WPI** are expected to largely track over the national All Industries WPI over the forecast period, with minor year-by-year differences related to the relative strength of the respective state economic growth and labour markets.

4. INDUSTRY WAGE FORECASTS – UTILITIES AND CONSTRUCTION: AUSTRALIA & VICTORIA

4.1 CHOICE OF THE WAGE PRICE INDEX AS THE MEASURE OF LABOUR COSTS

The WPI for the EGWWS (Electricity, Gas, Water & Waste Services or 'Utilities') sector in Victoria is used as a proxy for all of Victorian DNSPs electricity network related labour costs. labour costs includes all internal labour (i.e. all head office staff including professional and admin employees plus field employees) as well as any external labour hired to provide field services such as 'asset management' services. Businesses providing these field services are usually classified to the utilities sector. Hence, including their labour costs as part of the Victorian DNSPs opex 'network' labour and escalating it with the WPI for the state utilities sector will be consistent with the AER's framework. That being said, some of the Victorian DNSPs internal staff may be involved in project delivery such as replacement and/or augmentation capital projects. Their labour cost can be included in the capex calculations.

OEA chose to use the Wage Price Index (WPI) as the key measure of growth in the Victorian DNSPs internal labour costs for the forecasts of Electricity, Gas, Water and Waste Services. The key motivations for this are:

(a) Greater data availability: the EGWWS WPI is available at the national level and for the key states (NSW, Victoria and Queensland), both on quarterly and annual basis. Average Weekly Earnings (AWE) and Average Weekly Ordinary Time (AWOTE) are not available by industry by state, and at the national level are only published every 6 months; and

(b) The Australian Energy Regulator (AER) prefers the WPI as it has less volatility than AWOTE and is a better measure of underlying trends.

In terms of overall wage costs, **the full 0.5% for the Superannuation Guarantee increases each year should be added to the forecast WPI increases each year** for internal wages and also external wages, to arrive at the total percentage increase in labour costs. This applies to FY25 and FY26. This is in line with advice from Deloitte Access Economics (DAE) to the AER in their Superannuation Guarantee paper, that "…taking into account the uncertainty regarding how individual NSPs will respond to changes in the minimum superannuation guarantee, it is recommended that the full 0.5 percentage point annual increase to the superannuation guarantee be added to forecast WPI growth" (page 5 of DAE impact of *Changes to the Superannuation Guarantee on Forecast Labour Price Growth,* July 2020).

4.2 NATIONAL & VICTORIAN EGWWS WPI FORECASTS

Utilities wage growth is forecast to continue to outpace the national 'all industries' average over the forecast period.

The national (Australia-wide) EGWWS WPI growth has consistently been above the national (All Industries) average since the index's inception in 1997 and averaged 0.6% higher over the past two decades (see Table 5.1 and Fig 5.1). Over the two decades to 2020/21, the average growth in the real (inflation-adjusted) WPI was 1.2%. Since the collapse in wages growth following the end of the mining boom, the EGWWS WPI has continued to outpace the All Industries average, increasing by an average of 2.5% over the past decade from 2013/14 to 2022/23 inclusive, 0.2% higher than the 2.3% national average. The Australian EGWWS WPI rose 4.1% in FY24 – -0.1% in real terms.

We forecast the Australian EGWWS WPI to grow at a rate of 4.2% in FY25 and 4.0% in FY26, representing a real increase of 1.2% in FY25 and 0.4% in FY26. The WPI will grow at an average annual rate of 3.7% over the five years between FY27 to FY31, 0.3 percentage points above the same average for the All Industries WPI.

Table 4.1 Total Australia (All Industries) and Electricity, Gas, Water and Waste Services Average Weekly Ordinary Time Earnings and Wage Price Index (Year Average Growth)

Year Ended June	Average Weekly Ordinary Time Earnings (1)						Wage Price Index (2)					
	All Industries			Electricity, Gas, Water and Waste Services			All Industries			Electricity, Gas, Water and Waste Services		
	Nominal $/week	%CH	Real AWOTE %CH	Nominal $/week	%CH	Real AWOTE %CH	Nominal Index	%CH	Real WPI %CH	Nominal Index	%CH	Real WPI %CH
2005	973	4.4	2.0	1,091	3.2	0.8	85.3	3.7	1.3	83.3	4.3	1.8
2006	1 018	4.6	1.4	1,111	1.9	-1.3	88.7	4.1	0.9	87.6	5.2	2.0
2007	1 054	3.6	0.6	1,152	3.7	0.7	92.2	3.9	1.0	91.8	4.8	1.8
2008	1 106	4.9	1.6	1,183	2.7	-0.7	96.1	4.1	0.8	95.7	4.2	0.8
2009	1 166	5.5	2.3	1,255	6.1	3.0	100.0	4.1	1.0	100.0	4.5	1.4
2010	1 231	5.6	3.2	1,351	7.6	5.3	103.1	3.1	0.8	104.4	4.3	2.0
2011	1 283	4.2	1.0	1,474	9.1	6.0	107.0	3.8	0.7	108.7	4.2	1.1
2012	1 338	4.3	2.0	1,510	2.5	0.1	110.9	3.6	1.3	112.5	3.5	1.2
2013	1 400	4.6	2.4	1,602	6.1	3.9	114.6	3.3	1.0	117.3	4.2	1.9
2014	1 442	3.0	0.3	1,635	2.0	-0.7	117.6	2.6	-0.1	121.1	3.2	0.4
2015	1 477	2.4	0.7	1,646	0.7	-1.0	120.4	2.4	0.7	124.5	2.8	1.1
2016	1 504	1.9	0.5	1,704	3.5	2.2	123.0	2.1	0.7	127.5	2.4	1.0
2017	1 535	2.0	0.3	1,777	4.3	2.6	125.4	2.0	0.2	130.3	2.2	0.5
2018	1 572	2.4	0.5	1,818	2.3	0.4	127.9	2.1	0.1	132.9	2.0	0.0
2019	1 614	2.7	1.0	1,842	1.3	-0.3	130.9	2.3	0.7	136.6	2.8	1.1
2020	1 676	3.9	2.5	1,896	2.9	1.6	133.7	2.1	0.8	140.2	2.7	1.3
2021	1 721	2.7	1.1	1,927	1.6	0.0	135.6	1.5	-0.1	142.7	1.8	0.2
2022	1 755	1.9	-2.5	1,979	2.7	-1.7	138.8	2.4	-2.1	144.9	1.5	-2.9
2023	1 814	3.4	-3.6	2,109	6.6	-0.5	143.7	3.5	-3.6	150.1	3.5	-3.5
2024	1 895	4.4	0.2	2,246	6.5	2.3	149.5	4.1	-0.1	156.3	4.1	-0.1
Forecasts												
2025	1 974	4.2	1.2	2,352	4.7	1.7	155.0	3.6	0.6	162.8	4.2	1.2
2026	2 053	4.0	0.5	2 455	4.4	0.8	160.5	3.6	0.0	169.2	4.0	0.4
2027	2 128	3.6	0.6	2 548	3.8	0.7	165.6	3.2	0.1	175.2	3.5	0.5
2028	2 196	3.2	0.4	2 638	3.6	0.8	170.8	3.1	0.4	181.4	3.5	0.8
2029	2 275	3.6	1.1	2 744	4.0	1.5	176.6	3.4	0.9	188.2	3.7	1.2
2030	2 368	4.1	1.6	2 860	4.3	1.8	183.0	3.6	1.1	195.4	3.8	1.3
2031	2 464	4.1	1.6	2 982	4.3	1.8	189.4	3.5	1.0	202.6	3.7	1.2
Compound Annual Growth Rates (3)												
2001-2010	4.8		2.0	4.4		1.5	3.7		0.9	4.4		1.6
2010-2020	3.1		1.1	3.4		1.4	2.6		0.6	3.0		1.0
2020-2030	5.1		0.1	6.0		1.0	4.6		-0.4	4.9		0.8
2027-2031	3.0		0.9	3.2		1.1	2.7		0.7	3.0		0.8

Source: Oxford Economics Austrlaia, ABS

(1) Earnings per person for full-time adults. Data is year ended May (available only at mid-month of quarter)
(2) Wage Price Index, excluding overtime and bonuses
(3) CAGR (Compound Annual Growth Rates) for 2027-2031 is the average annual growth for 2026/27 to 2030/31 inclusive i.e. next Revenue Determination period.

Oxford Economics Australia regards the WPI to be a measure of the *underlying* wages growth in the utilities sector for total Australia. In terms of total wage costs — expressed in Average Weekly Ordinary Time Earnings (AWOTE) — Oxford Economics Australia expects EGWWS AWOTE to average 3.2% per annum over the five years to FY31, 0.2% higher than the EGWWS WPI. Our AWOTE forecasts are higher due to compositional effects. Apprentices, trainees and numbers of new staff have increased markedly over recent years, across the electricity, gas and water sector generally. Given slower growth in employment numbers over the next decade, it is likely that there will be overall upskilling of the existing workforce, which will see a commensurate movement by much of the workforce into higher grades (i.e. on higher pay), resulting in higher earnings per employee.

Wages growth in the EGWWS sector is invariably higher than the total Australian national (All Industries) average.

During the COVID-19 crisis, the EGWWS sector fared much better than just about all other sectors, along with the Education, Health & Social Assistance and Finance and Insurance sectors, in terms of wage increases over FY20 and FY21. However, in FY22, annual growth in the EGWWS WPI (1.5%) slipped below the All Industries average (2.4%) for only the second time in the past two decades. However, this proved to be a short-lived aberration, with the EGWWS WPI rebounding strongly over FY23 to match the national average of 3.5%. In FY24 the EGWWS WPI matched the All Industries WPI, largely because of some large one-off 'catch-ups' in wages for some low paid sectors such aged-care and child care. From FY25, we again expect the EGWWS WPI to outpace the All Industries WPI over the forecast period. Driving this will be much higher EBAs negotiated in an environment of very high inflation and a very tight labour market, particularly for the types of skilled labour that dominate in the sector.

To a large extent, higher relative wages growth has been underpinned by a strong capital works program in the utilities sector over the past two decades (and particularly up to 2013 - resulting in robust employment growth over the same period), strong competition from the mining and construction workers for similarly skilled labour and the powerful influence of unions in the utilities sector. This is set to continue over the next decade (also see Figures 4.5, 4.6 and 4.7).

In addition, the electricity, gas and water sector is a largely capital intensive industry whose employees have higher skill, productivity and commensurately higher wage levels than most other sectors. Further, the overall national average tends to be dragged down by the lower wage and lower skilled sectors such as the Retail Trade, Wholesale Trade, Accommodation, Cafés and Restaurants, and, in some periods, also Manufacturing and Construction. These sectors tend to be highly cyclical, with weaker employment suffered during downturns (such as the recent COVID-19 inspired downturn) impacting on wages growth in those sectors. The EGWWS sector is not impacted in the same way due to its obligation to provide essential services and thus greater need to retain skilled labour.

Strong Union presence in the utilities industry and higher collective agreements outcomes pushes utilities wages above the All Industries average.

Trade unions are typically able to negotiate higher-than-average wage outcomes for their members through collective bargaining, resulting in stronger wage growth than the all-industry average. Across the EGWWS sector, there are a number of utilities unions such as the Communications, Electrical and Plumbing Union (CEPU) and Australian Services Union (ASU), which have a history of achieving high

wage outcomes for the sector. Other unions active in the sector include the Australian Workers Union (AWU).

As at May 2023, 61.6% of full-time non-managerial employees in the EGWWS industry have their wages set by collective agreements, considerably higher than the national average of 35%. Over the 10 years to 2016, previous BIS Shrapnel research found that a higher proportion of workers on collective agreements was associated with higher wage growth, with a correlation coefficient of +0.6 (see Figure 4.2). As we expect that the EGWWS industry will continue to have higher levels of unionisation than the national average, we expect that unions in the EGWWS industry will continue to be able to negotiate for higher wages for a substantial proportion of EGWWS employees, resulting in EGWWS wages growing faster than the national average.

Figure 4.1 Wage Price Index - Australia All Industries and Electricity, Gas, Water & Waste Services

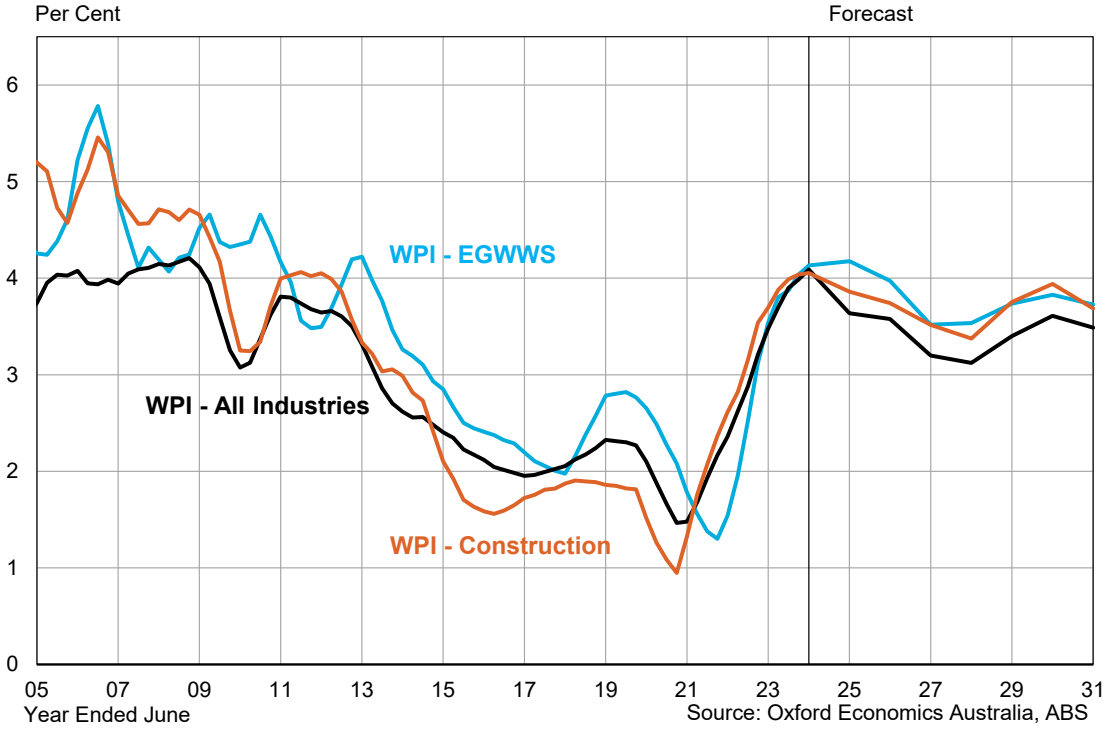
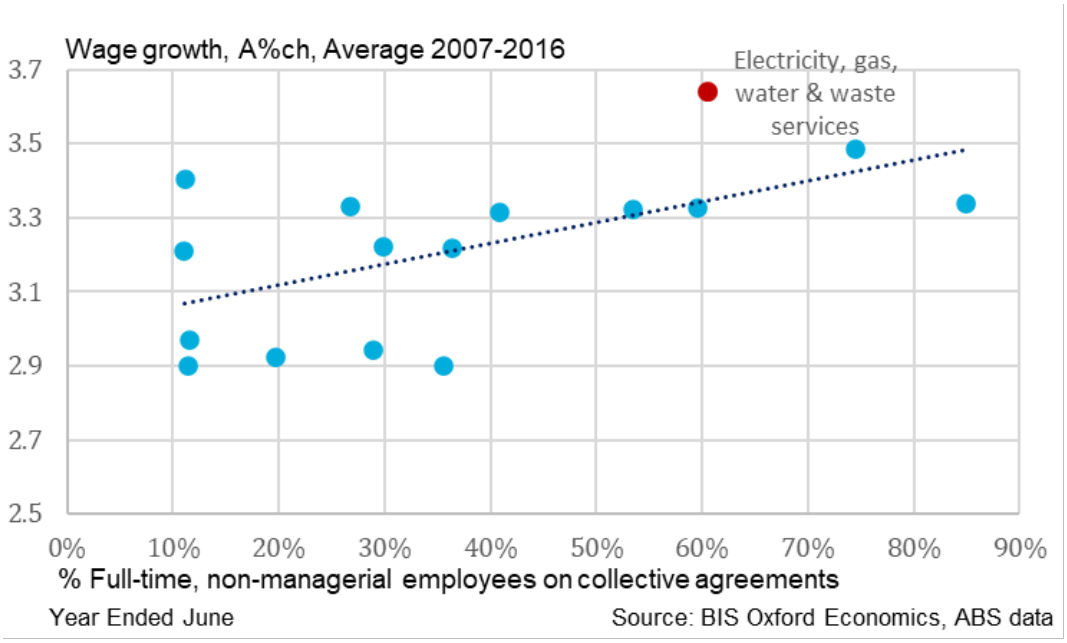


Figure 4.2 Average wage growth and unionisation rates by industry, 2007-2016



Collective bargaining dominates the pay setting arrangements in the utilities sector, while the relative absence of workers relying on (often) low-increase awards (set in the National Wage Case) means the overall average level of total utilities wages (in A$ terms) will generally be higher than the All Industries average. Over the outlook period, we expect collective agreements in the EGWWS sector to achieve average increases of 3.9%.

Oxford Economics Australia analysis shows collective agreements in the EGWWS sector were on average around 1.5% higher than CPI inflation over the 15 years to FY2014 (excluding the effects of GST introduction in 2000/01). In the six years to FY20, collective agreements were on average 1.4% above the CPI. Given the strength of unions in the sector and a still strong demand for skilled labour, collective agreements are forecast to remain around 1.0% above the 'official' CPI over FY25-31, although this is lower than previous periods.

As well as increases in CPI, increases in collective agreements under enterprise bargaining are also influenced by a combination of inflationary expectations, the recent profitability of relevant enterprises, current business conditions and the short-term economic outlook, and, as mentioned, by the industrial relations 'strength' of relevant unions. Because the average duration of agreements runs for two-to-three years, Oxford Economics Australia bases its near-term forecasts of Enterprise Bargaining Agreement (EBA) wages on the strength of recent agreements, which have been formalised or lodged (i.e., an agreement has been reached or approved) over recent quarters.

EBA outcomes were relatively weak over FY21 and remained subdued in FY22 (averaging 2.5%), compared to the 5 years to FY20, when EBAs averaged around 2.9%. However, EBAs have picked up appreciably over the past six quarters, with the latest March 2024 data showing that approved EBAs have picked up to 4.8% (AAWI terms) – an outcome not seen in over 15 years. We expect the next rounds of EBAs negotiated in the sector to remain elevated around current levels, due to several factors:

- CPI inflation will remain high (averaging 7% in FY23, 4.2% in FY24, 3.0% in FY25),
- the demand for skilled labour remains strong, and
- the recent high enterprise agreement outcomes in the construction sector will influence negotiations in the EGWWS sector, as some skills can be transferable.

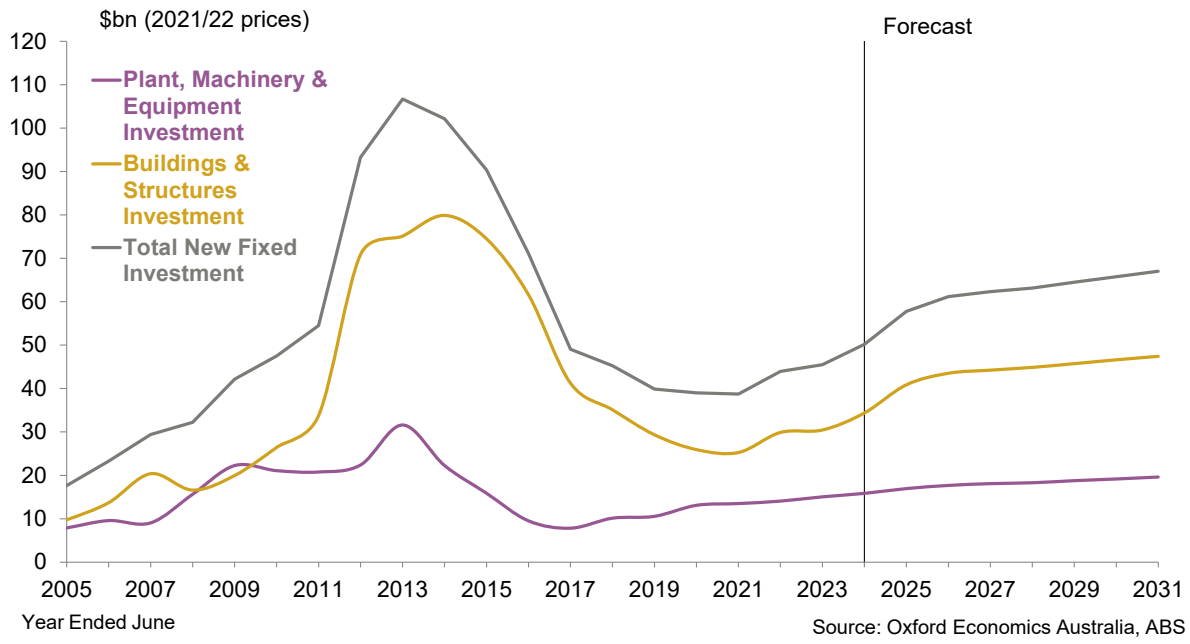
Wage increases under Individual agreements and EBAs are strengthening due to tight supply and strong demand for skilled labour from the Mining and Construction sectors.

Increases in individual agreements (or non-EBA wages) are primarily influenced by the strength of the labour market (especially the demand-supply balance of skilled labour), inflationary expectations, the recent profitability of relevant enterprises (which influences bonuses and incentives, etc.), current business conditions and the short-term economic outlook. Demand for labour (and hence wages) in the utilities sector are also significantly influenced by investment in the sector, particularly engineering construction, which has been the key driver of employment growth in the sector over the past two decades. Figures 4.5, 4.6 and 4.7 illustrate this relationship, and shows employment has a much stronger relationship with utilities engineering construction rather than utilities output.

The overall labour market is expected remain very tight over the next 2 years, with the unemployment rate to remain around 4%, despite a slowing in employment growth from 4.4% in FY23 to 2.9% in FY24 and 1.8% in FY25. We expect population and labour force growth to largely match employment growth, with small declines in the participation rate keeping the unemployment rate low, as workers with a 'loose attachment' to the workforce drop out as labour demand eases (some to fully retire). Hence, we expect to see the continuation of critical skilled labour shortages and competition for scarce labour - particularly from the mining and construction sectors - which will push up wage demands in the utilities sector. Mining investment is now picking up and is forecast to see steady increases over the next 6 years to the end of the decade (see Figure 4.3). Meanwhile, there is similar strong growth coming through in in the Construction sector, with solid increases across all segments of the overall construction sector (residential building, non-residential building and civil engineering & infrastructure construction) over FY23 to FY25, leading to strong labour demand in that sector, particularly over FY23 and FY24 when activity surpasses the 2018 levels – excluding oil and gas, where a significant proportion of the 'work done' measure is large imported components, assembled on-site.

With regard to utilities investment, Oxford Economics Australia is forecasting strong increases over the next 2 years, with electricity-related engineering construction projected more consistent growth to be 40% higher in FY31 compared to FY24 levels, following the 53% increase over the past three years (see charts 5.5 and 5.7). However, given the need for much greater amounts of transmission and distribution investment, let alone renewables generation, these projections could be considered conservative – there is a significant upside risk to the quantum of electricity-related investment required and therefore to the levels of skilled labour required.

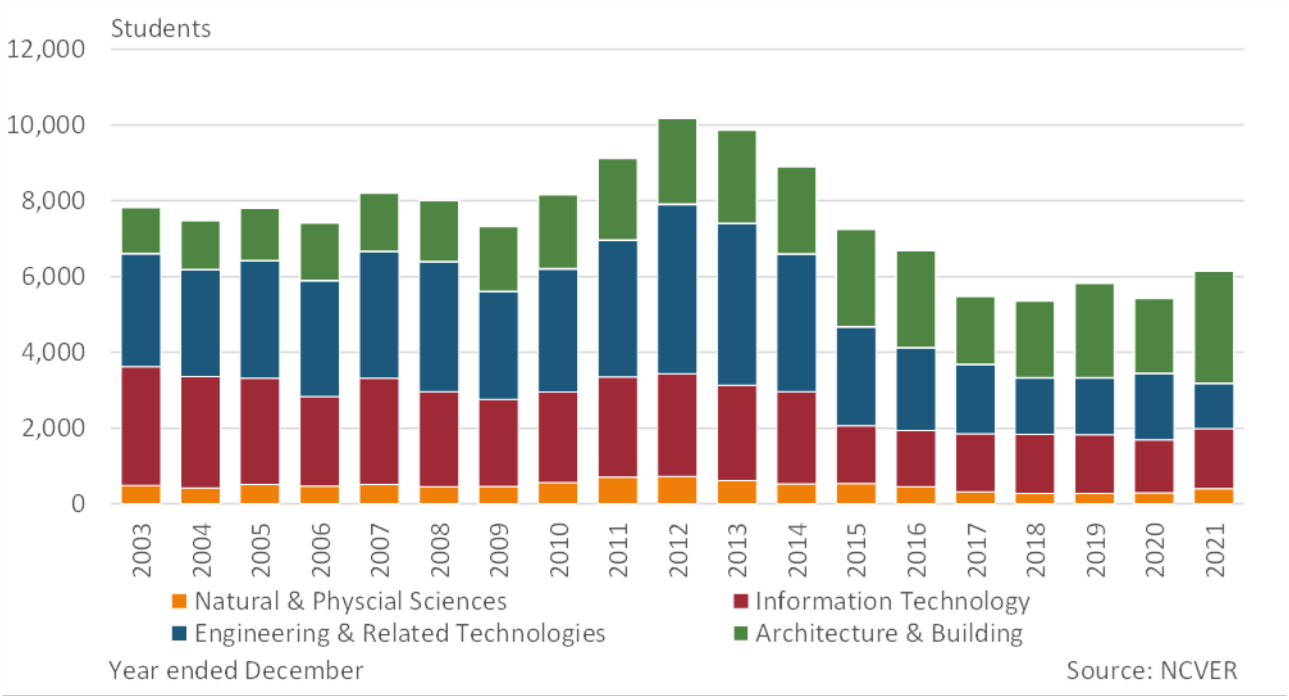
Figure 4.3 Australia – Mining Investment



Employers are already reporting an increasing shortage of technicians and trade workers, and employees with STEM skills. These are essential workers in the utilities sector. A key problem is that the TAFE (technical and further education) systems across the country have simply not been training enough workers. OEA research shows this is compounded by new graduates in the trades stream, in particular, not increasing fast enough to replace retiring workers, with new graduate numbers in some trades actually falling (see Figure 4.4). Despite government announcements that they are moving to address the TAFE system, it is unlikely that these issues will be addressed within the next 5 years. Added to this is that skilled immigration only fully returned in the first half of 2022, after being suspended since early 2020. Although now resumed, the backlog of skilled labour shortages will be slow to fill, meaning that the skill shortages will persist for at least the next 2 years.

With strong competition for similarly skilled labour from the mining and construction industries, firms in the utilities sector will need to raise wages to attract and retain workers. In other words, the mobility of workers between the EGWWS, mining and construction industries means that demand for workers in those industries will influence employment, the unemployment rate and hence spare capacity in the EGWWS labour market. Businesses will find they must 'meet the market' on remuneration in order to attract and retain staff and we expect wages under both individual arrangements and collective agreements to show further strong increases over the next two years.

Figure 4.4 Australia, number of completions, VET, 2003-2021



EGWWS sector has high levels of productivity, compared to the national average, which underpins higher wages.

The EGWWS sector has one of the highest levels of sectoral productivity – as measured by real Gross Value Added (GVA) per employed person – among the 18 industry sectors, with only Mining and Finance & Insurance Services having higher productivity. Utilities' productivity is more than double the national average according to ABS data for Australia and well above the average for Victoria (see Figure 4.7). High productivity levels and commensurate skill levels are the key reasons why wage levels are much higher in the utilities sector than most other industries (in terms of average weekly earnings measures – see Table 5.1).

However, over the past two decades, the growth in productivity in the sector has **not** been a driver of higher wages growth in the utilities sector. Productivity suffered a steep decline over 2001 to 2014 due to a combination of strong employment growth (mainly due to rising investment, as previously discussed) and weak growth in GVA, in Australia and across all states (see Figures 4.5, and 4.6). Meanwhile, utilities wages growth was relatively strong over this same period. In effect, there is no clear relationship between wages growth and the traditional productivity measures (i.e. GVA/Employment) in the utilities sector. Low productivity is set to continue in part because GVA (output) growth is expected to remain low, with low output a function of low demand caused both by high prices and energy-saving (and water-saving) measures. However, employment levels are expected to remain relatively stable – and actually increase - due to the need to maintain a skilled workforce to ensure reliability (particularly given more natural disasters due to Climate Change) and also to undertake capital works to cater for population and economic growth and for capital replacement or enhancement.

Figure 4.5 Australia – Utilities Employment, Output, Investment & Productivity

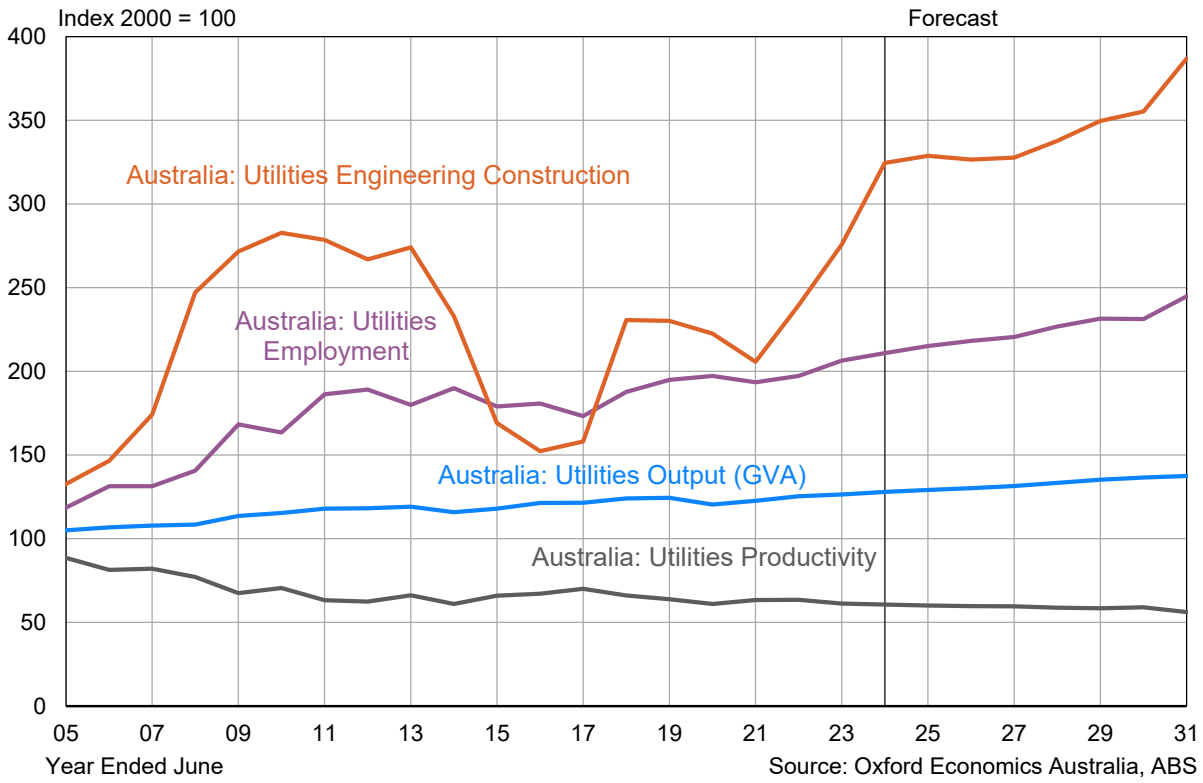
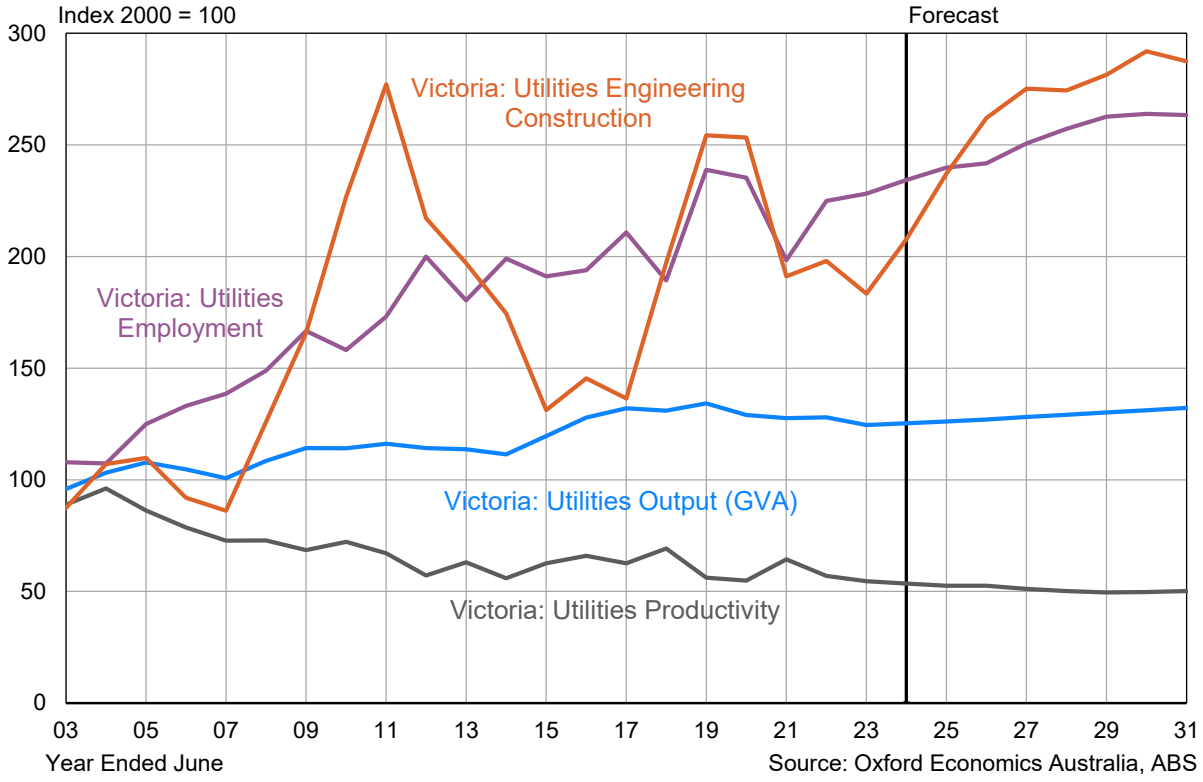


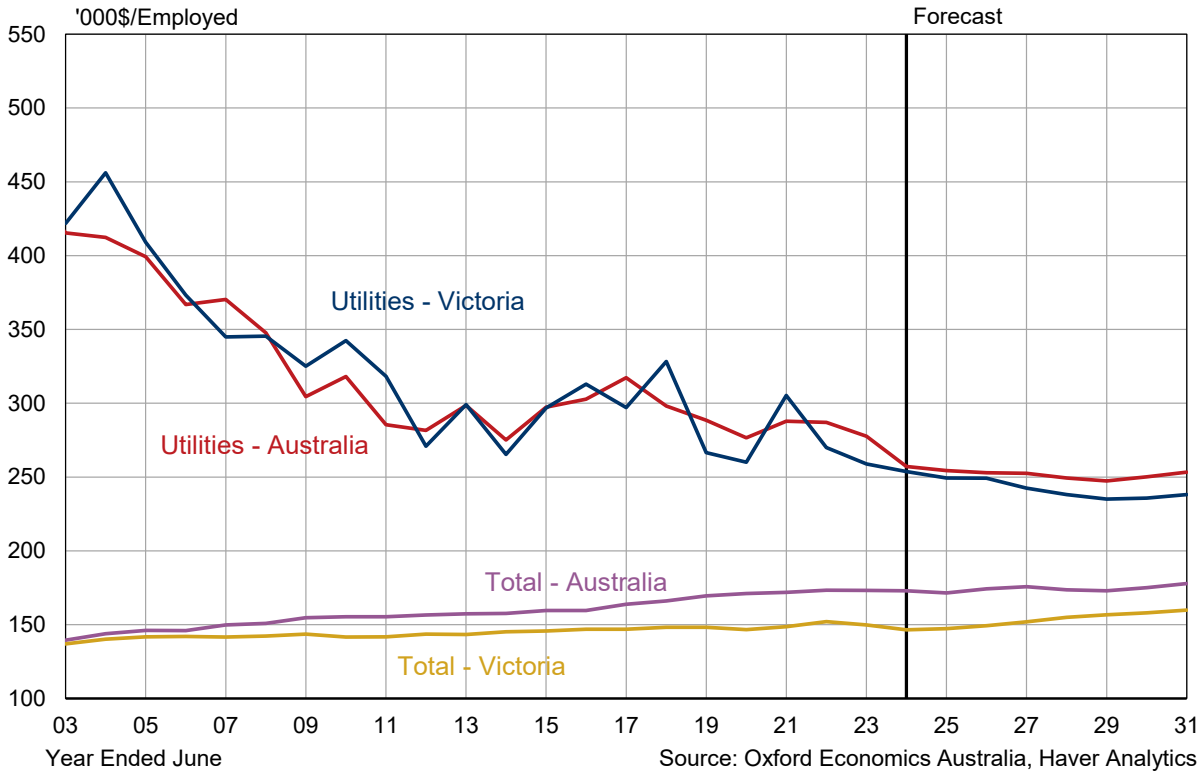
Figure 4.6 Victoria – Utilities Employment, Output, Investment & Productivity



4.2.1 Outlook for Utilities Wages Growth in Victoria

Wages in the Victorian utilities sector are expected to move in line with the national utilities sector average over the upcoming regulatory period (see Table 1.1). In the near-term, the Victorian EGWWS WPI is expected to be somewhat lower than the national EGWWS WPI in FY25 (3.7% compared to 4.2% nationally) given slightly weaker EBAs in Victoria than the national EBA average over the past 2 years. Subsequently, strong increases in utilities engineering construction in Victoria (see Figure 4.6) will see Victorian utilities WPI growth keep pace with the national EGWWS average over the forecast period.

Figure 4.7 Utilities Productivity in Australia and Victoria



4.3 NATIONAL & VICTORIAN CONSTRUCTION WPI FORECASTS

Given that service providers' outsourced labour is mostly supplied by firms in the construction industry, we proxy Victorian DNSPs external labour cost escalation by wages growth (as measured by the WPI) in the Victorian construction sector. Our research has shown that construction activity (ie work done in the sector) normally has a strong influence on construction wages, although changes in wages tend to lag construction (in work done terms) by around one year. Hence, our wage forecasts are based on Oxford Economics Australia forecasts of construction activity by state (which includes residential and non-residential building, plus engineering construction) as well as predicted movements in the construction wages at the national level.

Our forecast is for the Australian Construction WPI to average 3.7% over the five years from FY27 to FY31 inclusive (Victorian DNSPs regulatory period) – or 1.1% per annum on average in real (inflation adjusted) terms. Victorian Construction wages are also forecast to average 3.6%, or 1.0% in real terms

(see Table 1.1). While this is a marked improvement on the past five years, it is still well down on the 4.3% annual national average (nominal terms) of the decade to FY12.

The Australian Construction WPI growth recovered over FY22 to 2.6% followed by 3.7% in FY23 and 4.1% in FY24 (in year average terms). This compares to the meagre 1.6% annual average over FY16 to FY21. Construction wages are forecast to remain elevated in FY25 as construction activity increases and activity levels surpass the previous highs of FY18 and FY13 (in 2024 - see Figure 4.1) and serious skills shortages worsen, underpinning higher wages due to strong labour demand. Construction wages growth then eases over FY26 to FY28 as activity cools, but then picks up again from FY29 as activity again steps up a notch. Higher levels of residential and non-residential building will be key drivers, while engineering construction will be driven by higher electricity and mining investment and a plethora of publicly funded transport infrastructure projects (particularly in the eastern states of the nation).

Victorian Construction WPI growth was well above the national average in FY22, at 3.2% (0.6% higher than the national average). Higher construction sector EBAs in the state (compared to the national average) helped drive this result. EBAs approved over the past 1 to 3 years have averaged 0.3% higher than the national average. Strong EBA outcomes have continued to see solid wage growth over FY24, with Victoria's 4.1% matching the national average. The EBA outcomes struck over the past year will help maintain elevated wage growth over FY25 and FY26, of which will sit slightly above the national average. Victorian construction wages will then match the national average beyond FY28 as Victoria's construction activity shows similar growth trends.

5. ANALYSIS ON ELECTRICITY SECTOR SPECIFIC MEASURES OF WAGE GROWTH

5.1 INTRODUCTION

The AER has typically permitted the escalation of electricity wages in Victoria proxied by the Victorian EGWWS WPI, which captures average wage growth across the electricity, gas, water and waste services sectors. This is not necessarily an ideal proxy of wage growth for the electricity sector for two reasons – the inclusion of other sectors in the data which are not directly related to the electricity sector and that wage growth for the relevant workforce is typically determined through enterprise bargaining agreements, whereas the WPI is a weighted average of individuals who have pay set through award only, individual agreements and collective agreements.

This section discusses different measures of wage growth within the electricity sector and how these compare against the WPI. Further, we discuss the implications of allocating escalation based on the EGWWS WPI versus alternative measures.

5.2 DATA AVAILABILITY

The escalation of electricity wages in Victoria are proxied by the Victorian EGWWS WPI, which captures average wage growth across the electricity, gas, water and waste services sectors. There are electricity sector wage/earnings data which is published by the ABS – this includes the ABS "Employee Earnings and Hours, Australia" which is based on survey microdata. Unfortunately, the survey "Employee Earnings and Hours" is conducted on a biennial basis and not appropriate to use as the basis for forecasting wage growth.[4]

Wage growth outcomes for employees who have their method of pay set through EBAs is available from the Department of Employment and Workplace Relations (DEWR)[5]. For a given quarter, this includes newly struck EBAs ("approvals") and a weighted average of all "current" EBAs for a given sector. Similar to wage data, the EBA data is published based on the industry aggregate of electricity, gas, water and waste services.

Although not a data series, individual EBAs can be found in the database of the Fair Work Commission (FWC)[6] or in Trends in Federal Enterprise Bargaining released by the DEWR. These can be used to look

[4] This is for a multitude of reasons such as that it is earnings data as opposed to a wage price index, the biennial frequency means that every second year would need to be estimated and the lack of historical data would increase the difficulty of forecasting growth outcomes.

[5] https://www.dewr.gov.au/resources/enterprise-agreements-data

[6] https://www.fwc.gov.au/agreements-awards/enterprise-agreements

at specific EBA wage growth outcomes for the electricity sector – including recent and longer historical outcomes for distribution, generation and transmission service providers.

5.3 RECENT WAGE GROWTH AND ENTERPRISE BARGAINING OUTCOMES

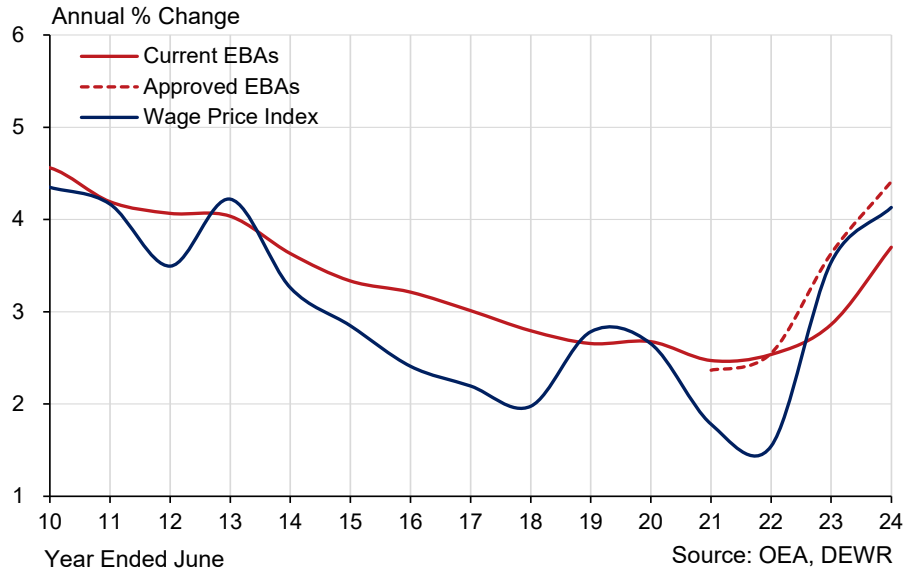
This section examines how recent wage growth outcomes across the different measures has differed historically. This includes the EGWWS WPI versus the EGWWS EBA, but also a comparison between electricity-specific bargaining agreement outcomes and the broader EGWWS outcomes.

5.3.1 EGWWS WPI versus EGWWS EBA

Typically, EBA wage growth outcomes across all sectors outpace broader wage growth as measured by the WPI. Wage growth as captured by EBA data in the EGWWS sectors has outpaced the EGWWS WPI by an average of 0.4 percentage points between FY10 and FY22 – as discussed in Section 4 of this report, unionised workers have historically been able to leverage the enhanced bargaining position to earn higher than average sectoral wage growth (the remainder of employees having their method of pay setting based on award or individual arrangements).

As depicted in Figure 5.1, this trend has reversed in FY23 and FY24, with the EGWWS WPI averaging 0.6% above EGWWS EBAs. This is not reflective of a shift in underlying wage trends, but rather this reflects the delayed response of EBA outcomes to relatively rapid changes in inflation. Workers on collective agreements were locked into lower wage growth, negotiated during the period of mild inflation through COVID-19, while those on individual arrangements were able to receive stronger wage growth that aligned with the higher inflationary environment.

Figure 5.1 Victorian EGWWS WPI and EBA Wage Growth



5.3.2 EGWWS EBA versus Distributor EBA outcomes

We examine the difference between EBA wage growth outcomes in the broader EGWWS sectors (i.e., including gas, water and waste services) against electricity EBA wage growth outcomes. We refine this

further to examine the different wage growth agreements reached between electricity distributors and workers against broader wage outcomes.

Considering relevant enterprise agreements which impact wage growth for workers operating in electricity markets that are part of the NEM, we find four new agreements approved in FY24 as at the time of writing[7]. This includes the South Australian Utilities Management Enterprise Agreement 2024 (+6.0% in FY25, +4.5% in FY26), the Energy Queensland Union Collective Agreement 2024 (+4.5% in FY25, +4.5% in FY26, +3.5% in FY27 and +3.0% in FY28), AusNet Enterprise Agreement 2024 (+5.1% between FY25-FY27) and the Powercor and CitiPower Enterprise Agreement 2024 (+5.1% between FY25-FY27).

The average duration for these agreements is three years, with an annual average wage increase of 4.8%. This represents average annual wage growth which is 0.4 percentage points higher than approval outcomes for the Australian EGWWS sectors over FY24. Focusing on Victoria, the two EBA agreements for AusNet, CitiPower and Powercor indicate wage growth of 5.1% between FY25-FY27 – this is 1.2 percentage points higher than average approvals in the Victorian EGWWS sector over FY24 (3.9%).

We note the distinction between 'approved' EBA outcomes and 'current' EBA outcomes – approved represents the agreed wage growth under agreements struck in a particular quarter, whereas current represents the weighted average wage growth outcomes for all workers across various different enterprise agreements. Therefore, there is typically a difference in approved versus current wage growth in a given quarter based on the distribution of the workforce across agreements of different lengths. Given that recently approved agreements have outpaced the wage growth granted in older (but still active) agreements, this means that recently approved EBA wage growth outcomes relevant to the electricity sector will outpace 'current' agreements by a larger margin than recent 'approved' outcomes.

Thus, as stated previously, wage growth outcomes for recently approved EBAs related to electricity distribution is equivalent to an average wage growth of 4.8% over the next three years. This is 1.4 percentage points higher than the average wage growth of 'current' agreements for the Australian EGWWS workforce over FY24 (3.2%, average duration 2.6 years).

The analysis above considers enterprise agreements that have been approved, but there is additional publicly available information that points to heightened wage growth outcomes under EBAs relevant to electricity distributors. TransGrid and the Electrical Trades Union (ETU) have been in protracted negotiations for wage growth outcomes since August 2023, wherein the ETU currently requests 6.5% per year over a three year period[8]. Additionally, Ausgrid has offered 7% in FY25 and CPI-equivalent growth in FY26-27. TasNetwork have offered 14% over three years, with 7% in FY25 and a $6,000 bonus. Essential Energy has offered 15% over the next three years which has been rejected by the workforce.

[7] This statement includes Powercor and Citipower although it is our understanding that although the application has reached the FWC, the agreement has not yet been approved.
[8] Accessed here.

Table 5.1 Comparison of Wage Growth Outcomes

Wage Measures and EBAs	Wage Growth (%) 2024-25 (FY25)	Wage Growth (%) 2025-26	Wage Growth (%) 2026-27
EGWWS WPI (Australia)	3.7	4.2	3.7
EGWWS WPI (Victoria)	4.2	4.0	3.5
EGWWS EBA Wage Growth			
EGWWS EBA Current (Australia)	3.7	4.2	4.0
Electricity Distribution EBA Wage Growth			
South Australia Utilties Management Pty Ltd 2024	6.0	4.5	-
Energy Queensland Union Collective Agreement 2024	4.5	4.5	3.5
Powercor and CitiPower Application 2024	5.1	5.1	5.1
AusNet Services Enterprise Agreement 2024	5.1	5.1	5.1

5.4 DISCUSSION OF WAGE SERIES USED TO ESCALATE LABOUR COSTS

As discussed above and illustrated in Table 5.1, recent EBA outcomes in a selection of agreements relevant to the electricity distributors have outpaced wider sectoral wage growth as captured in the EGWWS WPI and the EGWWS EBA series (for both Victoria and Australia). This is consistent with historical trends, wherein EBA wage growth outcomes have outperformed the broader workforce due to the enhanced bargaining power of the unionised workforce.

The usage of the EGWWS WPI to escalate labour costs is near guaranteed to underestimate wage growth that is paid out by DNSPs in the electricity sector. Indeed, even the usage of the EGWWS EBA series is likely to underestimate wage growth paid out by DNSPs over the regulatory period.

The AER has historically accepted the EGWWS WPI as a proxy for wage growth in the electrical workforce. There are issues with using alternative data sources to the EGWWS WPI – data on wage growth related to the electricity sector is too infrequent, and with respect to EBA outcomes, the AER has previously expressed concerns in accepting escalators that are able to be more directly influenced by the DNSPs. The logic being that if EBA outcomes are used as the basis for labour escalation, this reduces the incentive for DNSPs to negotiate lower wage growth outcomes.

We would assert that although this is a logical consideration, it does not reflect the reality of wage setting practices faced by the electricity sector. First, consider the historical relationship between EGWWS EBA growth and the EGWWS WPI – there has been an incentive to reduce EBA wage growth outcomes, but EBA wage growth has continued to outpace broader WPI growth with few exceptions (see Figure 5.1). There does not seem to be a solid evidence base to suggest that the added incentive of escalating labour with the WPI (instead of the EBA) has actually led to EBA outcomes which are aligned with the broader WPI measure.

Furthermore, this disparity is exacerbated when looking at recent EBA approvals relevant to specifically the electricity sector. Recent EBA approval outcomes relevant to DNSPs have outperformed broader EGWWS EBA approval outcomes, which in-turn are expected to outpace the WPI. Indeed, for the Victorian DNSPs (AusNet Services, Powercor and CitiPower) included in Table 5.1, wage growth outcomes over the next three years have been locked in at a rate substantially higher than our forecasts for the Victorian EGWWS WPI. We would suggest that these firms were highly incentivised to reduce wage growth in recent bargaining discussions but this has not played through to outcomes that are comparable to the WPI.

The EGWWS sector has the highest proportion of the workforce which have their wage set through collective agreements and thus relatively higher rates of unionisation compared to the broader economy. We would suggest that the relatively heightened wage growth outcomes seen in enterprise agreements in the electricity sector reflects the strong bargaining position of the unionised electricity workforce.

In addition to the high proportion of the workforce which is unionised, there are clear economic factors which have (and are expected to continue to) contribute to relatively higher wage growth outcomes faced by DNSPs. The recent inflationary pressures leading to a decline in sectoral real wages and enhanced cost of living pressures are a key driver of EBA wage growth outcomes over the next two to three years. Furthermore, bargaining power is further enhanced by the fact that the electrical workforce is key to the delivery of the energy transition and the substantial infrastructure burden across generation, transmission and distribution assets required to meet climate targets.

We argue that DNSPs do not have the necessary bargaining power to reduce EBA wage growth outcomes such that they align with the WPI, regardless of their incentive to do so. Consider the example of TransGrid, which has now been in protracted negotiations with the NSW & ACT branch of the ETU for over 12 months – including legal battles and numerous strike actions taken throughout 2024. TransGrid has offered 4.0% wage growth in FY25 and FY26 – which is, on average, *higher* than our expectation for the Australian EGWWS WPI over the same two years, but this has been rejected by the ETU which is seeking 6.5% per annum over three years.

To conclude, the usage of the EGWWS WPI as a proxy for electrical workers is expected to underestimate wage growth (for the relevant portion of the workforce) that is experienced by Victorian DNSPs over the upcoming regulatory control period. This is evidenced historically and is expected to continue over the forward period based on available information on collective agreements – see summary below (noting that our data on EBA outcomes goes back to FY04):

- Australian current EGWWS EBA outcomes have outpaced the EGWWS WPI by +0.2 percentage points between FY04-FY24, by +0.4 percentage points over the past ten years (FY15-FY24) and by +0.5 percentage points over the past ten years excluding FY23 and FY24 (FY13-FY22).
- Victorian current EGWWS EBA outcomes have outpaced the Victorian EGWWS WPI by +0.5 percentage points between FY04-FY24 and by +0.5 percentage points over the past ten years (FY15-FY24).

As seen above, the usage of the EGWWS EBA data series as the basis for wage escalation would reduce this disparity, although we find evidence that electricity specific measures of EBA wage growth are expected to also outpace the broader sectoral outcomes. This is discussed above and summarised below:

- Australian DNSP EBA outcomes approved in 2024 indicate an annual average wage increase of 4.8% over three years. This is +0.4 percentage points higher than EBA approvals for the EGWWS sector. This is +1.4 percentage points higher than the average wage growth of current EBA agreements for the Australian EGWWS workforce over 2024.
- Victorian DNSP EBA outcomes approved in 2024 indicate an annual average wage increase of 5.1% over three years. This is +1.2 percentage points higher than EBA approvals for the

Victorian EGWWS sector over 2024. This is +1.9 percentage points higher than the average wage growth of current EBA agreements for the Victorian EGWWS workforce over 2024.

We would also suggest that escalating wage growth based on EBA wage growth outcomes would not necessarily lead to a reduction in the incentive for DNSPs to negotiate wage outcomes – the EGWWS EBA outcomes are still based on an industry average (including across the gas, water and waste services sectors) such that a sole DNSP does not drive the overall trend in wage growth outcomes.

APPENDIX 1: A NOTE ON DIFFERENT WAGE MEASURES & WAGE MODELS

Several different measures of wages growth are referred to in this report, each differing slightly both in terms of their construction and appropriateness for measuring different aspects of labour costs. The following provides a brief summary of the main measures, what they are used for and why.

The main wage measures are:

- Average Weekly Ordinary Time Earnings (AWOTE) — earnings gained from working the standard number of hours per week. It includes agreed base rates of pay, over-award payments, penalty rates and other allowances, commissions and retainers; bonuses and incentive payments (including profit share schemes), leave pay and salary payments made to directors. AWOTE excludes overtime payments, termination payments and other payments not related to the reference period. The AWOTE measures used in this report refer to full-time adult AWOTE and are sourced from the Australian Bureau of Statistics (ABS) catalogue number 6302.0, with BIS Oxford Economics forecasts.

- Average Weekly Earnings (AWE) — represents average total gross earnings (before tax) of all employees (including full-time and part-time workers). They include weekly ordinary time earnings plus over-time payments.

- The Wage Price Index (WPI) — a CPI-style measure of changes in wage and salary costs based on a weighted combination of a surveyed 'basket' of jobs. The WPI used in this report excludes bonuses. The WPI also excludes the effect of changes in the quality or quantity of work performed and most importantly, the compositional effects of shifts within the labour market, such as shifts between sectors and within firms. The WPI figures quoted in this report are sourced from ABS catalogue number 6345.0, with BIS Oxford Economics forecasts.

Each measure provides a slightly different gauge of labour costs. However, the main distinction between average earnings measures and the wage price index relate to the influence of compositional shifts in employment. The compositional effects include changes in the distribution of occupations within the same industry and across industries, and the distribution of employment between industries. For example, a large fall in the number of lower paid employees, or in employment in an industry with lower average wages, will increase average weekly earnings (all else being equal). While this is a true reflection of the average cost of labour to businesses, it is not necessarily the best measure of ongoing wage inflation (i.e. trends in wage-setting behaviour in the labour market). Another compositional problem with using the 'all persons' AWOTE is variations in the proportion of male and female employees (particularly as average female AWOTE is lower than average male AWOTE). However, in practice, the data shows only minor differences in the AWOTE growth rates between male and females (or males and all persons) — between -0.2 and +0.2 per cent — since the 1980s or basically since the equal pay legislation was enacted through the 1970s.

The wage price index was specifically designed to get around these compositional problems. It uses a weighted average of wage inflation across a range of closely specified jobs. As it measures the collective variations in wage rates made to the current occupants of the same set of specified jobs, the WPI reflects pure price changes, and does not measure variations in quality or quantity of work performed. However, like the CPI (Consumer Price Index), the weights are fixed in a base year, so that the further away from that base and the more the composition of the labour market changes over time, the more 'out of date' the measure becomes.

Importantly, the WPI does not reflect changes in the skill levels of employees within industries or for the overall workforce and will therefore understate (or overstate) wage inflation if the overall skill levels increase (or decrease). The wage price index is also likely to understate true wage inflationary pressures as it does not capture situations where promotions are given in order to achieve a higher salary for a given individual, often to retain them in a tight labour market. Average weekly earnings would be boosted by employers promoting employees (with an associated wage increase) but promoting employees to a higher occupation category would not necessarily show up in the wage price index. However, the employer's total wages bill (and unit labour costs) would be higher.

Oxford Economics Australia Wage Growth Model

Oxford Economics Australia' model of wage determination in the short-to-medium term is based on the analysis of expected future wage movements in the three main methods of setting pay, as each discrete pay setting method has its own influences and drivers. The main pay setting categories and their key determinants are:

• Employees under awards have their pay determined by Fair Work Australia in the annual National Wage case. When determining pay increases, Fair Work Australia aim to maintain the standard of living of those employed on awards by providing a safety net of fair minimum wages. Hence, they focus on the overall performance of the domestic economy, taking into account productivity, business competitiveness, inflation and employment growth. This means that increases in the Federal Minimum Wage are usually based on recent CPI growth along with Fair Work Australia's view on short term future conditions for the Australian economy. From 1 July 2022, the minimum wage was increased by 5.2%. This followed rises of 2.5%, 1.3%, 3.5% and 3.5% respectively in previous years. At the All Industries level, 13% of all non-managerial full-time employees (data excludes those in agriculture, forestry and fishing) have their pay rises determined by this method, but only 1.5% of Electricity, Gas, Water & Waste Services' (EGWWS) employees.

• For employees under collective agreements (representing 35% of all employees; 61.5% of EGWWS), their pay is determined through enterprise bargaining, and wage increases are influenced through a combination of recent CPI, inflationary expectations, profitability levels of relevant enterprises, business conditions, and the short-term economic outlook. Workers' unions can also play a significant part in negotiations, especially unions with a good position in industrial relations through strong membership. With the average duration of these agreements currently two to three years, Oxford Economics Australia use the most recent agreements formalised in recent quarters as a basis for our near-term forecasts. Beyond that, collective agreements are based on our expectations of economic conditions.

• The remaining 52% of employees (or 34.5% of EGWWS employees) have their pay set by individual arrangements, whether it be individual contracts or some other form of salary agreement, which may include incentive-based schemes. Similar to the minimum wage and collective agreements, inflation and inflationary expectations have a strong influence on agreements, as well as the strength of the labour market. Individual arrangements are skewed towards more skilled workers, so the balance between demand and supply in skilled labour can be an important influence.

Note that wage increases under 'individual arrangements' are calculated by deduction. Data from DEEWR (Department of Education, Employment and Workforce Relations) are used for wage increases under collective agreements.

The limitation of this methodology is that because individual arrangements are calculated as a residual, all of the compositional effects in terms of AWOTE (ie from more or less lower-paid workers being employed in the relevant year) plus all (or most) of the bonuses and incentives from those under award or collective agreements end up in the individual arrangements residual, which distorts the pay increases in this segment. However, the methodology works well for the WPI, particularly at the All Industries level, although some compositional problems occur at the sectoral level, particularly for sectors with a relatively small employment base (such as electricity, gas, water and waste services).

The 'bottom-up' approach to wage forecasting is complemented by a more formalised 'top-down' macroeconomic modelling framework – to ensure an overall macroeconomic consistency with output, employment, productivity and price variables. The wage price index is a function of the following explanatory variables:

- CPI

- unemployment rate
- labour productivity (GDP/employment)
- lagged wage (WPI) growth (to capture 'sticky' nature of wage determination in the short term).

The top-down macroeconomic modelling methodology becomes more relevant beyond the next 2-3 years.

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