OXFORD ECONOMICS AUSTRALIA

# LABOUR COST ESCALATION: FORECASTS TO 2029/30

## PREPARED BY OXFORD ECONOMICS AUSTRALIA FOR ENERGY QUEENSLAND

**FINAL REPORT - OCTOBER 2024**

Energy Queensland

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**October 2024**



The modelling and results presented here are based on information provided by third parties, upon which Oxford Economics Australia has relied in producing its report and forecasts in good faith. Any subsequent revision or update of those data will affect the assessments and projections shown.

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# EXECUTIVE SUMMARY

Oxford Economics Australia (OEA) was engaged by Energy Queensland to provide price forecasts of labour relevant to Queensland's electricity distribution industry for the period 2024/25 (FY25) to 2029/30 (FY30). Forecasts for wage cost escalation will be used by Energy Queensland to develop their operating and capital expenditure forecasts. These forecasts, in turn, will be included Energy Queensland's regulatory submission to the Australian Energy Regulator (AER) - with the regulatory period covering the five-year period from 2025/26 to 2029/30 (FY26 to FY30) 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 Queensland Electricity, Gas, Water and Waste Services (EGWWS or 'Utilities') sector — expressed in Wage Price Index (WPI) terms — will average 3.8% per annum over the five-year period from FY26 to FY30 inclusive, equal to the Australian EGWWS WPI average of 3.7% over the same period. In real (inflation-adjusted) terms, the Queensland EGWWS WPI is forecast to average 0.9% p.a. over the five years to FY30 (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 Queensland 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 FY30. 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 Electricity, Gas, Water and Waste Services Wage Price Index**

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 5 yr Avg (e) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Actuals | | | | | | | | | | Forecasts | Next Regulatory Period | | | | | |
| **NOMINAL PRICE CHANGES** | | | | | | | | | | | | | | | | | |
| 1. Electricity Network-Related Labour | | | | | | | | | | | | | | | | | |
| **EGWWS WPI - Queensland (a)** | **2.4** | **2.8** | **2.6** | **2.5** | **3.0** | **2.7** | **1.9** | **1.6** | **4.8** | **5.7** | **4.2** | **4.1** | **3.6** | **3.6** | **3.8** | **3.9** | **3.8** |
| EGWWS WPI - Australia (b) | 2.8 | 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. All Industries Wages | | | | | | | | | | | | | | | | | |
| All Industries WPI - Australia (c) | 2.4 | 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 | 3.4 |
| Consumer Price Index (headline) (d) | 1.7 | 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 | 2.7 |
| **REAL PRICE CHANGES (f)** | | | | | | | | | | | | | | | | | |
| 1. Electricity Network-Related Labour | | | | | | | | | | | | | | | | | |
| **EGWWS WPI - Queensland (a)** | **0.7** | **1.4** | **0.9** | **0.6** | **1.4** | **1.4** | **0.3** | **-2.9** | **-2.2** | **1.5** | **1.2** | **0.6** | **1.1** | **1.1** | **1.3** | **1.4** | **1.1** |
| EGWWS WPI - Australia (b) | 1.1 | 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 | 1.0 |
| 3. All Industries Wages | | | | | | | | | | | | | | | | | |
| All Industries WPI - Australia (c) | 0.7 | 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 | 0.7 |

Sources: Oxford Economics Australia, ABS

(a) Electricity, Gas, Water and Waste Services (EGWWS) Wage Price Index (WPI) for Queensland
(b) Australian sector wage forecasts provided for comparison.
(c) Australian All Industries WPI provided for comparison.
(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) Average Annual Growth Rate for 2025/26 to 2029/30 inclusive, ie for next regulatory period.
(f) Real price changes are calculated by deducting the inflation rate from nominal price changes.

# 1. INTRODUCTION

Oxford Economics Australia was engaged by Energy Queensland to provide price forecasts of labour that are relevant to Queensland's electricity transmission and distribution industry for the period 2025/26 to 2029/30 (FY26 to FY30). Forecasts for wage cost escalation will be used by Energy Queensland 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: 2025 – 2032*, 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 outlook for Australia and Queensland. 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) for Australia and Queensland as measured by the WPI.

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

# 2. MACROECONOMIC OUTLOOK

## 2.1 AUSTRALIAN MACROECONOMIC FORECASTS

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 tax cuts will provide some support to incomes and consumer spending over the second half of 2024.

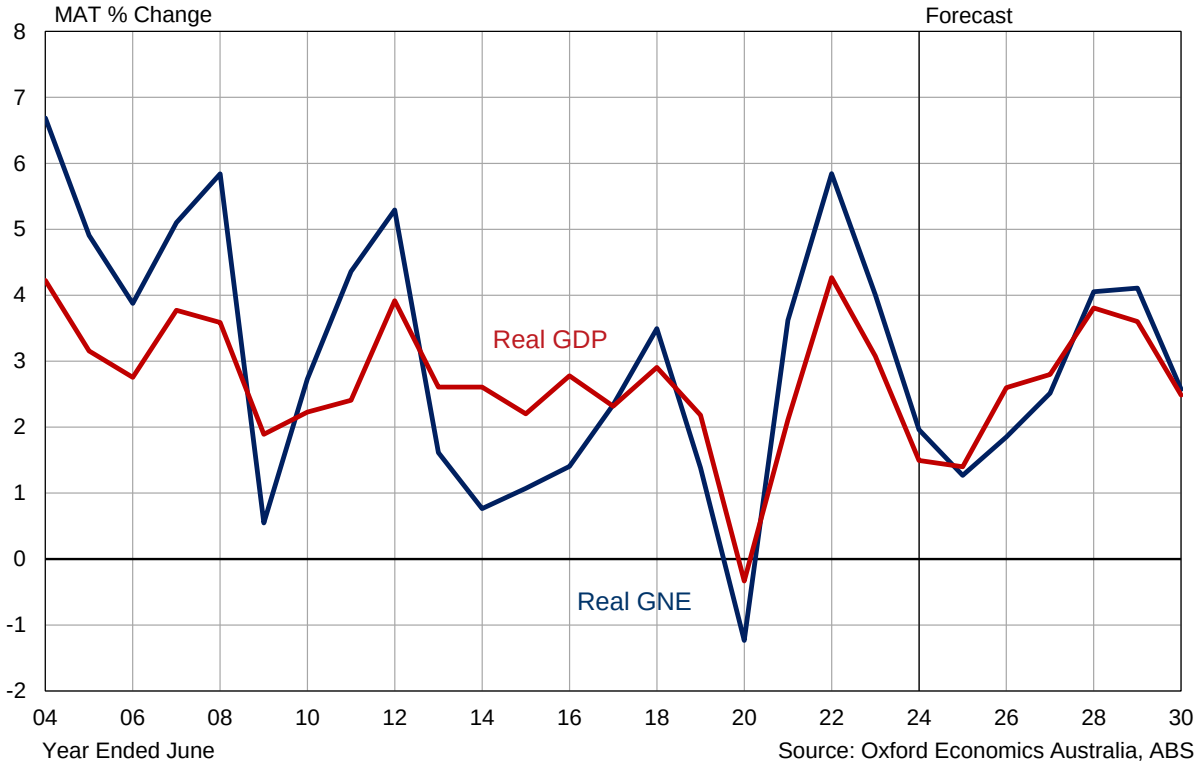
The investment outlook is patchy. Private sector business investment weakened in June quarter, falling back -1.5%, although picked up 3.3% over the year. Non-dwelling construction strengthened for a third consecutive year and is expected to continue given strong investment in mining and electricity infrastructure 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.[1]

[1] 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.

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%".

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 weaken 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 QUEENSLAND MACROECONOMIC OUTLOOK

Queensland's economy picked up in FY24, with Gross State Product (GSP) growing by 3.4%, which will soften to 2.8% in FY25. Near term growth will be underpinned by business investment, which is forecast to pick up over FY25. Investment will largely be driven by strong growth in private engineering construction activity, particularly related to roads and subdivisions, electricity infrastructure (mainly renewables) and mining.

In the second half of the decade, economic activity is expected to rebound and track strongly from FY27, averaging 3.5% over the four years to FY30 (compared to 2.8% nationally). Activity will be supported by strong growth in public investment, with construction related to the Brisbane 2032 Olympics presenting a stimulatory boost to GSP. Strong construction activity will also underpin employment growth in the state. Queensland currently enjoys some of the lowest public debt in the country as a share of GSP, which will help sustain solid public investment in infrastructure and services.

Queensland's long term economic activity will be underpinned by strong population growth. Lifestyle preferences and better affordability compared to other capital cities like Sydney and Melbourne should continue to support robust growth in the Sunshine Coast and Gold Coast regions, while softer growth is anticipated to persist in central and north Queensland. Total population for Queensland is expected to reach approximately 6.2 million persons by FY30 – 10% on the current level.

# 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 2.9% 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%[2].

**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

[2] 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**

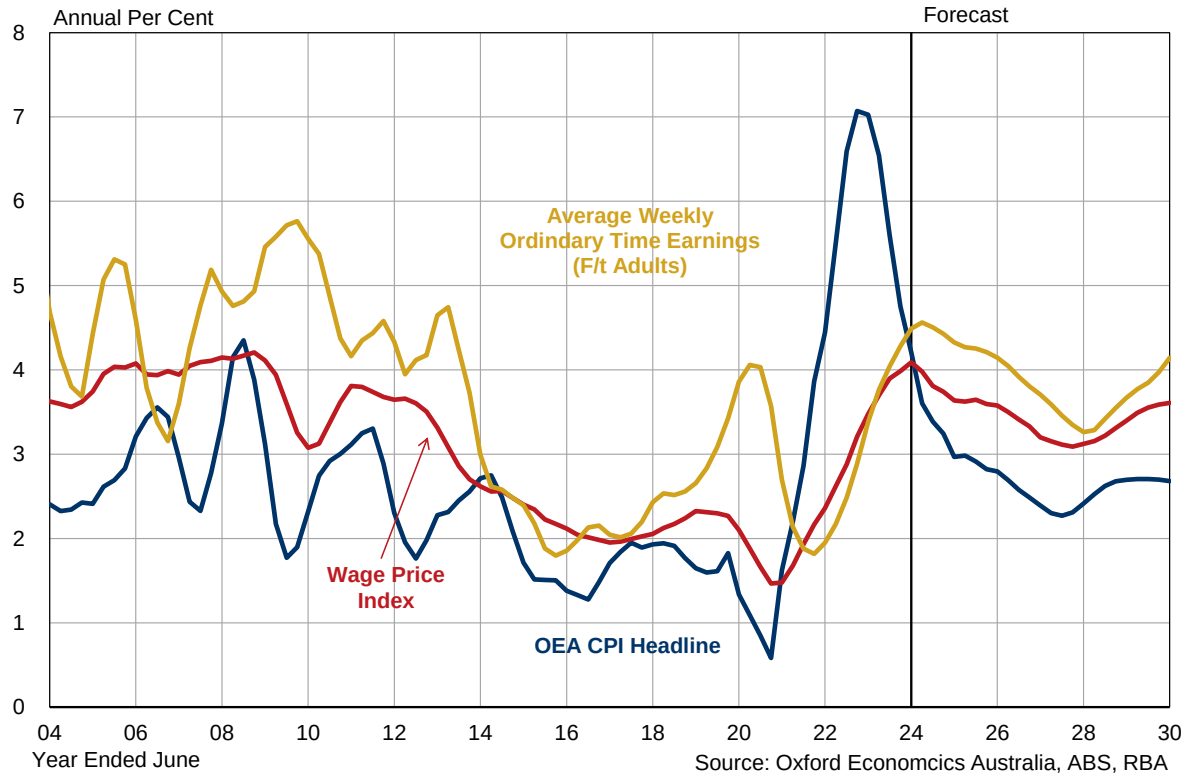
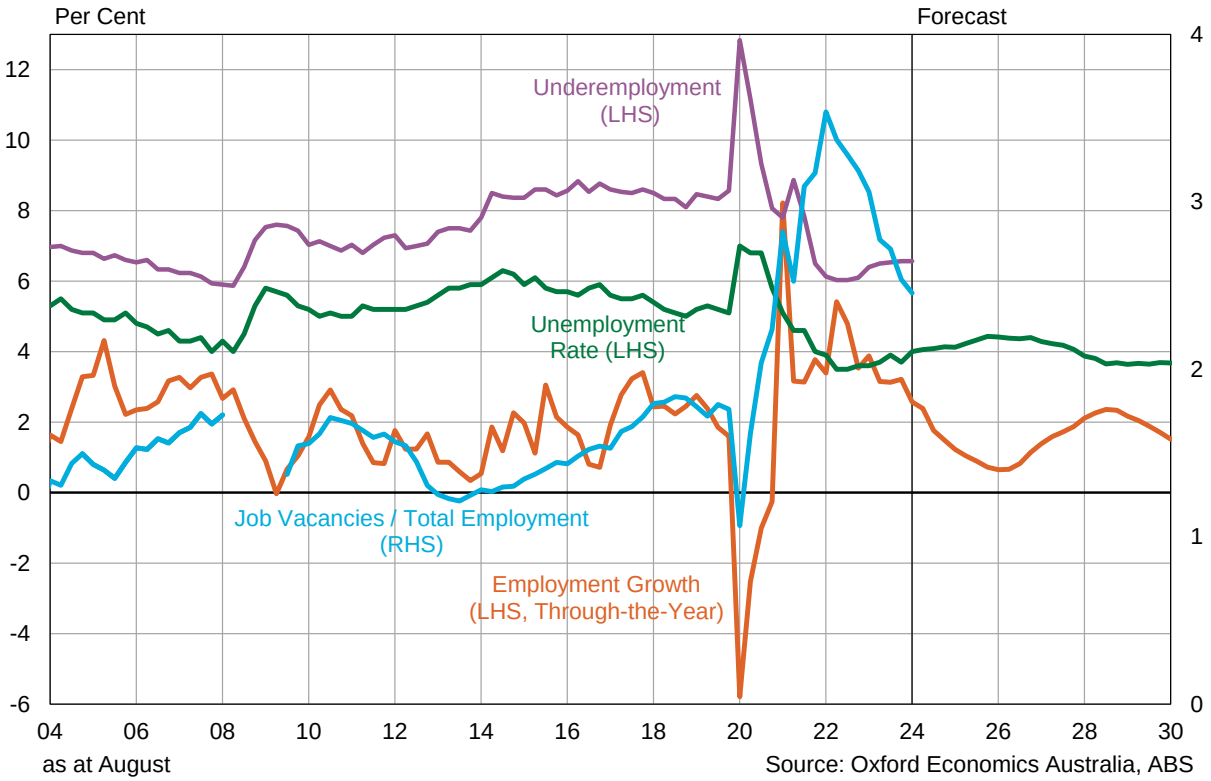


**Figure 3.2 Australia: Employment and Unemployment**




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 FY30. Over the five-year period from FY26 to FY30, the real rate of increase is forecast to average 0.5% p.a., which will be just below the 0.6% average of the decade to FY20 inclusive.

# 4. INDUSTRY WAGE FORECASTS – UTILITIES: AUSTRALIA & QUEENSLAND

## 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 Queensland is used as a proxy for all of Energy Queensland's 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 Energy Queensland's 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 Energy Queensland's 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 Energy Queensland's 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 & QUEENSLAND 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 4.1 and Fig 4.1). 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 rise 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 FY26 to FY30, 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 |
| 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 |
| 2023-2030 | 3.2 | | 0.8 | 3.5 | | 1.0 | 2.9 | | 0.4 | 3.2 | | 0.8 |
| 2025-2030 | 3.7 | | 0.8 | 4.0 | | 1.1 | 3.4 | | 0.5 | 3.7 | | 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 2025-2030 is the average annual growth for 2025/26 to 2028/30 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 4.1% per annum over the six years to FY30, 0.3% 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**

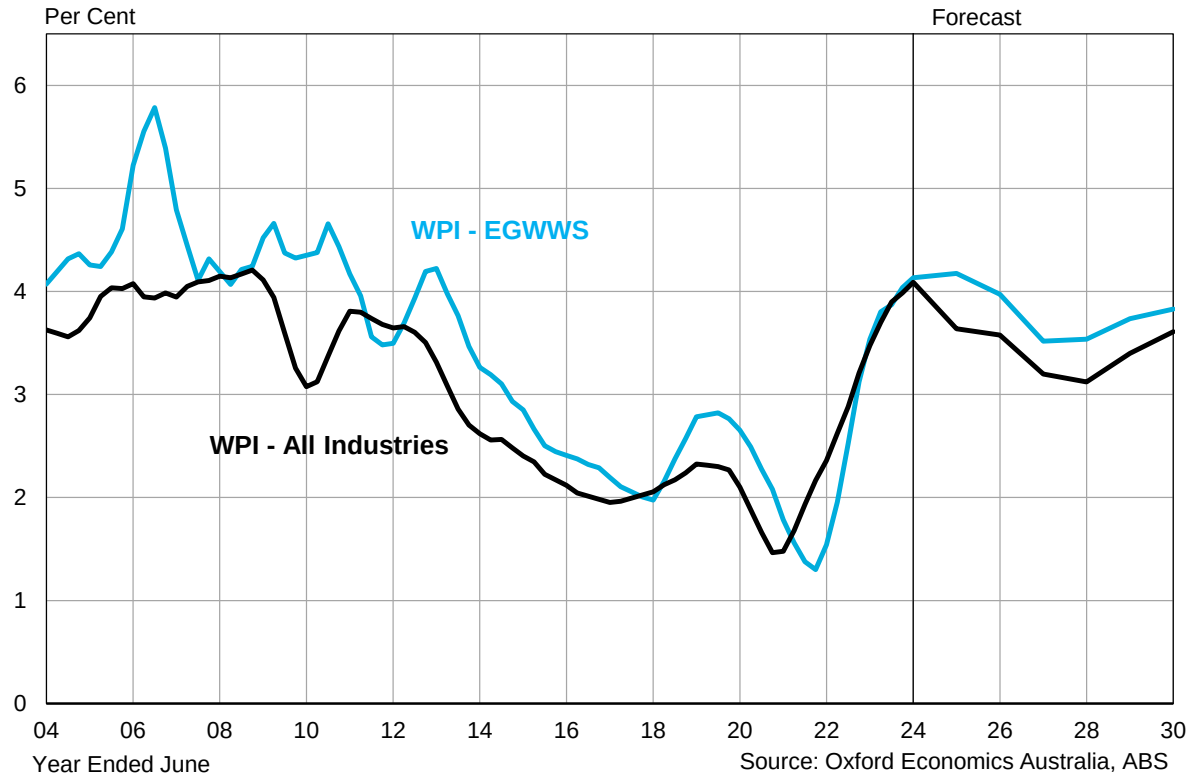
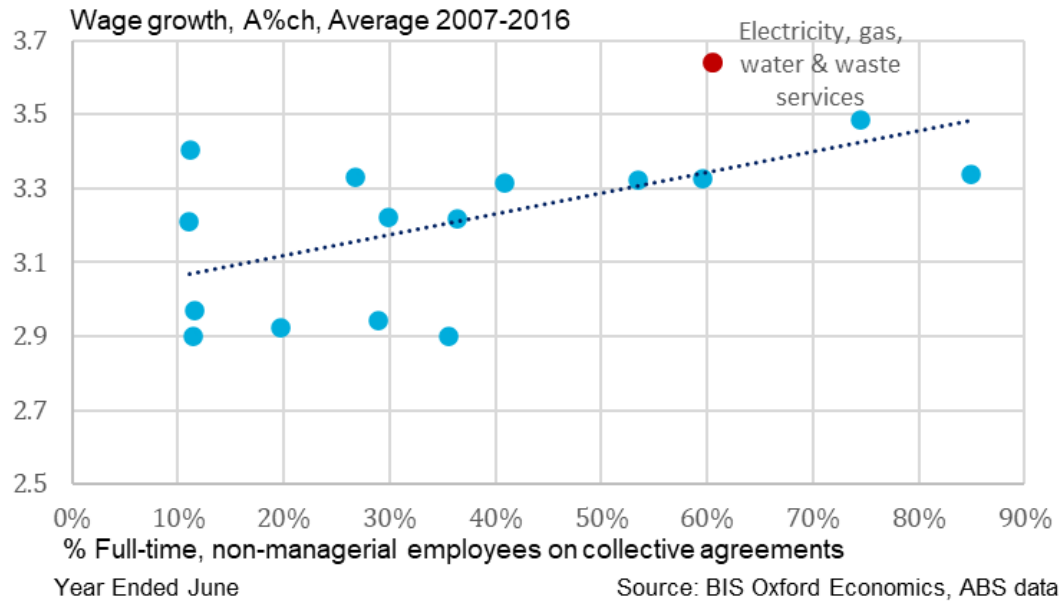


**Figure 4.2 Average wage growth and unionisation rates by industry, 2007-2016**




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 FY25-30, 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.

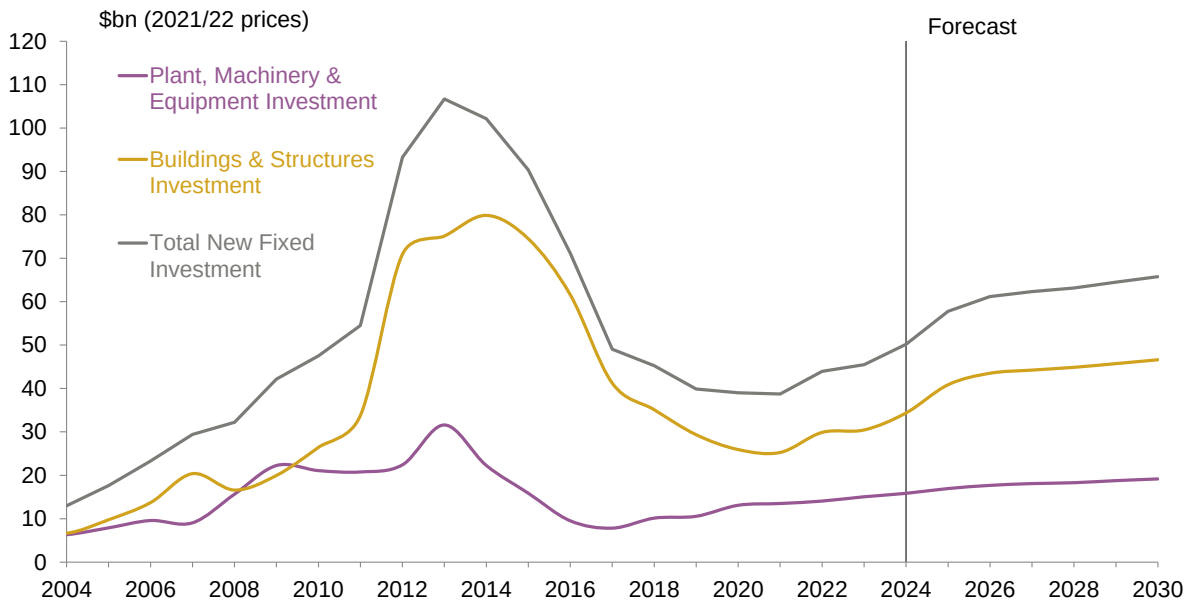
**Wage increases under Individual agreements and EBAs are strengthening due to tight supply and strong demand for skilled labour from the Mining and Construction sectors.**

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 FY30 compared to FY24 levels, following the 50% increase over the past three years (see charts 4.5 and 4.7). 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**

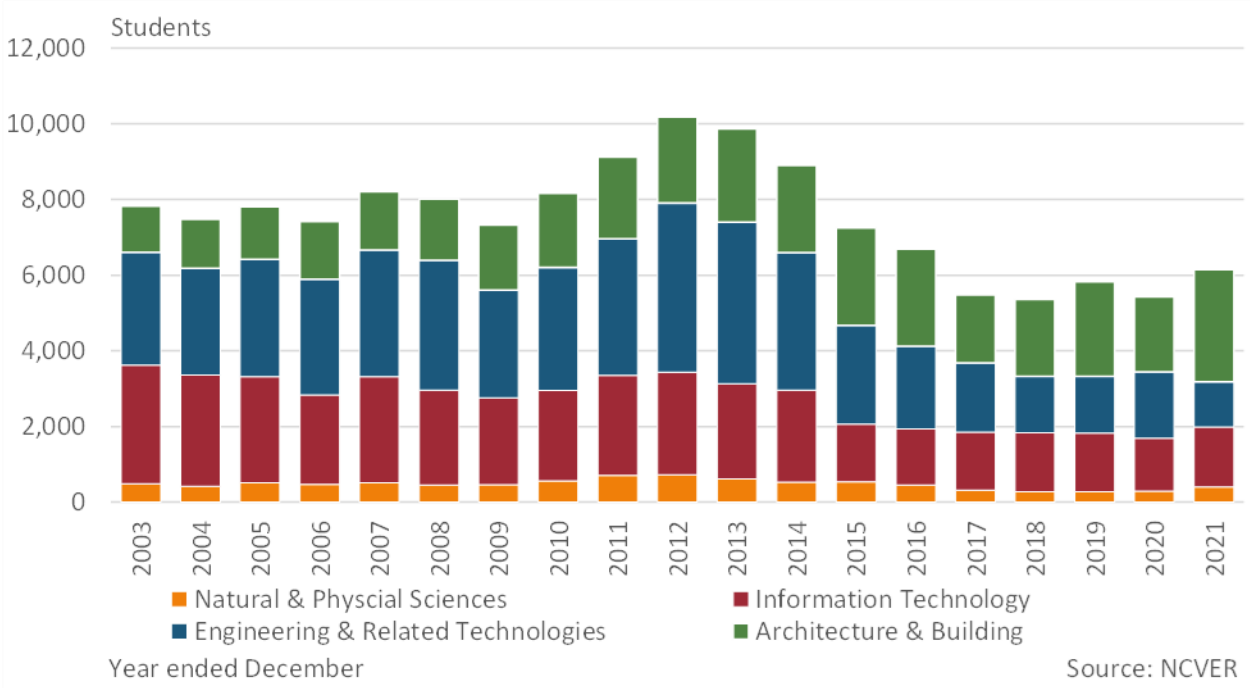



Source: Oxford Economics Australia, ABS

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 Queensland (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 4.1).

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**

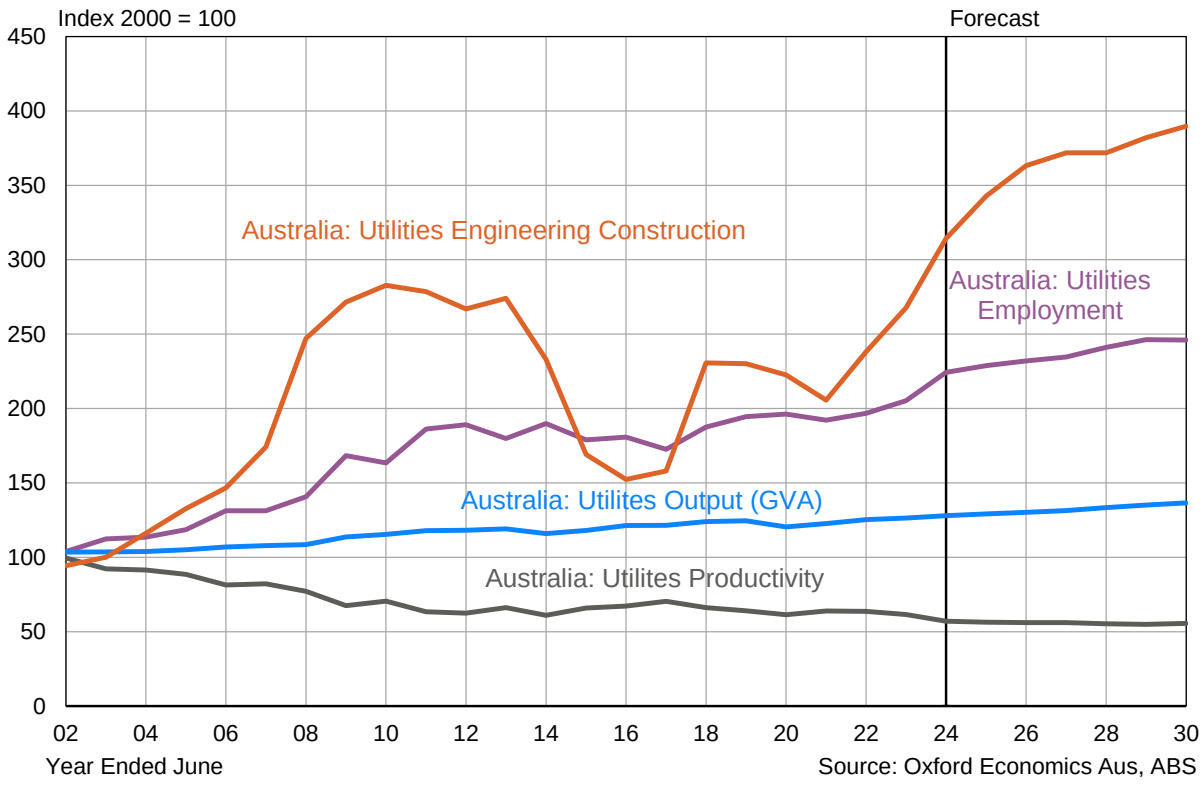
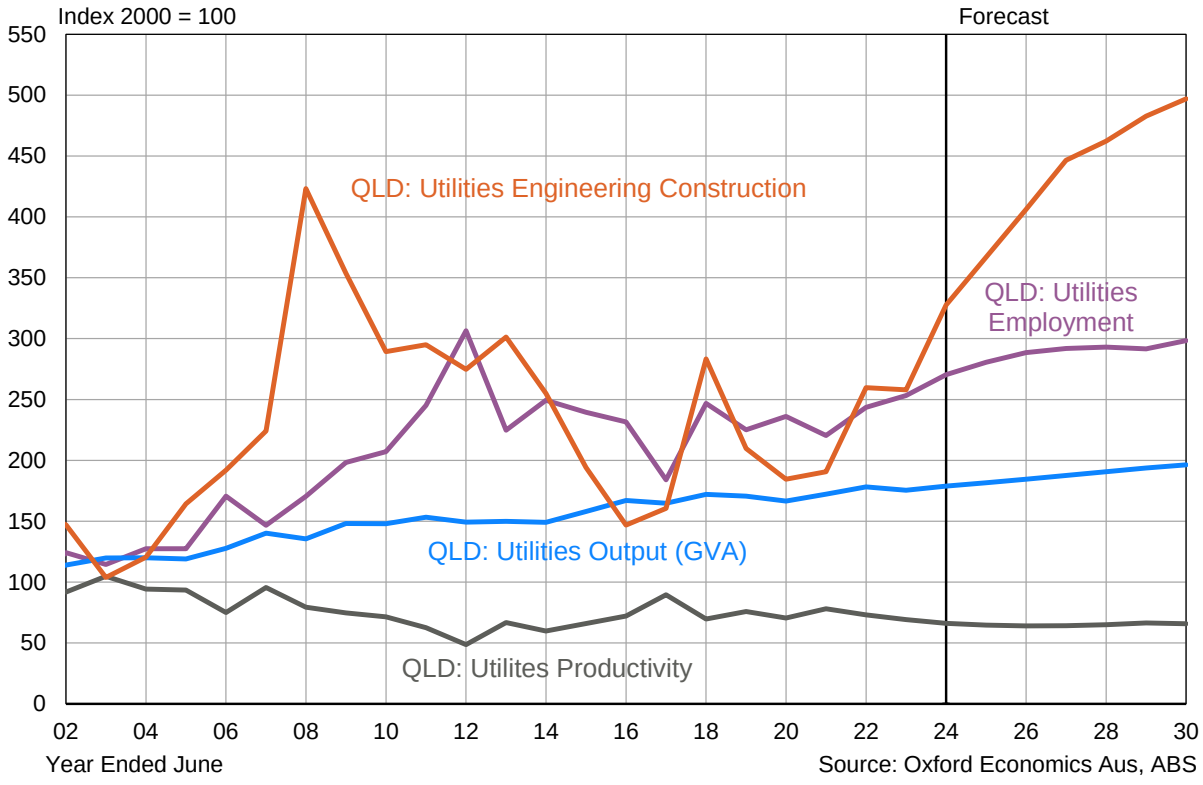


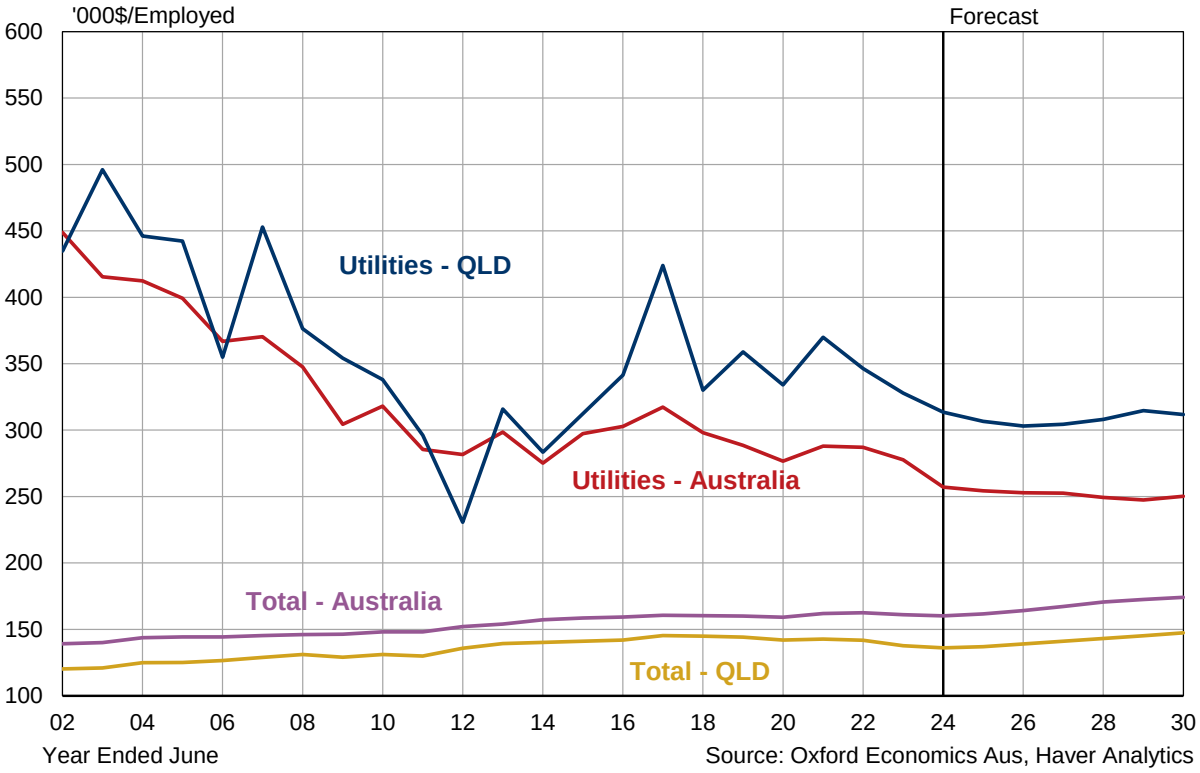

**Figure 4.6 Queensland – Utilities Employment, Output, Investment & Productivity**



### 4.2.1 Outlook for Utilities Wages Growth in QLD

Wages in the NSW utilities sector are expected to slightly outpace the national utilities sector average out to FY30 (see Table 4.1). In FY25 the QLD EGWWS WPI is expected to be +0.1% above the national average, owing to stronger EBA outcomes over FY24. Over the remainder of the decade, the stronger growth in QLD's utility engineering construction activity (see Figure 4.6) will put greater stain on local labour supply, relative to the national average, and ensure stronger EGWWS wage growth.

**Figure 4.7 Utilities Productivity in Australia and NSW**



# 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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