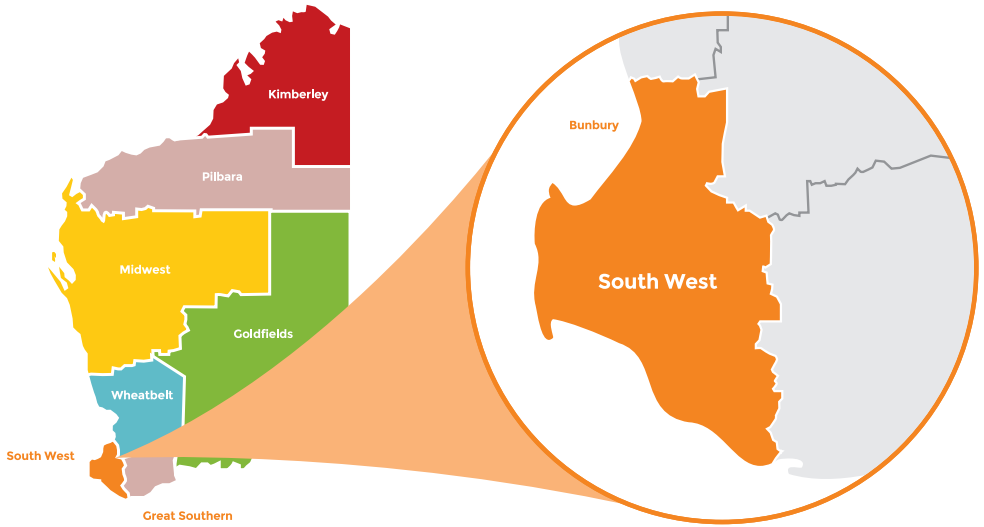
2 Context

2.1 Regional Qualities

The South West region is approximately 24,000km² of which 16,000km² comprises of State forest, national parks, conservation parks, nature and timber reserves. About 6,000km² is occupied by agricultural and rural uses; with some 2,000km² used for industrial and urban development.

The Noongar people are the traditional owners and have widespread cultural and heritage links to places in the region. The future involvement of Noongar people in the economic and social fabric of the region is important in respect of social equity and closing the gap.



2.1.1 Bunbury Geographe

The urban and administrative focus of the Bunbury Geographe sub-region is Bunbury, Western Australia's largest regional centre. The urban area that is Greater Bunbury includes residential areas in the local governments of Bunbury, Harvey, Dardanup and Capel.

The sub-region features substantial mining resource processing operations, served by Bunbury Port and strategic industrial areas at Kemerton, Waterloo, Worsley and Shotts. The power stations around Collie are facing closure in the short to medium term as the Western Australian Government has committed to cleaner energy options. In the meantime, programs have been put in place to transition the workforce.

Greater Bunbury has a range of higher-order services and facilities, including the Bunbury campus of Edith Cowan University, South Regional TAFE and the South West Health Campus which includes Bunbury Regional Hospital and St John of God private hospital. Most specialist services within the South West are located in Bunbury.

Image by Elements Margaret River, Busselton Foreshore

2.1.2 The Capes

The Capes sub-region comprises the City of Busselton and Shire of Augusta-Margaret River. Its economic base includes tourism, creative industries, premium wine and food production and agriculture. The City owns the region's major airport which has grown from an operational FIFO base to secure interstate flights to Melbourne in 2022, expanded to Sydney in 2024. It has significant potential to expand interstate travel, with medium term ambitions to forge international connections into Asian markets.

The Margaret River region is a globally recognised brand which helps attract 86% of all overseas tourist visitation to the South West. Margaret River has a strong affiliation with its stunning natural assets while Busselton is the principal commercial and administrative centre for the sub-region. Busselton also features spectacular scenery and is a drawcard for visitors, particularly through events and its foreshore which is highlighted by the iconic 1.8km jetty.

2.1.3 Warren Blackwood

The Warren Blackwood sub-region has an economy based on agriculture, mining, timber and tourism. Manjimup is the sub-regional centre and includes the shires of Manjimup, Boyup Brook, Nannup and Bridgetown-Greenbushes. Manjimup Shire has more than 500 agriculture businesses that collectively generate $541m in annual agricultural output (ABS 2024). It is WA's largest horticulture producer. Similarly, agriculture re-mains the dominant industry in Boyup Brook, accounting for 57.2% of all employment in the Shire.

The Warren-Blackwood has the largest number of individual small settlements of the South West, mainly a result of the historic development of small timber mill towns that emerged almost a century ago.

Access to native forest timber ceased in 2023, effectively end-ing the hardwood timber industry. However, the sub-region features significant softwood plantations.

Greenbushes is home to the world's premium lithium ore (spodumene) resource, producing 20% of global supplies. The operation continues to expand and feeds processing plants in Kwinana and in Kemerton, 17km from Bunbury Port. The Greenbushes Chemical Grade Plant 3 expects to process its first concentrate in the December 2025 quarter.

Image by Tourism WA, Frances Andrijich

Megatrends are large, transformative processes with global reach, broad scope with fundamental and dramatic impacts which could throw companies, individuals and societies into freefall. Megatrends are interlinked and involve a significant shift in environmental, societal and economic conditions.

The following points are drawn from a number of sources which generally interrelate, albeit with differing nomenclature. There is a mix of what is very clearly coming soon and 'weaker signals' of what is likely but less guaranteed. It is noted that the global pandemic continues to negatively influence trade and behaviours. So too has the war in Ukraine, conflict in the Middle East and Chinese activities in the South China Sea as geopolitical shifts add weight to the human dimension over trust, fairness, governance and environment.

2.2 Global Futurism and Megatrends

2.2.1 Urbanisation and energy

City dwelling has passed the 50% mark and it is predicted that 68% of the world's population will live in cities by 2050. This pressure alongside disruptive technologies will remap cities.

While cities are attractors, it is predicted that talent will leave behind megacities for smaller, more liveable cities. For the first time, 2020 saw more people leave Australia's two biggest cities for the regions, rather than regional people move to cities. The pandemic experience also saw increased interest in regional lifestyle and family liveability.

Urbanisation and a growing middle class in emerging economies will mean more people have disposable income. This will lead to increased consumerism and a greater demand for energy. The consequence will increase the push for energy efficiency and renewables in line with the State and Commonwealth policy drive to Net Zero.

The Australian Energy Market Operator (AEMO) reported WA's record energy demands in early 2024, echoing the prediction from CSIRO Megatrends (2022) that energy needs will continue to soar. Demand and calls for green energy will create greater employment as manufacturers look to remove emissions from their supply chains. Countries like Australia have a solar advantage.

2.2.2 People and society

Ageing populations will drive change in healthcare which will be more predictive and tailored. OECD nations will be impacted more than most and CSIRO (2022) predicts that Australians aged 65+ years will comprise 23% of the population as the ratio of working people to non-working goes from 4:1 to 2.7:1. This will force new thoughts on future-proofing infrastructure, planning, aged care and housing.

It is expected that of those aged 10-24 years, 90% will live in less developed nations by 2050 and the world population is predicted to be between nine and ten billion. Most scientists consider this a maximum upper limit given that the Earth's carrying capacity would be as low as two billion if all those people consumed at the same rate as the average American.

Society will have an increasing demand for personalisation and experiences as millennials become the largest demographic. For Australia, the impact of ageing will be on the future labour market, healthcare and the widening savings gap.

Economic inequality will become more extreme across most of the world. Refugee crises and human migration will add to the strain as the next waves of disruption promise to push these conflicts to a breaking point.

The future of work and human augmentation could produce a massive displacement of work and workers. Adding to the pressures are climate change, disease and excessive debt. These will collectively reframe the social contract between governments and citizens.

2.2.3 Education and skills

Education systems are planning significant transformation to align with the future of work. The future will be less about knowledge and more about a lifelong approach to developing critical thinking, problem-solving and communication skills, teamwork and leadership capabilities, and being technology-enabled.

Universities and the VET sector need to embrace change and work together. The need for reskilling will combine higher education and vocational; the key being right-time right-place education. Learning pathways will need to be easier to navigate and flexible, offering more choice and micro credentialing options.

Australia has a skills deficit along with most other countries and collectively, we need to increase work-integrated learning and particularly increase STEM-skilled graduate numbers.

Gig economy growth will leave low paid workers vulnerable and automation will impact on the unskilled who will suffer increasing economic displacement. So too will those with less access to technology. The role of education and skills training cannot be underestimated in the coming decade.

2.2.4 Climate sensitivity

The changing climate will become an ever more powerful driver as forests and farming is impacted by continued rainfall decline, storm events become more extreme, bushfires pose greater threats and habitat is threatened. National Tidal Centre data showed that the South West had the greatest sea level rises in Australia (+7.4mm/pa, 1990-2010) which will inevitably impact coastal infrastructure.

Regardless of what people believe is the cause, the planet is getting hotter – every year for 44 years now. Bushfires have seen issues become increasingly political and there will likely be conflict between those seeking restoration of ecosystems and those seeking technological solutions.

Innovation in food, water for food and consumer attitudes will drive change as the impact of population and climate change affects lives. This will likely form a part of the deglobalisation attitude and shift to localisation – farmers' markets, seasonal foods and so on.

The direct impact of climate change on Africa will have global implications for 'climate refugees' and the movement of people. Refugees in advanced nations will see jobs market tighten which would prompt decreasing tolerance towards immigrants particularly as some will lack the skills to find employment.

2.2.5 Depletion, extinction and resource security

In the face of declining farmland, it is estimated that the world will need to produce 35-56% more food for a growing population with increasing demands by 2050. The UN estimates the loss of 12 million hectares of productive farmland to desertification and degradation every year.

World fisheries may collapse within 30 years and in a little more than a decade, demand for water will increase 40%, and for energy 50%.

Rare earths and components for technologies will be running out. Research will need to be a priority to protect the quality of life and resources, particularly utilising waste. Australians produce 1.5kg of waste daily compared to the world average 0.7kg.
End of life plastics will need to be targeted for recovery and to avoid landfill.

Extinction threats and environmental damage will reach a critical point demanding a response. It is believed that the pressure for positive change will escalate and cannot be ignored.

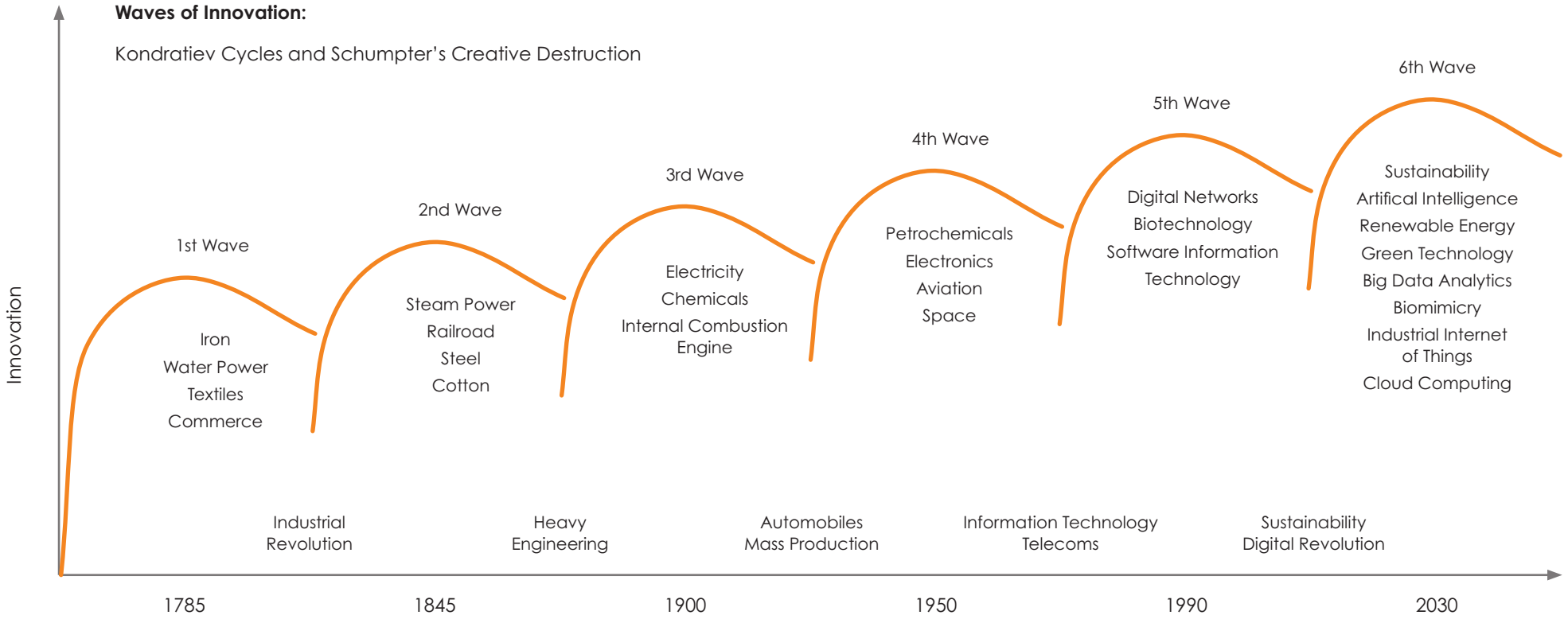
2.2.6 Technology and the workplace

Machine learning, AI and AR (artificial intelligence and augmented reality) will not only drive efficiency and productivity, but an increasing need for the efficient flow of data which will be more important at the edge of the internet since the traditional cloud model lacks real time responsiveness.

Technologies will boost efficiencies and productivity so companies that traditionally had a business edge through human efficiencies will lose that advantage and will need to compete through quality and innovation.

Edge computing will begin to change everything and is necessary to implement change such as autonomous vehicles which will need to interact with each other and not just their physical environment. For Australians, 5G will shape as a solution to data sharing in a more localised way. The connectedness of products through the internet of things will pose substantial cyber security threats while the ability to gather and analyse data in real time will not be a competitive advantage, it will be a necessity.

Blockchain will be vital in respect of product trust and preventing food fraud (substitution and adulteration). The aim is to guarantee quality and provenance in a competitive world challenged by misinformation. Blockchain will facilitate efficiencies and automation, for example, in purchasing.



2.2.7 Manufacturing shift

Business is shifting from products to services which are becoming increasingly important in a world where knowledge is a commodity.

Total exports of services rose 27.6% in 2023-24 to reach $124bn (ABS). It was primarily driven by the tourism sector.

However, COVID-19 exposed business risks impacting on those dependent on multiple supply chains, and the experience has reset thinking on overseas manufacturing reliance.

Some relief will likely come through additive manufacturing. Improvements in technology and 3D printing will become the norm with onshore suppliers able to layer materials to create required items. The 'molecular economy' could be a very significant disruptor.

Nanotechnology will be a disruptor that challenges current manufacturing and while the 'next greatest thing' in technology can vary, the trend is towards ever more compact and mobile.

It is expected that the continued move to mechanisation will impact on labour and risk jobs. The positive aspect for Australia is that with labour costs removed there will be a more level playing field in respect of input costs and global competitiveness. Workers in emerging economies will be particularly vulnerable.

The World Bank predicts the leading risk to workers will be in China (77%) and India (67%). The consequence is political risk focuses on the young age demographic of those countries where unemployment could be as high as 34%.

Top 5 leading economies by GDP

1 United States
2 China
3 Germany
4 Japan
5 India

Top 5 export markets for Australia

1 China
2 Japan
3 South Korea
4 India
5 United States

Same world but a different perspective of Western Australia's proximity to markets

2.2.8 Economic powerhouses

Economic shifts will continue to see influence shift from West to East, and North to South, as the world economy restructures towards the Asian century.

It is expected that within the next decade, the combined E7 countries (China, India, Brazil, Mexico, Russia, Indonesia and Turkey) will double the GDP of G7 nations (Canada, France, Germany, Italy, Japan, the United Kingdom and the United States).

Added to this, up to two-thirds of the world's middle class will live in the Asia Pacific within a decade. The impact on OECD economies may lead to protectionism, nationalism and deglobalisation.

Futurists note that Indonesia should not be overlooked in importance, especially to Australia as a key market. Indonesia is ranked 17th in the world in terms of GDP and its citizens are generally young, increasingly educated and with greater levels of disposable income.

The Asia-Pacific's cities will be seen as important markets. Some single city populations will grow to the size of modest countries and should be considered as target markets in their own right.

Developing commercial and friendly relationships based on trust and respect will be the key to political and economic stability.