

Diversify WA July 2019-July 2021



Deputy Premier foreword

The Western Australian (WA) Government was proud to launch Diversify WA in 2019, which provides the state with a strong economic development framework outlining how government, industry and community can work together to grow and diversify the economy, create jobs and secure our future.

Diversify WA's release was almost immediately followed by the onset of the COVID-19 pandemic. The pandemic caused a number of significant economic impacts, including disruption to global supply chains, increased unemployment and reduced business operations.

To drive both economic and social recovery from the COVID-19 pandemic, in July 2020 the WA Government launched the WA Recovery Plan with the aim of improving business and consumer confidence, creating employment opportunities and promoting growth. It included a range of stimulus and support measures to develop new and established industries – including many initiatives identified in the Diversify WA framework.

WA's response to the COVID-19 pandemic has positioned the economy to rebound faster and stronger than ever, reflected through the stabilisation of economic conditions and achievement of employment levels that have exceeded those reached pre-pandemic. However, this recovery has largely been driven by a significant increase in the value of the state's iron ore exports rather than through diversification.

A number of the state's identified priority sectors and industries also continue to endure the impacts of the pandemic. Tourism, events and creative industries, and international education in particular have been severely affected by COVID-19 public health measures,



such as travel restrictions and venue capacity limits. These sectors are being supported to survive and adapt through specific initiatives implemented under the WA Recovery Plan.

Despite these challenges, the WA Government has been successful in delivering a number of initiatives to support the state's diversification efforts. I am particularly proud of our achievements in the areas of investment and trade, which have included establishing Invest and Trade WA as the 'front door' for investors interested in doing business in WA and to support WA small to medium enterprises (SMEs) to reach their export potential. We have appointed new Investment and Trade Commissioners and the state's overseas office network has moved to a hub-and-spoke model to allow new locations to be established and resources deployed in response to emerging market and sector opportunities.

Recognising the changing global landscape and the relative stability of the state's economy, the WA Government has a renewed focus on progressing the Diversify WA vision. This report provides an overview of our achievements across our priority sectors to date, and emphasises our commitment to further industry and market diversification going forward.

Hon Roger Cook MLA

Deputy Premier; Minister for Health; Medical Research; State Development, Jobs and Trade: Science

About Diversify WA

Diversify WA is the state's economic development framework. It sets out initiatives, actions and strategies that will contribute to achieving its vision for "a strong and diversified economy delivering secure, quality jobs through increased investment across a broad range of industries". It also identifies priority sectors for strategic development that match WA's unique strengths with global trends to achieve growth across the economy.

The COVID-19 pandemic has provided an opportunity to review the economic development framework presented in Diversify WA and how the WA Government can best support the economy. The revised Diversify WA framework includes 8 external-facing sectors:

energy; tourism, events and creative industries; international education; defence industries; mining and mining equipment, technology and services (METS); space industries; health and medical life sciences; and primary industries.

The revised Diversify WA framework also recognises the importance of activities that will improve value and productivity across multiple sectors of the external-facing economy. These cross-sector activities are:

- » supply chain development
- » advanced manufacturing
- » science, innovation and technology
- » environmental, social and governance (ESG) frameworks.

Diversify WA activities

Investment and trade activities

External focused economy



Energy



Tourism, events and creative industries



International education



Defence industries



Mining and METS



Space industries



Health and medical life sciences



Primary industries

Cross-sector activities

Supply chain development

Advanced manufacturing

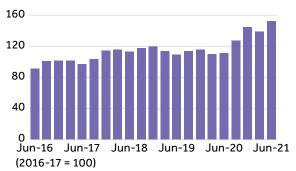
Science, innovation and technology

Environmental, social and governance frameworks

WA's progress towards diversification

Despite the challenges presented by the COVID-19 pandemic, economic indicators illustrate the WA economy is in a relatively strong position, particularly when compared to other countries and Australian jurisdictions. WA's economy (gross state product or GSP) grew by 1.4% in 2019-20, which was the highest of any Australian state. GSP growth in nominal terms was even higher, largely due to the increase in the price for the state's main export commodity, iron ore.

Business confidence



Source: Chamber of Commerce and Industry WA

WA's economic growth continued in 2020-21, driven by a rebound in household consumption and business investment. This is reflected in high consumer and business confidence. In June 2021, the Chamber of Commerce and Industry WA (CCIWA) index of business confidence was at its highest level since December 2007. Correspondingly, WA is perceived as a safe place to conduct business as the state's management of the pandemic has largely avoided the need for extended lockdowns, which is attractive to business. In addition, the pandemic acted as a disruptor and caused many WA businesses to quickly pivot and diversify their product and service offerings, while also seeking opportunities to improve efficiencies.

While the WA economy has certainly shown resilience during the COVID-19 pandemic, it is yet to catalyse further diversification of the state's economic base. In 2019-20, the mining industry made a positive contribution to WA's real GSP growth, while the contribution of all

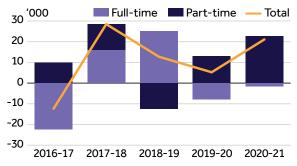


other industries was negative – this is a trend that has occurred in 5 of the last 6 years. At the same time, WA's reliance on China as an export market has increased – primarily for iron ore, however this is also the case for other commodities as well. This has seen an increasing proportion of WA Government revenue being derived from iron ore royalties, with changes to the distribution of goods and services tax (GST) revenue meaning that the trade-off of lower GST revenue from higher royalty income will not be felt as much as in the past.

The economic impact of the pandemic has not been evenly spread. Sectors relying on the movement of people have been adversely impacted, with the most affected sectors expected to take years to get back to 2018-19 level GSP contributions. In particular, sectors with a high proportion of SMEs with slim margins to invest in new business models and technologies have struggled to adapt to the operational challenges of health and border restrictions and changing consumer behaviours.

In contrast, the strength of the mining sector, supported by the WA Government through the pandemic, has assisted the state's economy to maintain its fiscal balance. In order to diversify,

Employment - full-time versus part-time



Source: Australian Bureau of Statistics

while continuing to build on the success of the resource sector, we need to focus on opportunities to leverage the expertise of WA's mining industry to attract investment in new industries of strategic importance.

The WA Government's priority, articulated through Diversify WA, is for economic development to create growth in secure and quality jobs. WA is making good progress in this regard. Although the immediate response to the COVID-19 pandemic inevitably resulted in large job losses, as at July 2021 employment in WA is over 27,000 higher than the pre-COVID-19 peak. The strength of the state's economy has led to unemployment and underemployment rates falling to multi year lows.



Energy

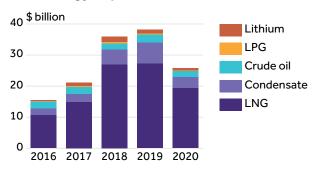
WA's energy sector is in the midst of a transition towards cleaner energy sources. The global trend of decarbonisation has gained significant momentum over the past year, which has presented a major opportunity for WA to secure new investment into its emerging clean energy industries.

The WA Government has supported the state's energy transition by establishing the strategic frameworks and infrastructure needed to enable growth, whilst also diversifying the energy sector through investment and increasing industry capability in renewable energy sources. Work is also underway to develop technology that supports energy affordability, improves energy system reliability and contributes to long-term emissions reduction, consistent with the WA Climate Policy released in November 2020. This includes, among other initiatives, investments in wind farms and standalone power systems.

The Renewable Hydrogen Strategy and the Future Battery Industry Strategy were both launched in 2019. These strategies set out the state's approach to becoming a significant producer, exporter and user of renewable hydrogen, future batteries and critical minerals. The development of these industries will provide substantial input and technologies for industry and communities, in both decarbonisation and new economic opportunities.

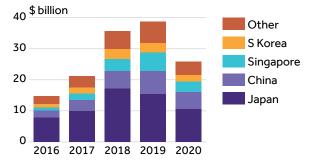
Significant progress has also been made in WA's domestic energy sector. The WA Government's Energy Transformation Strategy, launched in 2019, is leading the way in enabling the integration of more renewables and new technologies into the power supply chain. Key components of this strategy have also been launched, including the Whole of System Plan and the Distributed Energy Resources Roadmap, which ensure a structured and coordinated approach to investing in, and increasing the capacity of, the state's power system.

WA's energy export commodities



Source: Department of Mines, Industry Regulation and Safety

WA's energy export markets



Source: Australian Bureau of Statistics and Department of Mines, Industry Regulation and Safety



Future battery and critical minerals industries

The WA Future Battery and Critical Minerals Industries Strategy was released in 2019, with its objective to develop the state's battery and critical minerals industries by attracting investment, supporting innovation and growing our participation in global supply chains.

Collaborating with industry and research partners

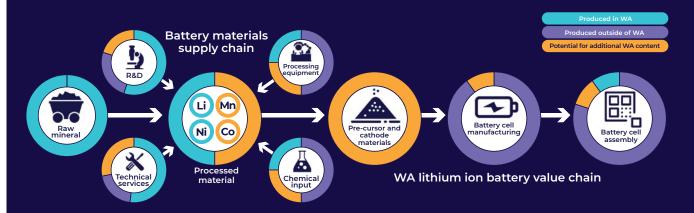
In implementing the strategy, a key focus of the WA Government has been strong collaboration with the Australian Government, industry and research partners. This approach has underpinned a number of significant achievements to advance the battery and critical minerals industries, including:

- » Successfully attracting investment into the processing of the state's battery minerals to produce battery-grade lithium hydroxide and nickel sulphate.
- » Attracting 3 of the world's largest producers of lithium to develop downstream processing projects in WA: Tianqi Lithium (China), Albemarle (United States) and SQM (Chile).
- » Securing Perth as the headquarters of the Future Battery Industries Cooperative Research Centre.



Developing the battery value chain

In November 2020, the WA Government announced a \$13.2 million initiative to attract a global pre-cursor cathode active materials manufacturer to establish a production facility in WA. This focus will ensure WA is cemented as a destination for value-add activities and advanced chemical manufacturing.



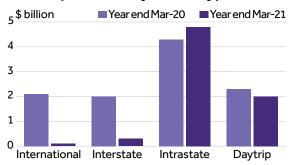
Tourism, events and creative industries

Efforts to build the tourism, events and creatives industries were impacted significantly by the COVID-19 pandemic. The necessary public health measures of travel restrictions and venue capacity limits had immediate and profound impacts upon businesses and operators in the tourism, events and creative industries, forcing many to cease operations entirely.

Recognising these impacts, the WA Government implemented a number of support measures to enable businesses to survive and adapt. This included more immediate measures, such as the \$14.4 million Tourism Recovery Program to support businesses to survive the new tourism landscape and \$76 million allocated to the arts and culture sector through the WA Recovery Plan, including the \$9 million 'Getting the Show Back on the Road' shared risk package.

Collectively, the WA Government's measures have provided the structural frameworks to enable the survival and sustainability of the tourism, events and creative industries. Despite this support, it is acknowledged that the sector will continue to struggle until there is certainty around interstate and international travel.

Visitor expenditure by visitor type



Source: Tourism WA



Wander out Yonder – WA's largest ever intrastate tourism campaign

The WA Government has worked in collaboration with the tourism industry to respond to the impacts of COVID-19 and pivot towards new opportunities through the Wander out Yonder campaign, which has been aimed at increasing intrastate tourists and attracting local investment.

Supporting regional and Aboriginal tourism experiences

As part of the campaign, the WA Government provided 10,000 vouchers worth \$100 to local tourists, which could only be redeemed when a minimum spend was incurred. The uptake of the vouchers by Western Australians was swift, and is anticipated to catalyse at least a \$2 million contribution by intrastate tourists. The WA Government has also worked closely with industry, Regional Tourism Organisations and the WA Indigenous Tourism Operators Council to promote compelling tourist experiences to Western Australians. This has included establishing targeted cooperative marketing campaigns, which have promoted holiday offers across hotels, holiday parks, campervans and a variety of tours and experiences. This approach has encouraged locals to holiday in regional WA and book directly with industry partners, stimulating activity.

Increasing industry capacity to respond to growing demand

The Wonder out Yonder campaign was expanded to inspire young Western Australians to embrace the opportunity to have a working holiday in regional WA. The Work and Wander out Yonder campaign has targeted labour shortages in a range of occupations usually filled by international workers, responding to growing industry labour demands.



International education

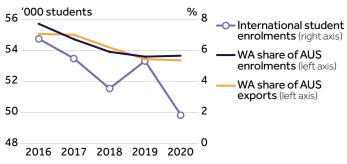
Before the emergence of the COVID-19 pandemic, the WA Government launched 'Where Bright Futures Begin: International Education in Perth, WA 2018-2025,' which articulated its commitment to enhancing WA's reputation and ranking as a world-class international education destination. Indicators demonstrate that the international response to the state's renewed focus on international education was promising, with enrolments increasing by 3.4% in 2019, after falling in 2017 and 2018.

However, these early successes were significantly undermined by the impact of the COVID-19 pandemic. Key challenges resulting from the pandemic, including travel restrictions, shifting economic and social priorities, and a changing geopolitical landscape have resulted in international education providers experiencing a large decline in new enrolments, affecting their viability.

To strengthen and build the international education sector, the WA Government launched the WA International Education Recovery and Renewal Plan to support the sector to reposition, recover, build capability and adopt new models of delivery going into the future. Initiatives within the WA International Education Recovery and Renewal Plan have been designed to support local providers and onshore international students, as well as facilitate offshore delivery to build the pipeline of future onshore enrolments.

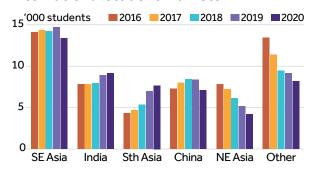
The WA Government is working closely with the state's international education sector to prepare for the return of international students when conditions allow. This includes work to develop an offshore marketing strategy to raise awareness and increase consideration of WA as a preferred study destination.

International student enrolments and exports



Source: Australian Department of Education, Skills and Employment

International student markets



Source: Australian Department of Education, Skills and Employment



Defence industries

The development of WA's defence industry has been guided by the WA Defence and Defence Industries Strategic Plan, released in October 2018. The strategic plan provides direction across 6 key strategies to enable WA to be a key player in the national and international defence industry, and is supporting the state to become the principal location for the delivery of all maintenance and sustainment requirements for Australia's vessels.

Targeted investment has drawn on the state's key comparative strengths and capabilities, and built on capability requirements within the WA defence sector that are transferrable and can be leveraged to build on opportunities and advancements in other priority sectors. This includes investment of \$87.6 million in the Australian Marine Complex (AMC) to enable it to accommodate larger classes of naval vessels and create greater connectivity and resilience across the complex.

Production pressures have been felt by the industry as a result of COVID-19. In response, the WA Government has focused efforts on building defence industry capability, including targeted incentives for apprenticeships and small businesses to grow the defence workforce pipeline and support more SMEs to join the sector.

Implementing upgrades to the Australian Marine Complex

The Australian Marine Complex (AMC) is WA's key shipbuilding and sustainment industrial precinct, supporting defence, mining, oil and gas, and commercial marine industries.

Setting a strategic direction

In November 2020, the WA Government released the AMC Strategic Infrastructure and Land Use Plan (SILUP) and the AMC Infrastructure Strategy which identifies the short, medium, and long-term infrastructure upgrades required to guide the AMC's ongoing development in the national interest. Infrastructure upgrades will enable the precinct to consolidate its role as Australia's primary location for construction of minor naval vessels, while improving facilities supporting current and future naval sustainment work.



Developing enabling infrastructure

Following the release of the SILUP, the WA Government has invested \$87.6 million in 4 fast-tracked infrastructure projects at the AMC, which is expected to immediately create 600 jobs.

Significant investment in our defence capabilities through the AMC – including a potential Large Vessel Dry Berth – will help drive ongoing trade opportunities and will support growth through the state, creating jobs and stimulating the economy.

Mining and METS

The mining sector has played an integral part in keeping WA in a strong economic position throughout the pandemic. The continued operation of the resource industry, supported by the WA Government, ensured the construction of new mines and sustained export production.

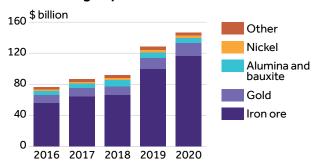
The production of key commodities, including iron ore, alumina, gold and nickel, has led to an extraordinary increase in the value of the state's mining sector in recent years. Since 2006, the value of the WA mining industry has increased from \$32 billion to \$148 billion.

The global economic recovery from the pandemic has led to significant increases in

commodity prices and record sales values for WA's mining sector. This has been supported by investments from the WA Government to sustain growth in mining and METS, including funding to support exploration activity, enhance the state's research and development capability and develop new industries. The state's mining industry provides substantial direct and indirect employment, and supports a number of new and existing downstream and service industries.

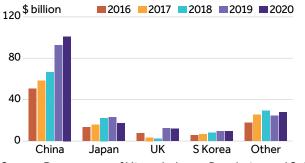
The METS sector in WA is estimated to account for about 30% of the national industry, adding an estimated \$27 billion to the state's economy in 2018. There are approximately 27,000 specialised METS sector companies in WA.

WA's mining export markets



Source: Australian Bureau of Statistics and Department of Mines, Industry Regulation and Safety

Sales of export commodities



 $Source: Department \ of \ Mines, Industry \ Regulation \ and \ Safety$



Space industries

The global and national space sector is growing rapidly and presents significant opportunities for WA. The state has significant geographical, technical, research and infrastructure advantages and capabilities to leverage investment and grow a world-leading, thriving space industry.

Currently, there are more than 70 international and Australian companies operating in space and space-related services in WA. The state also hosts space infrastructure for civil and defence applications, space-related facilities and institutions and university research programs.

The WA Government has made significant investment to assist industry to build capability to support the space sector, and to promote WA as a world-leader in space technology and research. This includes development of the Australian Automation and Robotics Precinct in Neerabup, establishment of the Space Automation, Artificial Intelligence and Robotics Control Complex and Australian Space Data Analysis Facility, and construction of a specialist Space Science Education Centre at Joseph Banks Secondary College in Banksia Grove, to support development of the future space workforce.



Health and medical life sciences

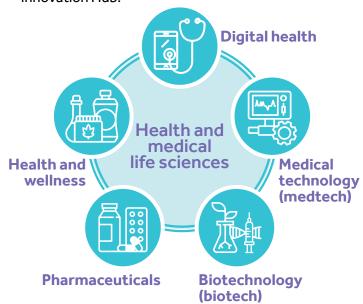
The WA health and medical life sciences sector has experienced significant growth in recent years. The sector presents opportunities to further build WA's established expertise in high need areas including medical research, new gene technologies, phenomics, medical technology, long-term population health studies, data linkage and digital health solutions.

The WA Government is committed to continuous improvement in health outcomes, to create jobs and diversify the economy. The WA Government repurposed its \$1.3 billion state sovereign wealth fund to create the WA Future Health Research and Innovation (FHRI) Fund, allowing interest earned to be directed through the FHRI Fund Strategy (2020-2022) to WA-based health and medical research, innovation and commercialisation, for perpetuity. The state has also secured the National AusBiotech conference, Australia's largest life sciences conference, to be held in Perth in 2022.

The WA Government works with and supports the associated research and innovation pursuits of WA's 5 universities, and its world-leading WA-based medical research institutes – the Telethon Kids, Harry Perkins, Lions Eye, and

Perron institutes – to build health and medical research capability in the state. Targeted support for health innovation and research centres is also provided, including support for the Australian National Phenome Centre, an initiative led by Murdoch University to support the development of personalised medicine.

The state has also invested \$1.2 million over 4 years from the New Industries Fund into the \$3.2 million MTPConnect WA Life Sciences Innovation Hub.





There are currently around 40 biotechnology and pharmaceutical companies and more than 50 medtech and digital health companies based in WA, along with 22 research institutions and almost 65 services and support organisations.

Primary industries

WA's primary industry sector is a strong contributor to the state's economic diversification. In 2020, agriculture was WA's second major export industry, with the state exporting around 80% of its agricultural production. The sector is supported by strong international trading relationships, with WA supplying over 150 international markets.

Primary industries exports continue to be dominated by raw commodities (over 70% of exports are raw) with limited post-farmgate value-adding. The 2020-2024 Primary Industries Plan, released in November 2020, aims to support the growth of increasingly sophisticated and globally competitive primary industries to increase the diversity of the sector.

Border closures continue to impact the movement of workers both from across Australia and overseas. The WA Government is working closely with the Australian Government to support the sector with measures such as the International Freight Assistance Mechanism, a targeted support program to keep global air links open in response to the ongoing effects of the COVID-19 pandemic. Indicators illustrate that

whilst some of the impacts of COVID-19 and trade restrictions have been mitigated by the transition to alternate freight mechanisms and new international markets being identified, there continues to be an ongoing impact to the sector.

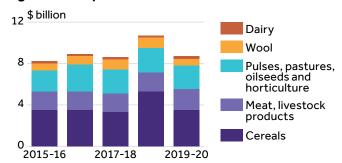


Agrifood market distribution



Source: Australian Bureau of Statistics

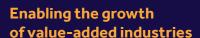
Agricultural production in WA



Source: Australian Bureau of Statistics

Establishing WA as a centre of excellence in food science

While agriculture is one of WA's most traditional industries and focuses on bulk quantities of raw produce, food science has the capacity to make the supply chain more precise, more profitable and more sustainable. The WA Government is focusing resources on supporting the growth of premium and value-added food and beverage businesses through the Food Industry Innovation program.



The Food Industry Innovation program has been developed to bring premium and value-add food and beverage producers together and help them overcome barriers to growth. The program aims to develop the full potential of WA food and beverage businesses that are producing premium products; adding value to raw produce and staging their product for domestic and international markets.

Supporting world-first innovations

On 22 April 2021, the WA Government launched the world-first National Oat Breeding Program as part of its \$10.1 million Processed Oat Industry



Growth Partnership. The program, backed by a joint \$5.4 million investment from AgriFutures Australia and the Grains Research and Development Corporation, will provide new varieties for milling and hay oats, with a broad genetic base equipped to respond to the changing needs of Australian growers and exporters.

This commitment to the Processed Oat Industry Growth Partnership provides global signals that the WA Government is committed to building the industry's capability and that WA is a desirable place to do business, which will attract investment into the sector.



Cross-sector activities

As an export-focused economy deeply integrated into global supply chains, WA needs to be responsive to shifts in global industry trends. In collaboration with industry, the below cross-sector enabling activities have been identified as key to supporting diversification of the state's economy.

Science, innovation and technology

Investments in science, research and development (R&D) will also enable WA industry to adapt to significant global changes and mitigate the impact of supply chain disruptions in the long-term. Through R&D, industry can use science as a basis to build new competitive advantages, increase productivity and test the boundaries of what is possible.

Innovation and technology also underpin productivity, competitiveness and the resilience of businesses. Firms with high productivity are able to pay higher wages and attract highly skilled workers, generate more value for consumers and pay higher returns to investors. The ability

to innovate means that our businesses and economy can adapt and change to pressures or opportunities. In the long run, innovation will facilitate the creation of a more agile labour market, where workers have the skills and flexibility to move to jobs that have positive long-term prospects.

Key WA Government investments in science, innovation and technology include:

- » Launching WA's STEM skills strategy in May 2019, which aims to ensure that everyone can develop the skills to embrace a technological future.
- » Establishing the \$16.7 million New Industries Fund, which assists further development and acceleration of innovation-based technologies, and their application to support new and emerging industries growth and participation in regional and global value chains.
- » Securing new national research infrastructure in WA, including installation of WA's first suite of cryogenic electron microscopes and the operationalisation of the Australian National Fabrication Facility 3D microscope.



Advanced manufacturing

Industry across all areas can innovate and compete through offering exceptional technical solutions or services, making them less dependent on pure goods production. WA has advanced manufacturing capabilities across the majority of the state's priority sectors, however work is still needed to scale-up these capabilities and to focus efforts on areas of strategic and comparative advantage, where there is global demand.

The WA Government has committed to supporting advanced manufacturing in WA through:

- » A commitment to establish a \$100 million Investment Attraction and New Industries Fund to support industry assistance, attraction and grants across a range of industry sectors, including battery manufacturing, renewable hydrogen, green steel and cyber security.
- » Establishing a Local Manufacturing Investment Fund to help WA manufacturers retool their workshops with world-class technology to manufacture rail wagon

- components and undertake R&D on innovative manufacturing techniques.
- » Supporting the establishment of a Global Advanced Industries Hub within the Western Trade Coast, which will bring together 4 key industrial areas – Kwinana Industrial Area, Rockingham Industry Zone, the AMC and Latitude 32.

Supply chain development

In the early stages of the pandemic, supply chain production issues due to trade restrictions were widespread. Key issues included:

- » Factories being shut down or operating at significantly reduced capacity.
- » A global shift to home-based working.
- » An increase in expendable incomes from government stimulus packages.
- » Port operations and aviation restrictions impacting sea and air freight services.

The WA Government, working with the Australian Government, has supported industry to restore these supply chains, and to





assess both the resilience and vulnerabilities of the state's supply chains. Work has also been progressed by the WA Government to develop domestic and global supply chain growth across the state's priority sectors, to respond to the accelerated shift in global demand since the COVID-19 pandemic. Working with key industry stakeholders, targeted opportunities have been identified across a number of Diversify WA priority sectors.

Environmental, social and governance frameworks

ESG awareness has built momentum within the international market, with ESG credentials now strongly factoring into investor decision-making. This push is being seen across all of WA's key markets, driven by regions with ambitious environmental targets, such as Europe.

The WA Government is committed to environmentally and socially responsible production processes, which is reflected through a range of measures, such as:

- » Engaging with native title groups and Aboriginal communities to develop agreements that accelerate economic and community development.
- » Development of a WA Climate Policy and establishment of a net zero greenhouse gas emissions aspiration for WA by 2050, to position the state for a low-carbon future.
- » Establishment of a Clean Energy Future Fund to support innovative clean energy projects in WA.
- » Implementation of carbon sequestration policies, including establishing the Land Restoration and Carbon Farming program, investing \$15 million into the Native Vegetation Rehabilitation Scheme, and opening up carbon sequestration projects in National Parks and on conservation estates.
- » Continued implementation of the Royalties for Regions initiative, which provides funding for economic and social development in regional WA.

Invest and Trade Western Australia

To support the state's economic diversification agenda, the Western Australian Government has established Invest and Trade Western Australia to promote the state's unique strengths and diverse industries and provide a one-stop shop for incoming trade and investment enquiries.

Through a network of local and international offices, Invest and Trade Western Australia helps investors to navigate the state's investment and trade ecosystem and assists local businesses to access foreign markets.

The Western Australian Government operates 8 international investment and trade offices across 5 regions:

- » ASEAN (Jakarta and Singapore)
- » China (Shanghai)
- » India-Gulf (Mumbai and Dubai)
- » North East Asia (Tokyo and Seoul)
- » United Kingdom/Europe (London)

Further information on Invest and Trade Western Australia can be found at www.investandtrade.wa.gov.au



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