REGIONAL TRANSFORMATION STRATEGY 2024 Central Queensland







ACKNOWLEDGMENT OF COUNTRY

The Department of State Development and Infrastructure (DSDI) acknowledges the Country and people of Queensland's First Nations. We pay our respect to Elders past, present and emerging.

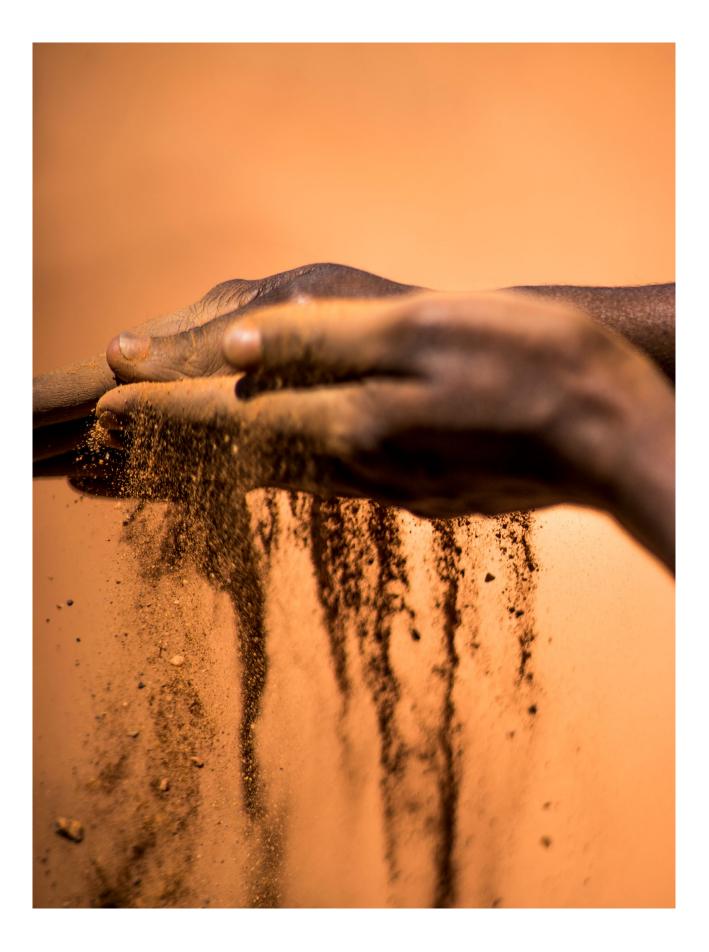
We acknowledge the continuous living culture of First Nations Queenslanders – their diverse languages, customs and traditions, knowledges and systems. We acknowledge the deep relationship, connection and responsibility to land, sea, sky and Country as an integral element of First Nations identity and culture.

This Country is sacred. Everything on the land has meaning and all people are one with it. We acknowledge First Nations peoples' sacred connection as central to culture and being.

We acknowledge the stories, traditions and living cultures of First Nations peoples and commit to shaping our state's future together. DSDI recognises the contribution of First Nations peoples and communities to the State of Queensland and how this continues to enrich our society more broadly.

> The transformation priorities for the region have been developed in close consultation with the community and are intended for the benefit of all people in the region.







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CONTENTS

Foreword	5
The importance of transformation in regional Queensland	7
About the Central Queensland region	17
Transforming the Central Queensland region	33

FOREWORD

The global economy is undergoing a historic shift from carbon-intensive industries to a cleaner, decarbonised economy. As the impacts of climate change become increasingly evident, governments and investors around the world are transforming their economies at an unprecedented scale. This is changing how economies source their energy, where investors allocate capital, and the products customers buy.

The Queensland Government is committed to working with industry, local governments and the regions to harness opportunities that this transformation presents.

The Queensland Energy and Jobs Plan (released in 2022) outlines the Queensland Government's plans to transform Queensland's energy system to deliver clean, reliable and affordable power and achieve 80 per cent renewable energy by 2035. The Plan also aims to achieve Queensland Government's targets to reduce emissions to 75 per cent below 2005 levels by 2025.

The Queensland New-Industry Development Strategy (released in 2023), identifies the key industries where Queensland is likely to have a competitive advantage in a decarbonised global economy.

The Regional Transformation Strategies build on these state-wide initiatives to identify specific opportunities for four regions – North West Queensland (including the corridor to Townsville), Greater Whitsunday, Central Queensland, and Darling Downs, South West and the South Burnett.

These regions are home to traditional, primary industries that today are a significant source of economic activity and jobs. However, they also have unique opportunities to support new industries like critical minerals, renewable energy, and low-carbon fuels such as hydrogen and biofuels, which will thrive in a decarbonised global economy.

The Central Queensland Regional Transformation Strategy (RTS) aims to build on the unique strengths and advantages of the region to support its long-term transformation. Building on the region's valuable natural assets and heavy industry capability, its strong agricultural and mining sectors, and an emerging capability in green hydrogen, the strategy identifies key opportunities for jobs and investment growth in a low-emissions economy. These include decarbonised advanced manufacturing, strong renewable energy supply chain capabilities, advanced and value-added agriculture, and sustainable, connected transport and logistics networks. Some of these specifically harness opportunities associated with decarbonisation; others provide diversification opportunities as the region transitions over time from carbon-intensive industries.

The RTS sets out specific priorities to sustainably grow these industries and support resilient regional economies. It aims to ensure the Central Queensland region has a strong future in a low-carbon economy, with a resilient economy, sustainable industries, and thriving communities.

These priorities build on the significant investment already underway in the region, including \$365 million for the Central Queensland Grid Reinforcement to support further renewable energy connectivity, \$171.1 million to CleanCo for renewables projects, construction of the \$983 million Fitzroy to Gladstone Pipeline, and \$115.4 million for Gladstone Port upgrades.

The RTS details the range of support currently available to the regions to support transition. This includes \$200 million under the Regional Economic Futures Fund to support specific regional transition and the \$415.5 million Industry Partnership Program.

The objectives and priorities that underpin this RTS have been developed in partnership with local government, industry and the wider community.

As implementation occurs, the Queensland Government will continue to consult and partner with communities in the region.

The region has a strong, vibrant future – and the Queensland Government is committed to supporting its transformation towards a world-class, low-carbon economy.

QUEENSLAND REGIONAL TRANSFORMATION OBJECTIVES

Resilient regions with diversified, value-adding industries and a highly skilled workforce Sustainable regions with innovative industries that lead the way in a net zero economy

Thriving, liveable and inclusive regions that attract and retain people, businesses and investment

Central Queensland Priorities



Decarbonised and diversified manufacturing

Grow green manufacturing in the region via the use of by-products, renewable energy, green hydrogen and biofuels

Accessible and serviced industrial land is available to support the development and growth of manufacturing businesses, including in defence and renewable energy components

Support for investment in defence manufacturing, maintenance and storage hubs to leverage the region's strategic location and defence assets

Facilities that help existing and prospective local manufacturers develop their skill sets and expertise in modern manufacturing

Other actions to support this priority



Advanced and value-add agriculture

Downstream food processing is further developed, building on the region's significant presence in agriculture and food processing

New, intensive agriculture and production activities are supported by secure and reliable water and energy supply

Sustainable, productive farming is supported through ag-tech and greater automation

Ensure land-use planning mechanisms support ongoing development of agriculture and associated value-added industries

Other actions to support this priority



Renewable energy supply chain

Cost-competitive, firm renewable energy and reliable, available water supply to grow the hydrogen and green chemical manufacturing industries

First Nations peoples, businesses and existing industry have strong participation in the renewable energy supply chain and complementary opportunities

Regional businesses have a substantial role in manufacturing, supplying and maintaining renewable energy and transmission grid components

Other actions to support this priority



Sustainable, connected transport and logistics

Rail connectivity to the Port of Gladstone and enhanced containerised freight capability through inland ports to support strong supply chains

High-value agricultural exports grow through improved intra- and inter-regional supply chain capabilities and development of air freight capabilities at airports in the region

Transport and supply chain industry is decarbonised through electric charging and hydrogen fuelling infrastructure

The region's supply chain is strengthened through distribution and consolidation centres in strategic locations to support safe and cost-efficient freight movement within the region

Transport corridors have sufficient capacity and structure throughout the region to support the efficient delivery of renewable energy projects

Other actions to support this priority

THE IMPORTANCE OF TRANSFORMATION IN REGIONAL QUEENSLAND

Why transformation matters

As Australia and nations around the world prioritise the decarbonisation of their economies, regional Queensland has an important role to play in the future industries that will underpin a low-emissions global economy. Adapting to that global shift and harnessing regional Queensland's distinctive strengths is key to ensuring that our state is globally competitive and home to vibrant regional communities that continue to prosper.

Being resource rich and trade-oriented, regional Queensland faces significant change over the coming decades. The global economy is undergoing a generational shift in response to the growing impacts of climate change, with an increasing focus on decarbonisation. In response, governments and industry around the world are shifting away from carbon-intensive supply chains towards new, low-carbon industries.

Regional Queensland is well positioned for this new economy. This is through a vast endowment of the minerals needed to support low-carbon industries, abundant land and resources suitable for sustainable agriculture and renewable energy generation and expertise in world-leading industries, such as mining.

Transformation relies on continued investment in economic and social enablers, such as diverse

Queensland's agricultural, forestry and fishing, mining and manufacturing industries contributed



housing, water, energy, health, education and transport infrastructure, a skilled workforce and digital connectivity.

Transforming the region around the key industries of mining, agriculture, renewable energy and tourism will require working across government and with local governments and the community to have the right land use and infrastructure in place. Of particular importance to the region will be the protection of land for its best use. In some circumstances, multiple land uses can be navigated to achieve sustainable coexistence. Other times, competing land use must be assessed to ensure any identified adverse impacts are appropriately avoided, minimised or mitigated, to support and strengthen the region's ongoing competitive advantage.

That is why the RTS is designed to align with other government policies, as well as federal and local government policies. The RTS will also support the national and Queensland emissions targets, as outlined in Figure 1 (page 8).

Notes ³ As of 2022, Data sourced from REMPLAN, 2018-2022, Release 1. Figure 1: Queensland regional transformation policy context.

AUSTRALIA AND QUEENSLAND'S TARGETS: NET ZERO EMISSIONS BY 2050



Queensland Energy and Jobs Plan Transforming Queensland's Energy

System There are 23 actions in the QEJP. One of

these is the development and delivery of the Regional Economic Futures Fund, to support economic and community development initiatives.



Queensland New-Industry Development Strategy

Developing new industries in a decarbonising global economy

Focus is on renewable energy manufacturing, critical mineral processing, battery industry development, hydrogen, resource recovery and recycling and the bio economy.

Other supporting actions

Some actions outlined in the QEJP are directly aligned to the outcomes of the Regional Transformation Strategies.

These include developing industries such as pumped hydro, batteries and storage, sustainable fuels and hydrogen and bioenergy. (Actions 1.2, 1.3, 1.6, 1.7, 1.9). Strategies Development of the Strategies aligned with Action 3.6 of the QEJP: Partnering with industries and communities to maximise benefits from energy transformation and drive regional opportunities.

Regional Transformation

Regional Economic Futures Fund

\$200 million fund to support economic and community development initiatives.

Queensland Regional Growth Framework

Regional Infrastructure Plans

Regional infrastructure plans are a key element of the State Infrastructure Strategy – our 20-year infrastructure vision for the State.

Regional infrastructure plans will take a placebased approach to ensure regionally significant infrastructure needs are considered and prioritised.

Statutory Regional Plans

Statutory Regional Plans are long-term strategic documents that guide land use planning for state and local governments. They also indicate and set direction through contemporary policy frameworks and spatial representation on how our regions will grow and respond to change over time.

Supporting Strategies

These strategies and plans across all levels of government will be aligned and implemented alonside the Regional Transformation Strategies. This includes:

- Good People. Good Jobs: Queensland Workforce Strategy
 2022-2032
- Queensland Hydrogen Industry Strategy
- Queensland Battery Industry Strategy
- Queensland Critical Minerals Strategy
- The State Infrastructure Strategy
- Hydrogen Industry Workforce Development Roadmap
- Queensland Resources Industry Development Plan
- Queensland Biofutures Roadmap and Action Plan
- Queensland Climate Adaptation Strategy Queensland Waste Management and
- Resource Recovery Strategy
- Queensland Climate Action Plan
- Queensland's Clean Energy Workforce Roadmap
- Local Energy Partnerships
- Advanced Manufacturing Roadmap and Action Plan
- Queensland Resource Recovery Industries Roadmap and Action Plan
- Queensland Low Emissions Agriculture Roadmap
- Queensland AqTech Roadmap
- Queensland Aerospace Roadmap and Action Plan
- Queensland METS Roadmap and Action Plan

- Queensland Biomedical Roadmap and Action Plan
- Queensland Defence Industries Roadmap and Action Plan
- Queensland Water Strategy
- Queensland Transport Strategy
- Queensland Freight Strategy and Action Plan
- Queensland Small Business Strategy 2024-2027
- A Place to Innovate Queensland Innovation Precincts and Places Strategy
- Queensland's Zero Emission Vehicle Strategy and Action Plan
- Queensland Tourism and Transport Strategy
- Towards Tourism 2032
- Queensland's Procurement Policy 2023 and
- Buy Queensland 2023
- Queensland Indigenous Procurement Policy
- Homes for Queenslanders
- Queensland Charter for Local Content
- Advance Queensland
- Advance Queensland Deadly Innovation Strategy
- Ecotourism Plan for Protected Areas
- Good job. Good training: Queensland Skills Strategy 2024-2028

Queensland Energy and Jobs Plan and the Queensland New-Industry Development Strategy

The Queensland Energy and Jobs Plan (QEJP) outlines how Queensland's energy system will transform to deliver clean, reliable and affordable energy for Queenslanders. It outlines key renewable energy targets and actions for Queensland, including:

- a new renewable energy target of 70 per cent by 2032 and 80 per cent by 2035.
- a commitment to convert all of Queensland's publicly owned coal-fired power stations into clean energy hubs by 2035, backed by a Job Security Guarantee for workers.
- substantial investment across the state, with 95 per cent of clean energy infrastructure investment anticipated to be in regional Queensland.

Queensland's natural advantages in renewables

Queensland has natural advantages in its high-quality renewable resources, including:

- Solar Queensland has abundant solar resources and is well-positioned for large scale solar generation, particularly in areas located near existing network infrastructure and major population centres.
- Wind Queensland has high quality and nationally competitive wind resources, underpinned by recent improvements in wind turbine technology.
- Biomass Queensland's strong agricultural industry generates substantial amounts of biomass. Using biomass to generate bioenergy (green electricity) and sustainable liquid fuels could contribute significantly to Queensland's renewable energy capacity.
- **Hydro-electricity** There is significant potential to expand and build upon Queensland's opportunities.

The QEJP will harness Queensland's existing natural resources and skilled workforce to transform the state's electricity system and deliver clean, reliable and affordable power to Queensland's energy system. This will include around 25 gigawatts (GW) of large-scale wind and solar, foundation pumped hydro assets, plus additional storage and firming technologies and new transmission.

The Queensland Government has committed around \$26 billion total capital investment over four years to support the QEJP.



Other focus areas of the QEJP that will assist with regional transformation

The Regional Transformation Strategies are one action of the QEJP (Action 3.6 – partner with industries and communities to maximise benefits from the energy transformation and drive regional opportunities). Other actions under the QEJP that will help facilitate regional transformation include:

- Developing industries and technology such as pumped hydro (Action 1.2), batteries and storage (Action 1.3), future renewable hydrogen (Action 1.6), sustainable liquid fuels (Action 1.7) and bioenergy futures (Action 1.9)
- Continuing to support the Uniform Tariff Policy, ensuring regional Queenslanders can access affordable energy (Action 2.7)
- Implementing a \$150 million Job Security Guarantee to support affected energy workers in Queensland's publicly owned coal-fired power stations and associated coal mines i.e., Kogan Creek and Meandu mines (Action 3.2)
- Delivery of Queensland's Clean Energy Workforce Roadmap, which was released on 25 October 2023, and \$192 million for Powerlink to develop Transition and Training Hubs in Townsville and Gladstone (Action 3.3)
- Committing \$11.6 million to build capacity in the manufacturing industry and encourage local content in Queensland to grow the renewable energy supply chain in Queensland (Action 3.4)
- \$10 million to deliver a Queensland Microgrid Pilot Fund to support network resilience for First Nations communities and ensure an inclusive SuperGrid (Action 3.5).

The Queensland New-Industry Development Strategy

(QNIDS) sets out the Queensland Government's approach to proactively develop the industries that are critical to the global shift to a net zero economy. QNIDS outlines the impact of decarbonisation in reshaping commodity demand, and opportunities for Queensland to capitalise on manufacturing opportunities to build the infrastructure and products required to transition towards renewable energy sources. The six key industries identified by QNIDS are outlined in Figure 2 (page 11).



Figure 2: QNIDS industry priorities



Renewable energy manufacturing and infrastructure development



Green hydrogen



Critical mineral processing, manufacturing and product development



Circular economy including resource recovery and recycling



Battery industry development



Bioeconomy including biofuels and sustainable aviation fuel (SAF)

The Regional Economic Futures Fund (REFF)

The REFF is a \$200 million program to support communities, which will be directly impacted by the transition to a low-emission economy, to seize industry development opportunities presented by global decarbonisation.

The objectives of the REFF are to support long-term community prosperity by facilitating sustainable employment and increasing investment in economic development and diversification projects. The REFF supports activities which:

- create new jobs and a stronger workforce,
- strengthen regional supply chains,
- support decarbonisation and the QEJP,
- build or identify a region's strengths, and/or
- support renewable energy precinct development.

The REFF is a component of the QEJP and QNIDS. The RTS provide a coordinated approach to delivering state government programs, including REFF.

How does the RTS align to these priorities?

The RTS identifies key economic strengths and future industry priorities for those Queensland regions likely to be most impacted by the shift to a decarbonised global economy, based on the unique geography, resources and workforce skills of these regions. This will enable these regions to have a targeted and place-based approach in line with the state-wide strategic priorities outlined in the QNIDS, and the renewable energy targets outlined in the QEJP. The industry priorities in the RTS have been developed to align with both existing strengths and several of the industries identified in both QNIDS and QEJP.

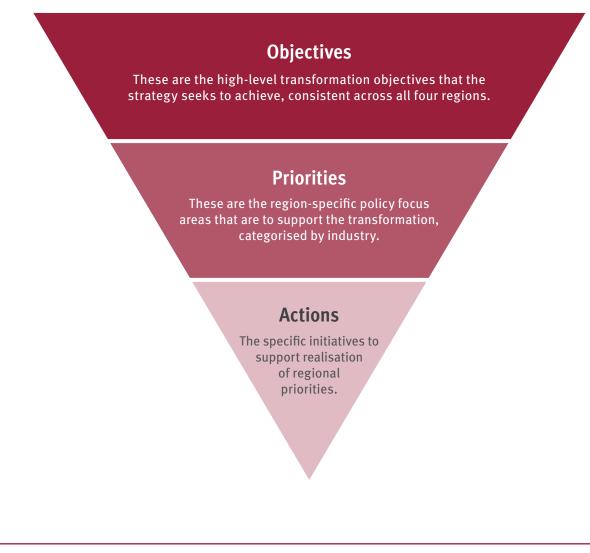
Framework for the Regional Transformation Strategies

The development of the RTS is based on a practical, outcome-based framework and provides a clear link between the strategic opportunities of each region and future actions and outcomes. It has been underpinned by extensive community and industry consultation. Their input is fundamental to these strategies, which have been developed with a 10–20 year horizon, acknowledging that advancing global decarbonisation and energy transition in the regions during this period will be critical to meeting the Queensland Government's renewable energy target of 70 per cent by 2032, and 80 per cent by 2035.

The approach to the Regional Transformation Strategies

The strategy framework outlines how the overarching transformation objectives for regional Queensland are supported by region-specific priorities and targeted actions. The overarching objectives provide a long-term vision for all of Queensland's regions that are the focus of transformation. They recognise the important relationship between sustainable, resilient and prosperous economies and thriving, liveable and inclusive communities.

Figure 3: Regional Transformation Strategy Framework



The objectives for regional transformation

Through close consultation with communities, a vision for regional Queensland has been developed that is encapsulated in three objectives.

Figure 4: Queensland Regional Transformational Objectives

Resilient regions with diversified, value-adding industries and a highly skilled workforce

Sustainable regions with innovative industries that lead the way in the net zero economy

Thriving liveable and inclusive regions that attract and retain people, businesses and investment

OBJECTIVE 1: Resilient regions with diversified, value-adding industries and a highly skilled workforce

The future of regional Queensland is one of resilient communities, underpinned by a diverse economy, value-adding industries and a highly-skilled workforce. In this context resilience means being ready to harness the opportunities of a decarbonised global economy. It is this proactive approach that will underpin the long-term future of our regions – a future with competitive industries and well-paid, highly-skilled jobs and a lifestyle to match.

Traditional industries, such as mining and agriculture, have and continue to underpin the economic prosperity of regional Queensland. They provide well-paid jobs for communities and produce high-quality exports for domestic and global markets. These industries are making significant investments to reduce their carbon footprint, and they will continue to play an important role in the Queensland economy. While demand in these industries will continue for some time to come, and low-emissions producers will have a critical role in a transformed economy, the long-term economic resilience of our regions will depend upon having a range of industries. This will better insulate our economy against changes in global commodity prices, reducing the risk of 'boom and bust' economic cycles.

An estimated

4 MILLION TONNES PER YEAR OF HYDROGEN

is forecast to be produced in regional Queensland for export and domestic use²

Value-adding industries will have a key role in our resilient regional economies, by helping to capitalise on our strong resource base while also providing well-paid jobs for communities. A shift to boosting sovereign processing and manufacturing capability in a more uncertain world is adding to the case for 'moving up the value chain' in areas where our regions will be competitive. A mix of primary and other industries will provide regional communities with highly skilled jobs, helping to attract and retain both people and investment.

What does this mean for the Central Queensland region?

- Supporting the traditional industries of agriculture and mining as central to the region's economy.
- Developing a vibrant manufacturing industry that builds on traditional industries (e.g. food processing, modern methods of construction [MMC], and minerals processing.).
- Capitalising on the transition to renewable energy by building local supply chain capabilities in renewable energy production and componentry.

Notes

² Enabling Queensland's hydrogen production and export opportunities (2022)

(https://www.energyandclimate.qld.gov.au/hydrogen/enabling-queenslands-hydrogen-production-and-export-opportunities-report)

OBJECTIVE 2: Sustainable regions with innovative industries that lead the way in a net zero economy

The future vision for regional Queensland is one underpinned by sustainable and innovative industries that will lead the way in a net zero economy. By leveraging existing economic strengths and natural endowments, each region can be well positioned to meet growing demand for sustainable products. This will involve both the decarbonisation of existing industries and the emergence of new, clean energy industries.

The QNIDS outlines the government's approach to proactively developing the industries that will be in demand in a decarbonising world. At the same time, we are transforming our energy system.

With a highly-skilled workforce, critical mineral deposits and abundant natural resources, Queensland's regions will be at the forefront of these strategic initiatives. This means the regions being underpinned by clean industries will be competitive in a world where supply chains and trade agreements place a growing emphasis on low emissions. Existing industries, such as manufacturing, resources, agriculture, transport and tourism, will play a key role in this. Businesses in these industries are already leading the way in reducing emissions. Innovative future industries will play an increasingly key role in our regions. A more circular approach to consumption and production will be prioritised, where we are recycling, re-manufacturing, re-designing and reusing products and materials at their highest value for as long as possible. Greater adoption of innovative construction methods, like modern methods of

construction, can enhance productivity and further support sustainability and emissions reduction.

Preserving and ensuring the ongoing sustainability of our natural environments will be critical, particularly with the challenges brought by climate change. An important part of this will be recognising and elevating First Nations peoples' deep knowledge systems in land and sea management practices. Management of climate risk, including by adapting to expected climate change impacts and mitigating further change, is vital to ensure the sustainability of the region, economically, socially and in terms of assets and infrastructure.

What does this mean for the Central Queensland region?

- An economy that continues to be innovative and progressive in heavy industry decarbonisation, through the use of renewable energy and re-use of waste products, and a hub for renewable energy production.
- Harnessing the region's abundant wind and solar resources, transmission infrastructure and manufacturing capabilities to strengthen renewable energy industries.
- Strengthening circular economy principles in the region's agriculture, critical minerals and manufacturing industries to facilitate more innovative and sustainable industries.
- Continuing to support the significant industrial base in the Central Queensland region as businesses move to decarbonise – ensuring our existing industries are just as supported and important as new industries.

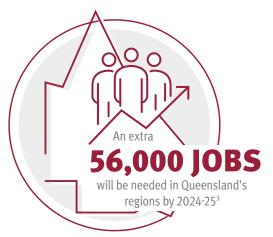


Proposed Aldoga Solar Farm, Gladstone

OBJECTIVE 3: Thriving, liveable and inclusive regions that attract and retain people, businesses and investment

At the heart of the transformation of our regions and their future prosperity will be the communities within them. Retaining people and attracting new residents will be key to strengthening our communities and providing a sustainable future. There is immense opportunity for investment and jobs in Queensland's regions as the world continues to decarbonise. However, this will only be possible if our communities are thriving, liveable and inclusive.

Fit-for-purpose and quality enabling infrastructure, such as diverse housing, water, energy, transport and digital connectivity, that is planned and built with consideration of the changing climate, is fundamental to support thriving, liveable and inclusive communities. This will support the wellbeing of residents and ensure regional communities provide the services that will attract and retain a competitive workforce. This will also ensure families have access to the services needed to provide future opportunities.



Highlighting the economic opportunities for communities in regional Queensland.

To make Queensland a location of choice for businesses, opportunities offered by transformation will need to be provided for all people in the regions.

Making up over 97 per cent of all business enterprises in Queensland, small businesses are the foundation of our communities.⁴ They employ around 42 per cent of the private sector workforce and play an important role in the supply chain of new industries, as well as continuing to support the growth of traditional industries⁵

First Nations peoples have unparalleled cultural resources and traditional knowledge of the lands and waters in the regions and are central to the nation's identity and history.

What does this mean for the Central Queensland region?

- Ensuring local opportunities for businesses and communities in the renewable energy supply chain.
- Upskilling the workforce through training programs for local and long-term jobs in advanced manufacturing, critical mineral mining and processing, and hydrogen production.
- Prioritising enabling transport and supply chain infrastructure that will support the community and economy.
- Attracting new workers and business investment to the region.

Notes

- ³ Jobs Queensland. Data portal for the projection period 2021-22 to 2025-26. Net new jobs. Excludes Brisbane, Cairns, Gold Coast, Ipswich, Logan –
- Beaudesert, Moreton Bay North, Moreton Bay South and Sunshine Coast. Accessed on 18 September 2023.
- ^{4.5} Queensland Small Business Outlook Beyond the pandemic, 2023, Queensland Small Business Commissioner, accessible at :
- <https://qsbc.qld.gov.au/wp-content/uploads/2023/09/QSBC_Beyond-the-pandemic_Accessible-web.pdf>

How the RTS has been developed

The RTS has been informed by the outcomes and findings of extensive consultation processes with key regional stakeholders, including industry bodies, businesses, community members and organisations, local governments and other Queensland Government departments and agencies.

Consultation identified a diverse range of opportunities for each region and broadly supported the strategic direction of the underpinning Queensland policy frameworks to help Queensland transition to a decarbonised future. Stakeholders also acknowledged that it will be important that regional transformation will need to be undertaken in a manner that is inclusive, sustainable and supports the liveability of our regions, with continued stakeholder input. Key stakeholders will continue to be periodically engaged through the regional **Local Economic Opportunity (LEO) Network**.

Stakeholder Advisory Committee (SAC) consultations Targeted consultation meetings

A Stakeholder Advisory Committee (SAC) for each region provided advice and feedback on a range of issues specific to each region. These consultations informed the development of the RTS by identifying key strengths and opportunities for the region, transformation objectives, key priorities and potential actions that would support the transformation of the region. These forums will continue to have a role supporting the implementation of the RTS for the region.

Targeted consultations have been undertaken with a range of stakeholders across each region to explore their insights on the economic strengths of the region, opportunities for economic transformation and actions that may support the transformation objectives and priorities. A targeted survey was conducted to obtain stakeholder insights on key economic opportunities and challenges relating to economic development and transformation in each region.

Targeted

survey

Public consultation has been undertaken to obtain feedback from people who live, work, or own a business in one of the four targeted regions. This was done through a range of media channels and an online survey.

Public

consultation

ABOUT THE CENTRAL QUEENSLAND REGION

The Central Queensland region spans an area of 170,971 square kilometres and extends from the Capricorn Coast west to Barcaldine, north to the southern boundary of Isaac Regional Council and south to Gladstone.⁶ For the purpose of this document the Central Queensland region comprises seven Local Government Areas (LGAs): Rockhampton, Livingstone, Gladstone, Banana, Central Highlands, Woorabinda and Barcaldine.

The region is well represented by a number of organisations which provide support at both a regional and industry level. In Barcaldine LGA one of these is the Remote Area Planning and Development Board (RAPAD), which is supported through the Queensland Government's Remote Area Board program.

The Central Queensland region is home to First Nations peoples who are recognised as the Traditional Custodians of the land and waterways, having lived in the region for many thousands of years and retained strong connections to the region.

The Central Queensland region spans across the following First Nations peoples:

- Darumbal, Gaangalu Nation and Barada Kabalbara Yetimarala peoples
- Bailai, Gurang, Gooreng Gooreng and Taribelang Bunda peoples
- Gangulu, Wulli Wulli and Iman peoples
- Wadja and Gungaloo peoples
- Woppaburra people
- Iningai people.

Figure 5 provides a geographic overview of the region. A statistical overview of the region is shown in Figure 6 (page 18).

Livingstone

Rockhampton Woorabinda

Gladstone

Central Highlands

Banana

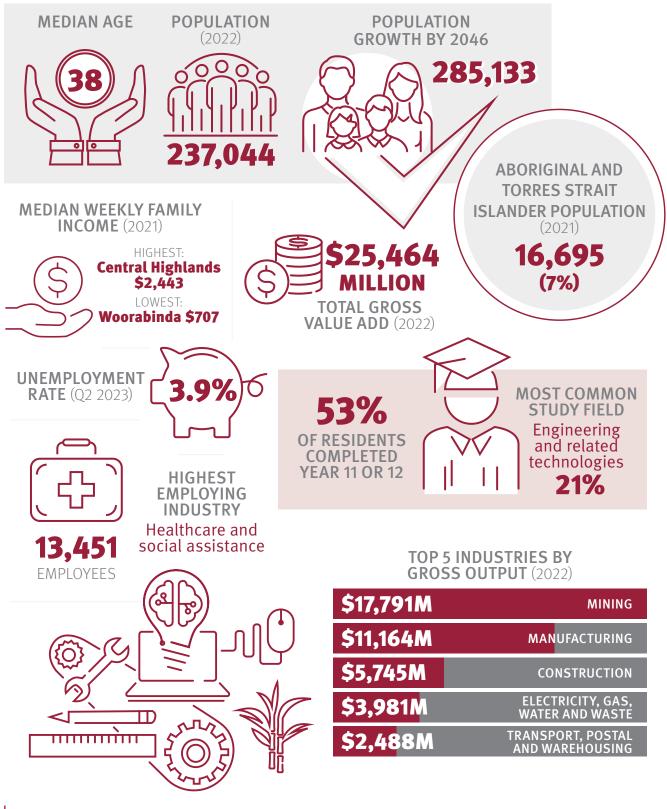
Figure 5 Map of Central Queensland

Notes

Barcaldine

⁶ Queensland Government, Central Queensland Regional Economic Profile

Figure 6 Statistical overview of the region⁷



Notes

⁷ Data sourced from REMPLAN, 2018-2022 and Queensland Government Statistician's Office

Economic overview

The region has a significant industry base, underpinned by mining and manufacturing. These two industries contribute over 50 per cent of gross regional output⁸ and over 70 per cent of the region's export value? Additionally, the region is well-endowed with natural assets that support the agriculture industry, liquified natural gas (LNG) industry and the tourism industry. Employment in the region is largely supported by the health care and social assistance industry (11 per cent), retail trade, administrative and support service and construction industries (9 per cent each).¹⁰

Mining



The location of the region atop the Bowen Basin provides access to significant reserves of both steelmaking and thermal coal. The largest industry, mining contributes \$17.8 billion to gross regional output, with Central Queensland mines generating 33.5 per cent of Queensland's total net output of coal.¹¹ Mining is also the top industry by gross value add (\$9.7 billion) and exports (\$16.4 billion) with the Port of Gladstone supporting international exports.

Manufacturing

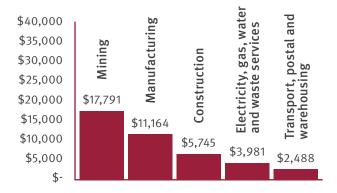


Manufacturing is concentrated to the LGAs of Gladstone and Rockhampton with key activities such as alumina refining, aluminium smelting and meat processing. The industry is the second largest in the region by gross output at \$11.2 billion and exports at \$9 billion.

Notes

- $^{\rm 8}$ Data sourced from REMPLAN, 2018-2022
- ⁹ Exports include goods and services delivered out of the CQ region ¹⁰ Data sourced from ABS, 2021
- ¹¹ Queensland production by individual mines (tonnes), 2020 21

Gross Output (\$m, Top 5 industries)



Construction

The construction industry has the second largest number of registered businesses in the region at 2,938 and employs 9 per cent of the workforce. Employment is concentrated in the Gladstone and Rockhampton LGAs due to their large industrial sectors.



Transport, postal and warehousing

Transport, postal and warehousing is the fifth largest industry, comprising freight and pipeline transport. The industry is the third largest by exports with an export value of \$1.2 billion.

Electricity and Gas Services

The size of this industry is driven by power stations in the region, particularly from coal and from gas distribution activities from the Surat and Bowen Basins and piped to the Port of Gladstone. The industry is the third largest by exports with an export value of \$2.2 billion.





The Central Queensland region is a key location for emerging industries, particularly in hydrogen production and green chemical manufacture.

Emerging industries in the region

The Central Queensland region is a key location for emerging industries, particularly in hydrogen production and green chemical manufacture, both of which will be supported by the development of new renewable energy generation.

The Queensland Government's Hydrogen Industry Strategy includes a five-year plan to grow a sustainable hydrogen industry. With a large manufacturing base established, Gladstone is set to become a world-leading hydrogen electrolyser manufacturing hub.¹² Additionally, a range of companies are progressing detailed planning studies for the production, use and export of hydrogen or its derivatives.¹³

The Queensland SuperGrid Infrastructure Blueprint 2022 provides the framework to decarbonise the existing electricity system and load in Queensland. Central Queensland has been identified as one of three suitable Renewable Energy Zone (REZ) regions (the others being North and Far North Queensland, and Southern Queensland) that could potentially support large-scale renewable energy infrastructure.¹⁴ Powerlink will invest \$365 million into the Central Queensland region to enable up to 3,300 megawatts (MW) of new renewable capacity to connect to the grid, providing the Gladstone area additional renewable energy capacity and support existing industrial consumers to transition to clean, reliable and affordable electricity. Strategic REZ Readiness Assessments have commenced in Central Queensland and a Detailed Assessment has begun for the Callide REZ.¹⁵

The Barcaldine Renewable Energy Precinct is also being developed in the western part of the region, supported by a \$7 million contribution by the State. The precinct will be linked to a large-scale, renewable energy project and provide Barcaldine manufacturing tenants with competitive lowcarbon electricity.¹⁶

Notes

- ¹² Queensland Government, 2023, State Development, Infrastructure, Local Government and Planning News
- (https://www.statedevelopment.qld.gov.au/news/gladstone-set-to-become-world-leading-hydrogen-hub)
- ¹³ CSIRO, Central Queensland Hydrogen Project (https://research.csiro.au/hyresource/central-queensland-hydrogen-project/)
- ¹⁴ Queensland Government, Central QREZ (https://yoursayhpw.engagementhq.com/understand-qrez/news_feed/central)
- $^{15}\ https://www.energyandclimate.qld.gov.au/energy/renewable-energy-zones/rez-roadmap/central-REZs$
- ¹⁶ Queensland Government Media Statement 'Barcaldine Renewable Energy Zone gets green light in Palaszczuk Government Budget' (https://statements.qld.gov.au/statements/97957).

Mining

The mining industry is largely driven by coal mining and non-ferrous metal ore mining:⁶ Located atop the central Bowen Basin, coal mining is a significant industry for the Central Queensland region. The Bowen Basin contains significant reserves of both steelmaking and thermal coal. Additionally, coal seam gas (CSG) extraction and processing also contributes to the region's resources industry.

There are 19 operational coal mines and four advanced coal projects across the Central Highlands and Banana LGAs¹⁷ Of the operational mines, Central Highlands is home to 12 mines, producing 28 per cent of Queensland's production, of which 90 per cent is exported¹⁸ The Port of Gladstone supports the mining industry with the commodity accounting for 70 per cent of export volumes through the port.¹⁹ The capital-intensive nature of the mining industry translates to a high output per person employed. Of the Central Queensland workforce, 7.3 per cent of people were employed in mining, compared to 2.3 per cent across the state.²⁰ The industry also has a high number of workers commuting from within and outside the region, who are not accounted for in local employment statistics.

OUTPUT: \$17,791 million VALUE-ADD: \$9,724 million EXPORTS: \$16,433 million

REMPLAN 2018-2022

Manufacturing

Manufacturing is one of the Central Queensland region's top three industries by economic output, which is valued at approximately \$11,164 million a year.²¹ Key manufacturing activities include basic non-ferrous metal, meat and meat product, basic chemical, cement, lime and ready mixed concrete, and machinery and equipment.

LNG production, utilising the region's CSG resources, is also a key component of the region's manufacturing industry. Gas is transported from CSG fields in the Bowen and Surat Basins, through the Callide Infrastructure Corridor State Development Area (SDA), to LNG processing plants located on Curtis Island in the Gladstone SDA²² Manufacturing accounts for around 7.4 per cent of employment, concentrated mainly in the Gladstone and Rockhampton LGAs, compared to 5.7 per cent across the state.²³

The beef processing industry is one of Queensland's largest manufacturing employers,²⁴ and the meat processing facilities in Rockhampton, Livingstone and Banana LGAs are of a substantial scale, producing beef for both domestic and international markets.

Rockhampton and Gladstone have been identified as manufacturing hubs by the Queensland Government²⁵ Rockhampton has focus areas of rail manufacturing and technology, advanced technologies for metal

Notes

- ¹⁶ Central Queensland Regional Organisation of Councils (CQROC) Strategic plan (noting this plan does not include the Barcaldine Region)
- ¹⁷ Queensland Government, Production of saleable coal by individual mines https://www.data.qld.gov.au/dataset/coal-industry-review-statistical-tables
- ¹⁸ Central Highlands Development Corporation (https://chdc.com.au/mining-energy/about-mining-and-energy)
- ¹⁹ Port of Gladstone Corporation, (https://www.gpcl.com.au/ports-and-trade/port-of-gladstone/)
- $^{\rm 20}$ Queensland Government Statistician's Office, 2021, Custom Regional Profile generated 3 July 2023
- $^{\scriptscriptstyle 21}$ Central Queensland, Data sourced from REMPLAN, 2018-2022
- ²² Queensland Government, Blueprint for Queensland's Queensland Government, Central Queensland regional economic profile.LNG Industry (https://cabinet.qld.gov.au/documents/2009/Aug/LNG%20Impacts%20Review/Attachments/LNG%20Industry.pdf)
- ²³ Queensland Government Statistician's Office, 2021, Custom Regional Profile generated 3 July 2023.
- ²⁴ Department of State Development and Infrastructure, Career opportunities in Queensland's beef processing industry.
- ²⁵ Queensland Government, Queensland manufacturing hubs (https://www.rdmw.qld.gov.au/manufacturing/hubs)

production and food product innovation while Gladstone is focused on emerging industries, including biofuels, hydrogen and renewable energy.²⁶

The Queensland Government is rejuvenating the Rockhampton Railyards site for commercial and community use. This will include supporting Queensland's rollingstock supply chain capabilities and commercial growth in the manufacturing and maintenance industries. OUTPUT: \$11,164 million VALUE-ADD: \$1,262 million EXPORTS: \$8,974 million

REMPLAN 2018-2022

CASE STUDY: GREEN METHANOL MANUFACTURING IN GLADSTONE

In October 2022, Cement Australia and Mitsubishi Gas Chemical Company (MGC) signed a Memorandum of Understanding to study the manufacture and sale of green methanol (e-methanol) made from renewables-based hydrogen and CO₂ captured from Cement Australia's Gladstone plant within the Gladstone SDA. The intent is to explore the use of MGC technology for recycling CO₂, waste plastics, biomass and other inputs into methanol (which can be used in chemical products, as fuel and in power generation).

At the forefront of sustainability, the project includes the use of renewable electricity, as well as the replacement of fossil fuels with hydrogen and oxygen generated in the Gladstone region.

As well as being energy intensive, cement production also produces CO₂ as a by-product of the process and Cement Australia Gladstone is the largest cement plant in Australia.

The joint feasibility study will assess commercial operability, with potential firststage commercial operations expected to generate 100,000 tonnes per annum of green methanol. Anticipated production start-up is by mid-2028, with the first-stage plant cost estimated at around \$150 million.²⁷

Notes

²⁶ Mitsubishi Gas Chemical, News Releases 2022 (https://www.mgc.co.jp/eng/corporate/news/2022/221028e.html)

²⁷ Queensland Government, Gladstone leads green methanol revolution, 28 October 2022, (https://statements.qld.gov.au/statements/96440)

CASE STUDY: INDUSTRY PARTNERSHIP

The Queensland Government's \$415.5 million Industry Partnership Program, aligning with QNIDS, is supporting emerging industries, leveraging private sector investment, strengthening and unlocking supply chains in support of a decarbonised future. Under this Program, funding is being provided to Fortescue Future Industries (Fortescue) and Alpha HPA for projects in the region. Both projects are located on land developed by Economic Development Queensland (EDQ) and highlight the key enabling role industrial land supply represents.



Fortescue, in 2021, undertook a national process to identify the ideal location for construction of one of the world's largest electrolyser manufacturing facilities. The first stage of the project, opened in April 2024, established Australia's first multi-gigawatt-scale electrolyser manufacturing facility, with an initial capacity of two gigawatts (GW) per annum. This project is a unique opportunity for Queensland to establish advanced manufacturing capability and a local supply chain for hydrogen and renewable energy technology and equipment. This project is an example of the partnership approach with industry that delivers technically challenging projects that are transforming the industrial landscape.

Alpha HPA is growing Gladstone's critical minerals processing capability and ensuring new industries have the materials to deliver safe, sustainable, high performing products to market. Alpha HPA will develop Stage 2 of its \$300 million-plus HPA First facility at Gladstone so it can move to full-scale production of high purity alumina. The high purity alumina will be used to manufacture high technology products such as LED (Light Emitting Diode) lighting, lithium-ion batteries for electric vehicles, semiconductors and consumer electronics. The facility will create up to 117 jobs.

Electricity and Gas Services

The electricity, gas, water and waste services industry contributes 2 per cent of total regional employment and 7 per cent of total regional output. Outside of mining and manufacturing, the industry has the third highest value of regional exports with several large power stations providing electricity for the state²⁸ The Central Queensland region is home to three large coal-fired power stations in Callide, Stanwell and Gladstone. These three power stations have capacity to generate 57 per cent of Queensland's coal-fired power station capacity.²⁹ The Queensland Government has committed to converting all publicly owned coal-fired power stations into Clean Energy Hubs by 2035, ensuring these sites continue to offer local economic and employment opportunities. These power stations are in strong parts of the Queensland network with strategic advantages like grid connection, a highly skilled workforce, established community relationships, and land. The Government is working with publicly-owned energy businesses to develop proposals to reserve, repurpose and reinvest to modernise coal-fired power stations into future

Clean Energy Hubs. In addition, the \$150 million Job Security Guarantee will ensure affected energy workers are supported through the transformation.

REZs will connect multiple clean energy generators, like wind and solar projects, in a coordinated way. This will lower costs and deliver better outcomes for regional communities and industries. They will also help to attract investment to the right areas in Central Queensland. There are four potential REZs in the Central Queensland, which were identified as part of the REZ Roadmap. These include Isaac, Capricorn, Calliope and Callide.

> OUTPUT: \$3,981 million VALUE-ADD: \$1,277 million EXPORTS: \$2,192 million

> > REMPLAN 2018-2022

Transport, Postal and Warehousing

Transport, postal and warehousing is the region's fifth largest industry by output, with a total output of \$2.5 billion. The industry contributes \$1.2 billion to the region's export value with an annual value-add of \$1.1 billion.

The region's two major ports, the Port of Gladstone and the Port of Rockhampton, are key contributors to this industry, with a large amount of product moving through the ports, supported by a large workforce. The region supports significant rail freight movement connecting industry to ports both within and outside of the region. Both Rockhampton and Gladstone are hubs for the rail operations.

Additionally, pipeline transport, which supports the transport of large quantities of natural gas,

is a key contributor. The Queensland Gas Pipeline runs 627 kilometres from Wallumbilla to Gladstone and Rockhampton, linking the Wallumbilla gas hub to industrial users. This industry is a key component of the region's economy, supporting the movement of goods and productivity of other major industries.

> OUTPUT: \$2,488 million VALUE-ADD: \$1,146 million EXPORTS: \$1,176 million

> > REMPLAN 2018-2022

Notes

²⁸ Data sourced from REMPLAN, 2018-2022

²⁹ DEPW, Energy Generation Map https://electricity-generation-map.epw.qld.gov.au/ Accessed October 2023

Agriculture, Forestry and Fishing

While not in the top five largest industries in the region, agriculture is an important part of the regional economy and contributes a significant amount of output to the state's total production. The Banana and Central Highlands LGAs are the largest agriculture producers in the Central Queensland region.

Production is dominated by cattle, cotton (irrigated and non-irrigated), sorghum for grain, mung beans and chickpeas. The Central Queensland region has access to irrigation due to its proximity to the Fitzroy Basin, which supports the region's agriculture production.

The agriculture, forestry and fishing industry accounts for the highest number of businesses

across the region, with 28.6 per cent of all businesses operating within it.³⁰ The industry in the Central Queensland region employs approximately 5.4 per cent of the region's workforce.³¹ This compares to 2.6 per cent of the Queensland workforce.³²

> OUTPUT: \$1,986 million VALUE-ADD: \$756 million EXPORTS: \$1,322 million

> > REMPLAN 2018-2022

CASE STUDY: THE CENTRAL QUEENSLAND SMART CROPPING CENTRE

The Central Queensland Smart Cropping Centre (CQSCC) is a flagship innovation facility, located in Emerald, that focuses on the unique climate of the region.³³ The CQSCC brings together research, development, and extension (RD&E) in areas such as farming systems, agronomy, crop innovation and plant protection. It is based on 863 hectares of research and commercial farming operations. The CQSCC's focus includes RD&E in the cotton, grains, pulses and horticulture (citrus) sectors across:

- climate-adaptive cropping systems.
- market-integrated productions systems.
- automation-ready farming systems.
- sustainable and resilient cropping systems.

Underpinned by data science and data engineering, the focus of the CQSCC's RD&E activities and collaborations will be delivering outcomes that specifically demonstrate how technology and data will support farming systems in the Central Queensland environment of climate variability.

Notes

^{30, 31, 32} Queensland Government Statistician's Office, 2021, Custom Regional Profile generated 4 July 2023

³³ Central Queensland Smart Cropping Centre, AgTech (daf.qld.gov.au)

State development areas (SDAs) are clearly defined areas of land established by the Coordinator-General to promote economic development in Queensland.

Central Queensland is home to three SDAs. Declared in 1993, the 26,934 hectare Gladstone SDA is located approximately 10 kilometres north-west of Gladstone City. Reserved for large-scale, large-footprint developments and materials transportation infrastructure, the SDA has excellent access, to services by way of sea, road and rail access and utilities such as gas, electricity and water. Already home to a diverse range of industries, including minerals processing, LNG production and a range of manufacturing facilities, the Gladstone SDA is the ideal investment location for projects of national and international significance and is suitable for new and emerging industries with opportunities for co-location.

Central Queensland also has two infrastructure corridor SDAs. The Callide Infrastructure Corridor SDA was declared in 2009 as a multi-user corridor able to accommodate up to eight underground gas pipelines. Running between the Calliope Range and the western boundary of the Gladstone SDA, the corridor is approximately 44 kilometres long and generally 200 metres wide. The corridor currently hosts three active coal seam gas pipelines and primarily transports gas to the liquefied natural gas plants on Curtis Island which lies within the Gladstone SDA.

The Stanwell-Gladstone Infrastructure Corridor SDA was declared in 2008 and supports the establishment of multiple underground pipelines. The corridor is approximately 90 kilometres long and generally 100 metres wide and can accommodate up to seven underground pipelines for various purposes such as water, gas and telecommunications cables. Designed to support the delivery of essential services throughout the region, the corridor is the chosen passage for the Gladstone to Fitzroy Water Pipeline that is currently under construction and will provide water security for Gladstone's existing industry and also support its emerging hydrogen and renewables industry.

An additional two SDAs are also partly in the Central Queensland region.

The 105,996-hectare Galilee Basin SDA comprises two 500-metre wide corridors from the 247,000 square kilometre Galilee Basin to the Port of Abbot Point. The Galilee Basin SDA will support the development of the Galilee Basin and provide an efficient way to transport coal to the Port of Abbot Point. One rail corridor is designed to service the central Galilee Basin and a second corridor will service the southern Galilee Basin.

Declared in November 2011, the Surat Basin Infrastructure Corridor SDA is a 214-kilometre rail corridor between the towns of Wandoan and Banana. It will accommodate the proposed Surat Basin Rail which will connect the existing Western Railway and Moura Railway systems.

Economic and social enablers

While the transformation priorities represent key future opportunities for the Central Queensland region, achieving these priorities will only be possible if economic and social enablers are in place. These enablers, which include diverse housing, transport and social infrastructure, water, energy and a highly-skilled workforce, are essential to support the economic prosperity of the region, its liveability and its ability to attract and retain people. There are both opportunities and challenges in relation to these enablers, and the Queensland Government is investing heavily at both a state and regional level to address these, as outlined below. Parallel to the RTS, the Central and Western Queensland Infrastructure Plan (CWQIP) addresses infrastructure planning activities to support traditional and emerging industries, communities and liveability in the region.

ENABLER	HOUSING
OVERVIEW	With vacancy rates in the Central Queensland region down to 0.76 per cent ³⁴ , increasing the housing supply to improve availability and affordability will help attract and retain the local workforce and build stronger communities. As noted in the CWQIP, there is a housing and rental shortage across the region and across all types of housing. ³⁵ Housing, for both purchase and rental, and short-term accommodation, needs a place-based response to need in each township in the region for regional transformation to be successful.
KEY INITIATIVES UNDERWAY IN THE REGION TO ADDRESS THIS	With housing stress felt across the nation, multiple funding programs and plans are currently being delivered at a state and national level to address housing affordability and availability:
	• Government Employee Housing supports the attraction and retention of frontline staff such as police, health workers and teachers, through the provision of suitable, good quality and safe housing. The demand for new housing increases each year, driven by the expansion of agency services in regional and remote communities. The program will build up to 439 homes and maintain an existing portfolio of approximately 2,900 homes for essential frontline workers in regional and remote communities.
	• The Central Queensland region falls across two Quickstarts Qld regions: Central Queensland and the Outback.
	 Under QuickStarts Qld and Social Housing Accelerator, the State has committed to commence 175 social homes in the Central Queensland region and 181 social homes in the Outback region by 30 June 2025.
	• From 1 July 2015 to 31 May 2024, 219 social homes have been delivered in Central Queensland and 92 social homes have been delivered in the Outback, including through QuickStarts Qld and the Social Housing Accelerator.
	• Homes for Queenslanders will work across the broader housing spectrum, bringing together private and public housing delivery, planning reforms, local government partnerships, state development, and significant infrastructure and public works as part of an additional \$3.1 billion investment across Queensland to support social and affordable housing and housing and homelessness outcomes.
	• 1,397 grants worth \$23.6 million paid to home buyers to help them purchase their first home in the Central Queensland region.
	• The Queensland Government is also supporting federal housing initiatives such as the Help to Buy scheme.

Notes

³⁴ SQM vacancy data, February 2024 (https://sqmresearch.com.au/vacancy.php)

³⁵ Central and Western Queensland Infrastructure Plan. (2023, March). https://www.statedevelopment.qld.gov.au/__data/assets/pdf_file/0029/79652/ central-and-western-queensland-infrastructure-plan.pdf

ENABLER	TRANSPORT
OVERVIEW	Well-connected freight routes are critical to ensuring communities and local industries can efficiently access key inputs and export goods to key demand centres. The development of renewable energy projects in the region also brings new challenges with the movement of oversize, overmass loads across the existing road network.
KEY INITIATIVES UNDERWAY IN THE REGION TO ADDRESS THIS	 There are currently multiple programs at state and national levels to maintain and improve transport quality and safety and reduce fatalities on the road. These include: \$37.4 billion Queensland Transport and Roads Investment Program 2024-25 to 2027-28 for road and transport infrastructure for delivery over a four-year period³⁶ \$4.1 million for Banana Shire Council, \$13.4 million for Gladstone Regional Council, and \$2.1 million for Rockhampton Regional Council³⁷ \$125 million for Access to Gladstone Port, improve heavy vehicle access, jointly funded with the Australian Government. The CWQIP identifies an upgraded and expanded transport network as a key priority to meet the needs of the renewable energy, hydrogen and clean manufacturing industries.

Queensland Freight Strategy and Queensland Freight Action Plan

The economic prosperity of regions is dependent on the strength of supply chains, which facilitate the movement of goods produced in regional areas to their final destination and vice versa. Freight networks are vital for regional economic growth, present an opportunity to decarbonise through investment in new, innovative technologies and skills development, which enable sustainable transport and promote sustainability across all aspects of the supply chain.

By investing in cleaner technologies, fostering innovation, and enhancing the skill set of the workforce, the region can move toward a more sustainable and economically prosperous future. These priorities are supported by the Queensland Freight Strategy³⁸ and the rolling two-year Queensland Freight Action Plan³⁹ which supports regions in:

- building effective partnerships between industry, customers and government
- unlocking economic opportunity
- smarter connectivity and access
- a more resilient freight system
- safer freight movements.

ENABLER	WATER
OVERVIEW	As well as supporting communities, water plays a key role in local mining, agricultural, power generation and manufacturing industries for ore processing, irrigation, industrial cooling and as a manufacturing input. Water will also be a key input to hydrogen production. Securing a sustainable water supply will be the key to sustain and grow communities and industries in the face of increased climate variability.
KEY INITIATIVES UNDERWAY IN THE REGION TO ADDRESS THIS	 Access to additional water has the potential to unlock investment and increase higher value cropping in the region. The Queensland Government is funding: The Department of Regional Development, Manufacturing and Water (DRDMW) is progressing the review of the Fitzroy water plan that will utilise information from the Central Queensland Regional Water Assessment in the setting of water reserves for future development.

Notes

³⁶ https://www.publications.qld.gov.au/dataset/queensland-transport-and-roads-investment-program-qtrip-2023-24-to-2026-27/resource/e2f11e9c-f59c-4292-a5cf-f35716d083dc

³⁷ Regional Remote Roads Upgrade Pilot Program, available at: https://investment.infrastructure.gov.au/sites/default/files/documents/rrupp-projects.pdf

³⁸ https://publications.qld.gov.au/dataset/queensland-freight-strategy-advancing-freight/resource/ae528968-a698-422c-bdc7-2a38a911de45

³⁹ https://www.publications.qld.gov.au/dataset/queensland-freight-strategy-advancing-freight/resource/92f8oof1-c8e5-4eaf-8o1b-3585e3883aeb

(CONTINUED) ENABLER	 a total of \$183.6 million, which was matched by the Australian Government, for the Rookwood Weir on the Fitzroy River \$983 million spend to construct the 117-kilometre Fitzroy to Gladstone pipeline \$40.2 million for the Mount Morgan water pipeline for water security a detailed business case for water supply for the hydrogen industry in Gladstone.
OVERVIEW	Supply of electricity relies on the generation, storage and transmission of the electricity to support industry and community. Adequate and efficient power supply drives increased productivity, cost-effectiveness and innovation by enabling uninterrupted operations, optimising resource usage and fostering a conducive environment for research and development.
KEY INITIATIVES UNDERWAY	The Queensland Government has committed around \$26 billion in total capital investment over four years to support the QEJP.
IN THE REGION	Action plans in the QEJP that will support the transition towards renewable energy include:
TO ADDRESS THIS	 \$500 million for community and large-scale battery projects across Queensland, to store excess rooftop solar and improve network resilience
	• \$639 million in the 2022-23 State Budget as part of the Uniform Tariff Policy to ensure all Queenslanders pay a similar price in electricity.
	The Queensland Government is also working to establish the Central Queensland REZ region to coordinate development of clean energy infrastructure in areas of high renewable potential, maximising benefits for regional communities.
	Within the Central Queensland REZ region, the Queensland Government is supporting infrastructure development across the region with the \$365 million Gladstone Grid Reinforcement to connect solar and wind projects to the grid, delivered by Powerlink.
	The Queensland Renewable Energy and Hydrogen Jobs Fund is a \$4.5 billion fund aiming to ensure publicly-owned energy businesses can continue to invest in renewable energy, storage and hydrogen projects in the QREZ regions, and will help deliver on the long-term targets for these regions to reach 25 GW of total renewable energy by 2035.
	Renewable funded projects in the Central Queensland region include:
	 \$171.1 million in 2023-24 for CleanCo to progress the development of renewables projects across the Central Queensland region, supporting development of up to 2.3 GW of new wind and solar projects.
	• An additional \$92 million to CleanCo for renewable wind and solar and in the 2024-25 budget \$500 million to CS Energy to develop the 285MW Lotus Creek Wind Farm.
ENABLER	EDUCATION AND TRAINING
OVERVIEW	Adequate education services and infrastructure are not only important for liveable communities, but also central to ensuring the upcoming and existing workforce has the opportunity to develop the skills and knowledge needed to be a part of the region's future. Educational institutions are also centres for innovation and R&D.
	In addition to the school network, CQUniversity provides both vocational and tertiary education within the region, with four campuses across the region.
	Bolstering investment in education and training was identified as a priority of the CWQIP.
KEY INITIATIVES UNDERWAY	Closer proximity to social amenities like education and employment will be important to attracting and training the future workforce.
IN THE REGION TO ADDRESS THIS	State and national funding includes:

(CONTINUED)	 \$120 million over four years to implement the Queensland Early Childhood Workforce Strategy, which includes \$40 million to attract and retain Early Childhood Teachers in outer regional, remote and very remote communities \$5.04 million investment across Queensland to strengthen partnerships between schools and industry through the Regional School Industry Partnership Program \$2.1 billion infrastructure investment allocated across Queensland schools in 2023-2034 \$290 million allocated annually across Queensland State Schools as part of Investing for Success \$48.3 million for teacher housing in rural and remote areas of Queensland Free kindergarten education for all eligible-aged children attending a government-approved kindergarten program Funding is provided to organisations throughout the region for the provision of Early Years Services \$74.8 million allocated for education to maintain, improve and upgrade schools in the Central Queensland region \$15.9 million total investment between 2022-2024 through the Equipping TAFE for our Future initiative to Stage 1 of CQUniversity's Rockhampton Campus consolidation and an expansion of the Mackay Ooralea Trade Training Centre to cater for heavy vehicle automotive training A \$600,000 expansion to the Gateway to Industry Schools program to cover a dedicated renewable energy focus, and additional funding to support the development and implementation of online resources to support Queensland teachers to deliver clean energy content and student learning Up to \$10 million investment across the state to uplift state owned training infrastructure to support the skills needs of the clean energy workforce.
ENABLER	HEALTH
OVERVIEW	Proximity to sufficient healthcare services is central to supporting liveable and growing communities. It is also important for these facilities, along with housing, to be able to attract the healthcare workforce required to meet community needs. There is regional demand for a higher quantity of health services and more specialised health services at key regional health facilities. ⁴⁰
KEY INITIATIVES UNDERWAY IN THE REGION TO ADDRESS THIS	The recent Queensland budget includes \$28.9 billion allocated to Queensland Health, with the majority to be spent on Hospital and Health Services. This includes \$873 million for Central Queensland Hospital and Health Services.
ENABLER	TELECOMMUNICATIONS
OVERVIEW	Access to digital connectivity is essential to growing businesses, connectivity to markets and adopting advanced technologies. While satellite internet does provide coverage across the entire region, it is cost prohibitive for many residents and businesses who rely on cellular networks instead.

Notes ^{4°} Central and Western Queensland Infrastructure Plan. (2023, March). https://www.statedevelopment.qld.gov.au/__data/assets/pdf_file/0029/79652/central-and-western-queensland-infrastructure-plan.pdf

KEY INITIATIVES UNDERWAY IN THE REGION TO ADDRESS THIS

In 2023 the Queensland Government committed to investing \$200 million over three years to grow the state's digital economy and improve digital connectivity. Connectivity is also being addressed through state initiatives, such as the under development Digital Infrastructure Plan, and Australian Government initiatives, such as the Telecommunications Disaster Resilience Innovation program.

The Better Connectivity Plan is a key Australian Government initiative that will invest upwards of \$656 million across five years to improve connectivity in regional Australia, including coverage on regional roads, place-based connectivity infrastructure, on farm connectivity and more.

WORKFORCE

Developing industry and the economy will require an increase in available workforce to support the development and ongoing operation of new industry.

The Queensland Workforce Strategy Action Plan (2022-2025) includes a focus on local solutions. It contains actions to implement locally focused and led workforce planning and coordinate efforts across industry, the community and government at all levels. A Central Queensland Regional Jobs Committee has recently been announced to bring together local stakeholders and is a key mechanism in supporting the delivery of the strategy.

The Queensland Workforce Strategy builds on a suite of programs that have together powered the state's significant economic growth. This includes projects under a \$200 million Future Skills Fund, including:

- In the Central Queensland region, there is \$47.9 million allocated to develop skills and provide training to 5,265 people.
- The Women in Manufacturing Strategy, which provides a framework to support the attraction and retention of more women in the Queensland manufacturing industry.

On 25 October 2023, the Queensland Government released Queensland's Clean Energy Workforce Roadmap, which recognises and supports regional Queensland to prepare for growth associated with energy transformation. Key actions out of this \$30 million strategy that will be delivered include:

- \$500,000 to develop and implement a digital energy skills passport app, addressing workforce mobility barriers in Queensland's renewable energy sector by establishing agreed skills, qualifications and competencies required for the trade workforce for applicable projects in Queensland.
- A \$600,000 expansion to the Gateway to Industry Schools program to cover a dedicated renewable energy focus, and additional funding to support the development and implementation of online resources to support Queensland teachers to deliver clean energy content and student learning.
- A skills academy as part of Stanwell's \$100 million Future Energy Innovation and Training Hub in Rockhampton.
- Up to \$10 million investment across the state to uplift state owned training infrastructure to support the skills needs of the clean energy workforce.

The Hydrogen Industry Workforce Roadmap 2022-2032, released in July 2022, sets a clear path for industry and government to work together to deliver a strong and adaptable workforce for a safe and thriving Queensland hydrogen industry. This includes an \$800,000 investment in the Gateway to Industry Schools project for the hydrogen industry (GISPH2), which is being delivered in five schools across the Central Queensland region.

KEY INITIATIVES UNDERWAY

ENABLER

OVERVIEW

IN THE REGION

ENABLER	REGULATORY FRAMEWORKS
OVERVIEW	Planning and regulatory frameworks are constantly evolving in response to emerging markets and challenges – to achieve economic, social and environmental objectives. Project proponents must consider planning and environmental regulations under the relevant Australian, Queensland and local government legislation applying to the site including the <i>Planning Act 2016</i> and State Development Assessment Provisions. Having the right policy and regulatory frameworks in place is important to enable new and emerging industries as well as evolution in existing industries.
KEY INITIATIVES UNDERWAY IN THE REGION TO ADDRESS THIS	 As an action under the QEJP, the potential for a renewable hydrogen gas target is being investigated in consultation with industry. The Gas Supply and Other Legislation (Hydrogen Industry Development) Amendment Act 2023 commenced on 4 April 2024 and amends the Gas Supply Act 2003 and the Petroleum and Gas (Production and Safety) Act 2004 to provide a clear approvals pathway for hydrogen and other prescribed substance pipelines. The Coordinator-General, under the SDPWO Act, provides significant support to the coordination of major projects, evaluation and responsible management of regional impacts. The Gladstone SDA and connecting infrastructure corridors have the ability for a state led response to supporting land use planning and industry growth. Economic Development Queensland (EDQ) is the Queensland Government's land use planning and property development agency. On 18 April 2024 the Queensland Parliament passed the Clean Economy Jobs Act 2024 and the Energy (Renewable Transformation and Jobs) Act 2024 to secure Queensland's spot at the centre of a global energy transformation. The Clean Economy Jobs Act 2024 sets out a pathway to decarbonisation that will support jobs in the state's key traditional industries, including agriculture, resources and manufacturing, and unlocking investment in new industries including renewables, manufacturing, critical minerals, hydrogen and sustainable aviation fuel.



TRANSFORMING THE CENTRAL QUEENSLAND REGION

The Central Queensland region has several key industries which are a significant source of economic activity and jobs. The region is also uniquely positioned to strengthen existing and develop new industries to harness the opportunities as the world transitions to net zero.

The transformation of the Central Queensland region will be underpinned by industries that leverage the

region's strengths, have significant growth potential, and support long-term economic growth, diverse economies and sustainable jobs.

Figure 7 sets out the distinctive strengths by industry for the region while specific transformation priorities, in these current and emerging industries, are outlined on the following pages.

Natural landscape that supports large scale

the western part of the region

including biofuels and SAF

solar and wind energy production, including

• CQUniversity is the highest ranked agricultural

research institution in Northern Australia

• Significant biomass in the sector with the potential to support energy generation

at the Barcaldine Renewable Energy Precinct in

Figure 7 Central Queensland's key industry strengths

ENERGY



- Plentiful existing infrastructure to support industry, including electricity and gas transmission infrastructure
- Some of the newest coal-fired generation in the state

AGRICULTURE

- Cropping is supported by plentiful water resources, including the Fitzroy Basin
- Beef Capital of Australia
- Favourable climate supports a strong agriculture industry
- Strong transport connectivity to trade markets

MANUFACTURING



- Large alumina refineries, aluminium smelters and cement plants, amongst other heavy industries
- Significant manufacturing sector to support other established industries in the region

TRANSPORT AND LOGISTICS



- Established transport networks throughout the region which connect to adjacent regions and overseas markets
- Manufacturing industry value adds to existing agriculture production
- Gladstone SDA recognised as Central Queensland's premier heavy industry precinct
- Strategic connectivity through ports, including the ability to expand existing ports' capacities and capabilities

How the transformation will provide opportunities for First Nations peoples in the Central Queensland region

While economic opportunities span each of the region's transformation priorities, a particular transformation priority for the Central Queensland region, identified in partnership with First Nations community members, is: *First Nations peoples, businesses and existing industry have strong participation in the renewable energy supply chain and complementary opportunities (Priority 2.2)*.

It is essential that First Nations peoples and businesses have strong and meaningful participation across the renewable energy supply chain and other industry supply chains, ensuring that they can leverage and benefit from the significant pipeline of renewable energy investment in the region.

This priority and other economic opportunities for First Nations peoples have been identified through consultation with local First Nations community members in the region and will also be supported by the Queensland Indigenous Procurement Policy, which provides a whole-of-government framework to increase procurement with First Nations businesses to be three per cent of the value of government procurement contracts.

The Queensland Government is developing a First Nations Economic Strategy that will support agencies to engage with First Nations peoples, communities and businesses to address barriers and explore economic opportunities and pathways to jobs, skills and training, education, business development and entrepreneurship in current and emerging industries and sectors.

A Queensland Indigenous Business Network (QIBN) will also be established and led by First Nations peoples to help First Nations-owned small businesses grow and thrive.

Priority 1: Decarbonised and diversified manufacturing

Strengthen and grow decarbonisation, diversity and competitiveness of the manufacturing industry, with a focus on green manufacturing and circular economy opportunities.



Decarbonised and diversified manufacturing

Priority 1.1: Grow green manufacturing in the region via the use of by-products, renewable energy, green hydrogen and biofuels.

Priority 1.2: Accessible and serviced industrial land is available to support the development and growth of manufacturing businesses, including in defence and renewable energy components.

Priority 1.3: Support for investment in defence manufacturing, maintenance and storage hubs to leverage the region's strategic location and defence assets.

Priority 1.4: Facilities that help existing and prospective local manufacturers develop their skill sets and expertise in modern manufacturing.

Priority 1.5: Other actions to support this priority.

Manufacturing is a significant driver of the Central Queensland region's economy and supports major industrial clusters, including Australia's second largest aluminium smelter, two of the world's largest alumina refineries and Australia's largest cement plant.⁴¹

The Central Queensland region has a demonstrated history of leveraging its strengths and resources to be a global leader in heavy industry manufacturing. It now has an opportunity to continue this journey – transitioning to a more decarbonised and sustainable future. This is important to ensure the ongoing competitiveness of the region, both domestically and on a global scale.

The region is well-positioned to develop its green manufacturing industry, leveraging the advantageous position as an emerging hydrogen hub as well as the renewable energy development across the region. Supply of reliable cost competitive renewable energy is essential to growing the region's green manufacturing industry.

Notes ⁴¹ https://gea.asn.au/gladstone/ The region has a unique set of attributes that will enable it to become a global player in the production of green hydrogen and related products. These assets include a deep-water port at Gladstone with space for expansion, the already declared SDAs, with industrial land available through EDQ and the Office of the Coordinator-General (OCG).

Australia's largest hazardous goods hub, located at the Port of Rockhampton, extensive electricity and gas transmission infrastructure across much of the region and a highly skilled workforce are also significant assets in the region.

Increasing circularity in manufacturing is key to this, including a greater re-use of waste outputs or by-products as an input to the production of goods. This will not only lead to a more sustainable industry, but also greater productivity, reducing the reliance on externally sourced raw inputs. The co-location of extensive manufacturing activities provides a unique opportunity to create an ecosystem that promotes the use of industry by-products in other manufacturing processes.

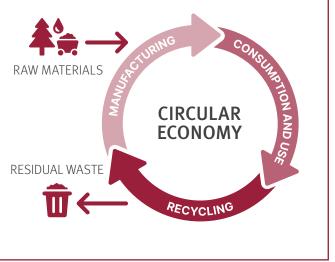
Increased circularity in manufacturing will also play a key role in reducing the region's waste by diversifying and providing sustainable and productive solutions to resource recovery (recycling and re-use) of major waste streams, including batteries, mining tires, solar panels, agricultural and packaging waste, as well as industry wastewater.

Circular economy

The circular economy is a system where materials never become waste and nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacture, recycling and composting,⁴² after they have served their initial purpose. A circular economy is a way to minimise pressure on the environment while achieving sustainable consumption and production.⁴³

Recycling and resource recovery are two key components of the circular economy, diverting waste, valuable materials and by-products from landfill so they can be used to create new materials or products. Recycling often requires less energy compared to the extraction and processing of virgin materials and as such can reduce emissions and the environmental impact of resource extraction. Similarly, resource recovery allows industry or manufacturing by-products to be re-used for other purposes.

Building on the existing foundation of a skilled workforce and industry technology, another key priority is to develop precincts that help existing and prospective local manufacturers develop their skills and expertise in modern manufacturing, including diversifying into defence manufacturing and MMC. There are opportunities to develop defence manufacturing, maintenance and storage hubs in the Transitioning to a circular economy is a priority for the Queensland Government in the shift towards decarbonisation. To do this investment into recycling and resource recovery we are supporting industry and businesses to utilise circular economy principles to reduce waste and emissions⁴³



region, leveraging its strategic location and existing manufacturing capabilities.

It is recognised that sufficient availability of accessible and serviced industrial land is essential to supporting the development and growth of manufacturing businesses, including, but not limited to, defence, resource recovery and renewable energy.

Notes

- ⁴² What is a circular economy? | Ellen MacArthur Foundation
- ⁴³ Australian Government DCCEEW, Transition to a more circular economy (https://www.dcceew.gov.au/environment/protection/circular-economy)
- ⁴⁴ Queensland Government, What is a circular economy (https://www.statedevelopment.qld.gov.au/news/what-is-a-circular-economy)

CASE STUDY: CENTRAL QUEENSLAND STATEMENT OF COOPERATION

The Central Queensland Statement of Cooperation⁴⁵ sets out the commitment between the State and Central Queensland industry stakeholders to work towards a common vision for the evolution of Central Queensland into a zero net emissions industrial and manufacturing powerhouse. Major industry stakeholders include Rio Tinto, Orica, Alpha HPA, Stanwell, Acciona and Cement Australia.

The partners are working together to secure the future competitiveness of Queensland – adding value to a natural renewable energy advantage to drive employment and economic outcomes for the state, while maintaining system security and reliability as the energy system decarbonises.

The vision will be realised through three areas of focus:

- Committing to industry by establishing certainty for current industry and growing demand, potentially through electrification of existing processes over time in an orderly and least-cost fashion. This will catalyse demand growth and spur long-term investment, while ensuring these industries are cost competitive.
- Delivering a globally competitive energy solution that is centred around low-carbon electricity for industry. The solution will require an orderly decarbonisation of energy generation, an affordable transmission network and flexible energy consumption from heavy industrial users.
- Growing the industries of the future in the Central Queensland region by creating an enabling regulatory environment, strengthening regional skills and employment to lower capital intensity and planning for the infrastructure to enable industry development to ensure industries of the future are built in the Central Queensland region.

Notes

 $https://www.statedevelopment.qld.gov.au/__data/assets/pdf_file/0026/64547/statement-of-cooperation.pdf$

⁴⁵ Department of State Development and Infrastructure,

Queensland Government actions to support implementing this priority:

The REFF is a new fund that supports economic and community development initiatives. REFF funding that aligns to this priority is expected to be announced in 2024.

Other activities include:

- The Queensland Hydrogen Industry Strategy (DSDI and Department of Energy and Climate [DEC]).
- The Queensland Battery Industry Strategy (DSDI).
- The Queensland METS Roadmap and Action Plan (DSDI).
- The Queensland Biofutures Roadmap and Action Plan (DSDI).
- The Queensland Waste Management and Resource Recovery Strategy
- (Department of Environment, Science and Innovation [DESI]).
- The Queensland Resource Recovery Industries Roadmap and Action Plan (DSDI).
- The Queensland Defence Industries Roadmap and Action Plan (DSDI).
- The Advance Queensland (DESI) initiative is supporting sustainable and resilient regional economies through innovation, and the suite of targeted programs is empowering our regions to unlock potential, harness opportunities, be innovative, collaborate and create jobs, such as:
 - » A Place to Innovate Queensland Innovation Precincts and Places (QIPP) Strategy 2022-2032 is Queensland's ten-year strategy to release the potential from the state's innovation precincts and places and builds on decades of investment in Queensland's innovation ecosystem.
 - » The \$15 million Queensland Innovation Precincts and Places Fund enables innovation places to achieve their goals across the three pillars of people, place and purpose.
 - » Queensland Connects, based on the internationally regarded Massachusetts Institute of Technology (MIT) Regional Entrepreneurship Acceleration Program (REAP), supported a team of regional leaders, led by the Gladstone City Council, to develop the Gladstone Connects Supplier Platform, which promotes the local manufacturing sector and streamlines supply chains.
 - » The Regional Futures Collaborative Projects Program invested \$100,000 to Gladstone Engineering Alliance Limited to grow local supply chains by further developing the Gladstone Connects Supplier Platform to connect large enterprise procurement with local SME engineers and manufacturers.
 - » Supporting the commercialisation of new ideas through the Ignite Ideas Fund.
 - » Growing new and innovative industries through the Decarbonisation Strategic Technology Roadmap.
- Reducing emissions and enhancing opportunities for remote and First Nations communities with a \$10 million Microgrid Pilot Fund (DEC).
- \$365 million Gladstone Grid reinforcement being progressed by Powerlink to support decarbonisation in the region (DEC).
- SuperGrid Training Centre and Transmission Hub in Gladstone (DEC).
- The QEJP identifies Gladstone (and Townsville) as major hydrogen hubs and has committed up to \$20 million for the development of a renewable hydrogen industry. It also commits \$4 million to investigate options and pathways to expand bioenergy generation, particularly in regional Queensland (DEC and DSDI).
- Gladstone State High School has received a grant of \$2 million to build the hydrogen training hub (DEC).
- Under Action 3.4 of the QEJP to grow the renewable energy supply chain in Queensland, the Queensland Government committed to investigating building capacity in the manufacturing sector, including end-of-life and recycling opportunities for priority renewable energy technologies. This work will complement existing and planned investigations into circular economy activities for renewable energy technologies undertaken by partner Queensland Government agencies (DRDMW, DSDI, DESI and DEC).

- The Queensland Government will invest \$500 million as part of the Queensland Renewable Energy and Hydrogen Jobs Fund for government backed grid-scale and community batteries, including the Central Queensland Hydrogen Project and Central Queensland Wind Farm (Queensland Treasury [QT]).
- Under the Queensland Government's \$15 million VET Emerging Industries initiative, \$4 million is being invested in an Energy Strategy that includes a \$1 million Hydrogen Skills Fund, a \$2 million TAFE Queensland Renewable Energy Strategy, and a \$1 million Electric Vehicle Skills Fund (Department of Employment, Small Business and Training [DESBT]).
- Queensland's Procurement Policy 2023 and Buy Queensland 2023 are the government's overarching policies for the procurement of goods and services. This will use procurement power to support local jobs through applying a 'local benefits' approach and supporting the establishment and growth of new industries through declaring Supply Chains of State Significance. These will boost Queensland manufacturing industries, Queensland content and manage risks for critical supply chains (DEC).
- Launched the \$9.25 million Local Energy Partnerships initiative to create a framework for community participation and benefit sharing from the renewable energy transformation, including the expansion of the former GasFields Commission to Coexistence Queensland which will enable the commission to engage communities and support coexistence with other industries, including between the renewable energy and agriculture sectors (DEC).
- ecoBiz is a free Queensland Government program, delivered by Business Chamber Queensland, providing personal coaching, site surveys, training and tools to small and medium sized businesses. ecoBiz supports businesses to engage in sustainable supply chains, understand circular economy opportunities and increase their competitiveness to pursue procurement opportunities (DEC).
- The Partner Up Queensland Regional Science and Innovation Network is a state-wide approach to increasing science and innovation engagement in regional Queensland (DESI).
- Regional Industrial Land Improvement Program announced \$45 million over three years to unlock industrial land in Mackay and Gladstone (DSDI).
- Co-funded with the Australian Government to upgrade facilities in a Rockhampton recycling plant (DSDI).
- Banana Shire Council received funding under the Regional and Remote Recycling Modernisation Fund (RRRMF) program for a project that will create four new jobs and divert 3,780 tonnes of waste from landfill per annum (DSDI).
- Banana Shire Council received funding under the Queensland Recycling Modernisation Fund (QRMF) program for a project in Biloela that will create 20 new jobs and divert 11,500 tonnes of waste from landfill per annum (DSDI).
- Kriaris Recyclables Processing received funding under the QRMF program for a project in Rockhampton that will create three new jobs and divert 5,184 tonnes of waste from landfill per annum (DSDI).
- Under the Hydrogen Industry Workforce Development Roadmap 2022-2023 secondary school students now have the opportunity to enrol in free hydrogen-focused online learning programs under a new partnership between the Queensland Government and CQUniversity (DESBT).
- A similar program for clean energy more broadly will be delivered under Queensland's Clean Energy Workforce Roadmap (action 1.2) (DESBT).
- In partnership with Energy Skills Queensland, the Gateway to Industry Schools Program (GISP) has expanded to include a new hydrogen focussed program, which links students with local industries to explore career opportunities in the sector (DESBT).
- The Hydrogen GISP will be delivered in at least 30 Queensland schools, including five in the Central Queensland region, engaging more than 2,000 students over three years (DESBT).
- Providing free or reduced fee training through Free TAFE, Free Apprenticeships for Under 25s, User Choice, Certificate 3 Guarantee and Higher-Level Skills (DESBT).
- The Queensland Low Emission Agriculture Road Map (Department of Agriculture and Fisheries [DAF]).
- The Queensland AgTech Roadmap (DAF).
- Rural Agricultural Development (sheep and goats) grants up to \$200,000 as a co-contribution grant to support economic development in relevant rural areas and support growth within the industry (DAF).
- Rural Economic Development grants up to \$200,000 as a co-contribution grant to strengthen primary production sectors and bolster rural communities (DAF).

- The Central Highlands Regional Council Growth Hub (former Emerald Agricultural College) (DAF).
- The Queensland Government has established a \$7.1 million Manufacturing Energy Efficiency Grant (MEEG) Program (DRDMW).
- Established Manufacturing Hubs in Rockhampton and Gladstone engage directly with industry and provide targeted advice/support, training and professional development, along with facilitating applications for grants/ funding assistance to build capacity, capability and sustainability (DRDMW).
- Manufacturing Hubs hosted industry showcase tours/events to introduce manufacturing stakeholders to renewable and green industry proponents to establish supply chain networks and new business relationships (DRDMW).
- The \$22.5 million Manufacturing Hubs Grants program assists small to medium sized manufacturers to become more productive, build advanced manufacturing capabilities and create jobs (DRDMW).
- The \$121.5 million Made in Queensland grant program helps small to medium sized manufacturers to increase international competitiveness, productivity and innovation and to generate high skilled jobs of the future. The program also supports manufacturers to achieve energy efficiency, export, onshoring and the advancement of decarbonisation and net zero outcomes (DRDMW).
- The Manufacturing Sustainability Benchmarking Program enables manufacturers to benchmark their progress towards sustainability and provides a report outlining opportunities for further action. The program is subsidised by DRDMW.
- The Manufacturing Capability Development program provides a range of workshops, seminars and events to increase manufacturers knowledge and understanding of contemporary issues and challenges within and facing the industry (DRDMW).
- H2-HubTM Gladstone is a coordinated project that is currently being supported through the Environmental Impact Statement (EIS) process (DSDI).
- The Queensland Government owns land in the Gladstone SDA that is actively marketed to support industry to establish and grow in the region (DSDI).
- The OCG is working with industry to identify, preserve and develop corridors to support industry investment within the Gladstone SDA (DSDI).



Priority 2: Renewable energy supply chain

Grow the renewable energy industry including developing capabilities along the renewable energy supply chain.



Renewable energy supply chain

Priority 2.1: Cost-competitive, firm renewable energy and reliable, available water supply to grow the hydrogen and green chemical manufacturing industries.

Priority 2.2: First Nations peoples, businesses and existing industry have strong participation in the renewable energy supply chain and complementary opportunities.

Priority 2.3: Regional businesses have a substantial role in manufacturing, supplying and maintaining renewable energy and transmission grid components.

Priority 2.4: Other actions to support this priority.

The Central Queensland region is well known as the state's energy powerhouse and is located at the heart of the state's electricity network. Places like Gladstone, Rockhampton and Biloela are critical to Queensland's energy system.

Home to energy-intensive industries looking to switch to renewable energy supply, the Central Queensland region is a key component of Queensland's energy transition plan, with four⁴⁶ potential REZs having been identified in the region. These REZs will help attract investment to the right areas in the Central Queensland region. Up to 8,200 MW of expected new renewable generation will be installed in identified REZs⁴⁷ Projects within the REZs are expected to be connected incrementally, providing workers with sustainable employment opportunities across multiple projects over a number of years.

There are more than 250 MW of operational, large-scale renewable energy projects in the Central Queensland region, representing more than \$400 million in investment and around 600 construction jobs.⁴⁸ In addition to this, investment in electricity infrastructure is estimated to reach \$9.2 billion by 2040.

Gladstone has been identified as a location for a number of large-scale hydrogen production projects. The most progressed, the Stanwell led CQ-H2 Hub project, is expected to begin operation in 2028 and at full production produce up to 800,000 kilograms of hydrogen per day.⁴⁹

Growing capacity in the region provides an opportunity to help transition existing industries, such as manufacturing and chemical processing, to renewable energy, which will be important for the region's international competitiveness.

Increasing renewable energy production in the region is a key priority, as is ensuring the region's people, workforce and businesses benefit from renewable energy growth. In order to realise local economic benefit, strong involvement of the local Central Queensland region workforce will be required in project delivery and operations, as well as the support of local businesses as key contributors within the supply chain, providing the inputs needed to deliver renewable energy projects and production.

Notes

- ⁴⁶ Note the Central Queensland region as defined for QREZ also includes North Burnett, Isaac and Bundaberg.
- ⁴⁷ Department of Energy and Public Works. Central Queensland Renewable Energy Zones (https://www.epw.qld.gov.au/about/initiatives/renewable-energy-zones/rez-roadmap/central-REZs)
- $^{_{48}}\,https://www.epw.qld.gov.au/energyandjobsplan/regions/central-qld$
- ⁴⁹ https://www.stanwell.com/wp-content/uploads/CQ-H2-PROJECT-FACT-SHEET-web-Issued-October-2023.pdf

Queensland Government actions to support implementing this priority:

The REFF is a new fund that supports economic and community development initiatives. REFF funding that aligns to this priority is expected to be announced in 2024.

Other activities include:

- The Queensland Hydrogen Industry Strategy (DSDI and DEC).
- The Queensland Biofutures Roadmap and Action Plan (DSDI).
- The Queensland Battery Industry Strategy (DSDI).
- The Queensland Government owns land in the Gladstone SDA that is actively marketed to support industry to establish and grow in the region (DSDI).
- The OCG is working with industry to identify, preserve and develop corridors to support industry investment within the Gladstone SDA (DSDI).
- Advance Queensland (DESI) has a number of programs that support the transformation of the industry including:
 - » Industry Research Fellowships
 - » Private Sector Pathways Program
 - » Regional Futures Collaborative Projects
 - » Queensland Connects
 - » Ignite Ideas Fund
 - » Decarbonisation Strategic Technology Roadmap.
- Utilising \$8 million in funding allocated in the 2023-24 State Budget, the Queensland Government is undertaking a detailed business case on a desalination plant in Gladstone to meet the significant forecast water requirements of the emerging hydrogen industry (DRDMW).
- This will build on the Queensland Government's \$983 million investment in the Fitzroy to Gladstone Pipeline, which commenced construction in October 2023, and will provide long-term water security to Gladstone and meet early stages of water requirements for the hydrogen industry (DRDMW).
- Queensland Water Strategy The priority is to secure water for growth and key industries such as agriculture, manufacturing, resources and renewables (DRDMW).
- Strategy 2 of the Advanced Manufacturing 10-Year Roadmap and Action Plan is to support manufacturers to grow in a carbon neutral future. It includes analysis of renewable supply chains and development of a renewable energy supplier database (DRDMW).
- Established Manufacturing Hubs in Rockhampton and Gladstone engage directly with industry and provide targeted advice/support, training and professional development, along with facilitating applications for grants/ funding assistance to build capacity, capability and sustainability (DRDMW).
- The Queensland Government will invest \$4.5 billion as part of the Queensland Renewable Energy and Hydrogen Jobs Fund for government owned corporations to increase ownership of commercial renewable energy and hydrogen projects, as well as supporting infrastructure, including in partnership with the private sector (QT). In the Central Queensland region, allocations from the fund so far include:
 - » \$563.5 million for wind farm investments in Central Queensland (CS Energy)
 - » \$15 million for the Central Queensland Hydrogen Project (Stanwell).
- Supported by the new progressive royalty rates announced in the 2022-23 Budget, the government (QT and DEC) is providing \$10 billion in funding to the government owned corporations and Queensland Hydro. In the Central Queensland region this includes:
 - » \$592 million for CleanCo to support a 2.3 GW portfolio of wind and solar
 - » \$300 million for CS Energy to pursue investments in new wind projects and energy firming options to support future industrial decarbonisation.

- Master planning has been undertaken to provide the First Nations community of Woorabinda with a strategic development plan for future growth to pave the way for future residential, industrial and economic opportunities (Department of Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities and the Arts [DTATSIPCA]).
- Local Thriving Communities is a significant long-term reform that will embed change, resulting in a visibly different way of working alongside communities across the state to improve outcomes for First Nations Queenslanders, including the primary industry sector (DTATSIPCA).
- Stanwell will build a \$100 million Future Energy and Innovation Training Hub in Rockhampton to provide the sandbox to test innovative new energy technologies, including wind, solar, hydrogen and battery storage (DEC).
- The REZ Roadmap identifies three potential REZs for development in the Central Queensland region Callide REZ (2,000-2,600 MW of expected installed generation), Calliope REZ (1,500-2,000 MW of expected installed generation), and Capricorn REZ (1,400-1,800 MW of expected installed generation) (DEC).
- The QEJP represents long-term opportunities for relevant manufacturing businesses to accelerate, establish or expand their operations in Queensland. Under action 3.4 of the QEJP, to grow the renewable energy supply chain in Queensland, the Queensland Government committed \$11.6 million to help build capacity in the manufacturing sector and encourage local content in Queensland to supply future renewable energy projects (DEC).
- Business Boost grants provide up to \$20,000 to support small business to invest in advancing operational efficiency and increasing productivity (DESBT).
- Business Growth Fund grants provide between \$50,000-\$75,000 in grant funding to purchase specialised equipment to unlock growth potential, increase production, expand the workforce and maximise economic returns. Special consideration is given to applications in, or part of, the supply chain for these priority industries (DESBT).
- Providing free or reduced fee training through Free TAFE, Free Apprenticeships for Under 25s, User Choice, Certificate 3 Guarantee and Higher-Level Skills (DESBT).
- Appoint a dedicated Renewables Project Officer for Manufacturing Skills Queensland (MSQ) to work with local manufacturing businesses to build workforce capacity and access clean energy supply chain opportunities (DESBT).
- Queensland's Clean Energy Workforce Roadmap (DESBT).
- Deliver region specific future energy resources, including skills supply and demand analysis and jobs opportunity guides aligned with Queensland REZ regions (DEC).
- Opening of Powerlink's interim Queensland SuperGrid Training Centre and Transmission Hub in Gladstone (DEC).

Priority 3: Advanced and value-add agriculture

Facilitate the ongoing development of advanced and diverse agriculture, including adoption of new technologies and development of value-add opportunities.



Advanced and value-add agriculture

Priority 3.1: Downstream food processing is further developed, building on the region's significant presence in agriculture and food processing.

Priority 3.2: New, intensive agriculture and production activities are supported by secure and reliable water and energy supply.

Priority 3.3: Sustainable, productive farming is supported through ag-tech and greater automation.

Priority 3.4: Ensure land-use planning mechanisms support ongoing development of agriculture and associated value-added industries.

Priority 3.5: Other actions to support this priority.

Agriculture has long been the cornerstone of the Central Queensland region, known for its cattle production, with substantial meat processing facilities, as well as crops, such as cotton, sorghum, mung beans and chickpeas.

The Central Queensland region's agricultural industry experiences challenges, withstanding changing

climate conditions and fluctuations in global demand and market prices resulting in an agile and resilient industry. This makes the agriculture industry wellplaced to leverage technologies and build on existing strengths to add further value-add activities to the industry. Value-added agriculture focuses on production or manufacturing processes that increase the value of primary agriculture commodities.



Production



Processing of raw agricultural product such as wheat, into flour and further processing the flour to make noodles, pasta, bread and other packaged foods

О

Transport to consumer markets

The Central Queensland region is already active in looking to adopt technology and innovation to improve farming practices. This is evidenced by the Central Queensland Smart Cropping Centre, bringing together research, development and extension in farming systems, agronomy, crop innovation and plant protection.

With increasing innovation and advanced agricultural practices, the region has the potential to expand existing production for higher value uses as well as diversify the crop mix. Beyond traditional outputs, agricultural products, such as tallow, can play a key role as a feedstock for the biofuels industry, including sustainable aviation fuel. The health food industry is providing another high value demand source for agricultural products, such as plant-based sources of protein from lucerne and mung bean. The oilseed industry is also emerging in the region, with a new facility proposed for crushing cottonseed, sunflower, soybean and safflower, producing both oil and meal. This type of facility can enable flow on manufacturing capability and open new value-added markets for Australian-grown oilseeds. There is also a potential opportunity for the development of bioenergy crops (e.g. Pongamia).

While large-scale beef processing takes place within the region, other agricultural produce is largely transported elsewhere for processing. The Central Queensland region has a well-developed transport supply chain supporting its existing agriculture, mining and manufacturing industries. Leveraging this, the region can build its capabilities in the food processing sector, adding further value-added activities and local jobs to the Central Queensland region economy.

Central to the region's economy, agriculture will continue to grow and is a key part of the region's economic transformation.

State Government actions to support implementing this priority:

The REFF is a new fund that supports economic and community development initiatives. REFF funding that aligns to this priority is expected to be announced in 2024.

Other activities include:

- The Queensland Biofutures Roadmap and Action Plan (DSDI).
- The Queensland Government has funded \$3.45 million in training subsidies and supported over 1600 trainees and apprenticeships for the beef-processing sector (DESBT).
- Business Boost grants provide up to \$20,000 to support small business to invest in advancing operational efficiency and increasing productivity (DESBT).
- DRDMW supports the primary produce sector through many water initiatives including:
 - » Rural Water Futures program
 - » \$7.1 million allocated over four years to enhance water modelling capacity to support water planning, water security and infrastructure assessments
 - » \$5.5 million to develop a Queensland bulk water infrastructure assessment plan, in the form of a Strategic Water Infrastructure Plan and Pipeline
 - » \$4.9 million for a Queensland rural water compliance system
 - » \$4.5 million for the Central Queensland Regional Water Assessment.
- Round 6 of Building our Regions has awarded over \$5.6 million to the Central Queensland region, leveraging over \$27 million in additional contributions and supporting an estimated 104 jobs during construction to improve water supply and sewerage systems (DRDMW).
- Queensland Water Strategy (DRDMW) \$40.4 million funding commitment toward the Mount Morgan water pipeline.

- Manufacturing Hubs (DRDMW) hosted professional development and business development workshops/ training including:
 - » Technology Adoption Workshops/Webinars
 - » Lean Manufacturing Workshops
 - » Manufacturing Benchmark Program
 - » Introduction to Industry 4.0 Seminars
 - » Industry 4.0 Masterclass
 - » Decarbonisation Action Plan Workshop
 - » Digital Connectivity Program
 - » Paperless Quality Systems Seminars
 - » Technology in Manufacturing Workshops.
- The Science into Industry Initiative aims to make Queensland's science sector more competitive by accelerating the translation of research and development, supporting universities and research institutes to partner with industry to build new products and services, and increasing Queensland's share of Australian Government funded industry-science programs. Programs include the Science into Industry Co-investment Fund (DESI).
- The Queensland AgTech Roadmap (DAF).
- Rural Economic Development grants up to \$200,000 as a co-contribution grant to strengthen primary production sectors and bolster rural communities (DAF).
- Rural Agricultural Development (sheep and goats) grants up to \$200,000 as a co-contribution grant to support economic development in relevant rural areas and support growth within the industry (DAF).
- The Queensland Low Emissions Agriculture Roadmap (DAF).
- Emerald Agricultural College transition to highest and best community use (DAF).
- Drought and Climate Adaptation Program Delivering RD&E improving the drought resilience and preparedness of primary producers (DAF).
- Central Highlands Smart Cropping Centre (DAF).
- Advance Queensland, the Office of the Queensland Chief Entrepreneur and TIQ are partnering with Climate Salad to grow the climate tech industry and community in Queensland (DESI).
- Queensland's Land Restoration Fund supports land-sector carbon projects and to increase participation in carbon farming by Queenslanders (DESI).

Priority 4: Sustainable, connected transport and logistics

Drive growth and sustainability in the transport and logistics industry to support intra-region, domestic and international freight movement.



Sustainable, connected transport and logistics

Priority 4.1: Rail connectivity to the Port of Gladstone and enhanced containerised freight capability through inland ports to support strong supply chains.

Priority 4.2: High-value agricultural exports grow through improved intra- and inter-regional supply chain capabilities and development of air freight capabilities at airports in the region.

Priority 4.3: Transport and supply chain industry is decarbonised through electric charging and hydrogen fuelling infrastructure.

Priority 4.4: The region's supply chain is strengthened through distribution and consolidation centres in strategic locations to support safe and cost-efficient freight movement within the region.

Priority 4.5: Transport corridors have sufficient capacity and structure throughout the region to support the efficient delivery of renewable energy projects.

Priority 4.6: Other actions to support this priority.

The Central Queensland region's transport and logistics industry has developed over time as the resources, manufacturing and agriculture industries have grown. A strong transport and logistics industry creates jobs, stimulates investment and generates revenue through activities such as shipping, warehousing and transportation services. It facilitates the movement of goods both domestically and internationally, enhancing the region's position in global markets.

The transport and logistics industry can also stimulate regional development by providing opportunities for businesses in rural and remote areas to connect with broader markets helping to diversify regional economies.

The Central Queensland region is strategically placed to alleviate constraints faced by other states' ports. With greater connectivity, both within the region and to the rest of the country, the region can harness the full potential of the Port of Gladstone and provide the nation with greater connectivity to key international demand markets. The Port of Gladstone has a competitive advantage as it is one of Australia's finest natural deepwater harbours and Queensland's largest multi-commodity port, with significant developable land, proximity to the SDA and a strategic location on east coast shipping routes to and from key export markets in Asia.

Building on the region's freight transport network there is an opportunity for the region to grow a strong low emissions transport and logistics industry, supported by greater containerisation capabilities throughout the supply chain network and development of regional multi-modal inland ports for freight and logistics. There is also an opportunity to further decarbonise the region's industries through investments in sustainable transport and logistics infrastructure to reduce the industry's environmental impact. This includes initiatives like improved fuel efficiency and the use of alternative fuels and transportation modes.

Queensland Government actions to support implementing this priority:

- The Office of the Queensland Chief Entrepreneur, Advance Queensland (AQ) and Trade and Investment Queensland (TIQ) are partnering with Climate Salad to grow the climate tech industry and community in Queensland (DESI).
- Regional Industrial Land Improvement Program \$45 million over three years to unlock industrial land in Mackay and Gladstone (DSDI).
- The Department of Transport and Main Roads (DTMR) is developing the Net Zero Emissions for Transport Roadmap (Transport Roadmap), a commitment under the Queensland Climate Action Plan. The Transport Roadmap will provide the foundational blueprint to reduce Queensland's transport sector emissions and contribute to achieving Queensland's emission reduction targets.
- DTMR is currently in early phase scoping and planning for the development of an integrated multi-modal regional freight plan for the Central Queensland region to identify and prioritise freight network improvements to enhance supply chain efficiency.
- Targeted regional infrastructure priorities in the CWQIP, including investigating options to improve road and rail freight efficiency and rail freight access to and from the Port of Gladstone (DTMR).
- DTMR is considering transport implications of the renewable energy freight task associated with decarbonisation of the energy system and common-user infrastructure in Central and Western Queensland within state and federal transport planning processes.
- The Queensland Government owns land in the Gladstone SDA that is actively marketed to support industry to establish and grow in the region (DSDI).
- The OCG is working with industry to identify, preserve and develop corridors to support industry investment within the Gladstone SDA (DSDI).
- DTMR will continue to support investment in east-west connectivity to the Port of Gladstone and ensure the Gladstone SDA is supported by the road network and transport corridors.
- The Queensland Transport and Roads Investment Program 2024-25 to 2027-28 includes \$191.2 million in 2024-25 for the \$1.73 billion Rockhampton Ring Road (jointly funded with the Australian Government) (DTMR).



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