

# Queensland new-industry development strategy

A strategy for new industry in  
a decarbonising global economy



## Acknowledgement of Country

The Department of State Development, Infrastructure, Local Government and Planning (DSDILGP) 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. DSDILGP recognises the contribution of First Nations peoples and communities to the State of Queensland and how this continues to enrich our society more broadly.

Department of State Development, Infrastructure, Local Government and Planning

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# Foreword

Queensland is on the cusp of a new wave of economic growth, emerging from the opportunities presented by global shifts in demand for cleaner, greener, and more responsibly sourced products.

**T**HE QUEENSLAND NEW-INDUSTRY development strategy sets out the Queensland Government’s approach to proactively developing the industries that will be in demand in a decarbonising world.

Not every opportunity will make sense for Queensland. The ones that do are those that build on our proven strengths in existing industries like mining and agriculture – and which leverage the talents and resources of our regional communities.

Queensland’s regulatory regime – requiring fair wages and conditions, sound environmental practice and just approaches to Aboriginal and Torres Strait Islander peoples – is a solid foundation upon which the private sector can build its environmental, social and governance (ESG) credentials.

As well, the Queensland Government is committed to bringing all of our formidable industry development levers to bear on seizing the industry opportunities that come with renewable energy, high-value battery manufacturing, critical minerals, biofuels, hydrogen and materials recycling.

The Queensland Energy and Jobs Plan creates a strong foundation for new industry

growth. By decarbonising Queensland’s electricity network, we ensure the input costs to industry are lowered and that our energy sources meet the requirements of increasingly ESG-conscious investors and consumers.

To underpin our success, we are developing regionally specific infrastructure and land use plans aligned with the economic and social aspirations of each region. The creation of these plans will complement the work of a newly established Local Economic Opportunities Network, which will work with local communities to take a place-based approach to assisting with economic transition.

We are committed to working together with industry, universities and our regional communities to ensure that the opportunities presented by leaning into a more sustainable way of growing our economy are realised and to deliver jobs and opportunities across our state.

The scale of benefits that can be realised for the state is immense, but it will take a concerted effort and sustained focus. This strategy details our commitment to growing our economy for all of our regions and communities by delivering a new wave of sustainable economic growth and future-facing industry development.



# Seizing the decarbonisation opportunity

Queensland's next wave of economic growth is focused firmly on seizing the opportunities that global decarbonisation brings. Decarbonisation will continue to reshape commodity demand as the world seeks to reduce emissions. There are now 'net zero by 2050' targets in every state and territory in Australia, supported by significant ambition across the other tiers of government and the private sector. Queensland has an important role to play, having committed to:



renewable energy target by 2030



emissions reduction below 2005 levels by 2030



renewable energy target by 2032



renewable energy target by 2035



net emissions by 2050

**T**HIS AMBITION IS SIGNIFICANT and together with industry and universities, we need to be proactive to make it a reality. Decarbonisation of our own economy is central to achieving better ESG outcomes and will enhance the global competitiveness of Queensland's industries.

Global trading and market conditions are evolving rapidly, with increased demand for cleaner, greener, high-value commodities and products. Ensuring Queensland is in a strong position to capitalise on this shift will not only deepen existing value and supply chains, but also open up opportunities across new supply chains and support industry growth.



# The Queensland opportunity



Queensland is strongly positioned to capitalise on our unique strengths to take advantage of global opportunities. We have:



A wealth of natural assets, including critical minerals required to achieve a decarbonised economy (e.g., vanadium, nickel, cobalt, graphite and bauxite), and an abundance of solar and wind resources to generate cleaner, greener energy as an input to industrial processes.



A strong R&D network of tertiary providers and specialist capabilities within the existing workforce, ready to pivot towards new applications and processes such as biofuels. Our existing research facilities and supporting infrastructure network are market leading and will be key to enabling growth.



Efficient, mature and modern agricultural and resources industries, and a strong manufacturing base to underpin growth and expansion into new products, markets and opportunities.



A responsive and collaborative state government, with a deep history of successfully using the levers it has created to develop new industry and a commitment to pursuing partnerships with industry and other tiers of government.



A strong regulatory regime which requires fair wages and conditions, sound environmental practices and just outcomes for Aboriginal and Torres Strait Islander peoples. This provides a solid platform upon which business can build its own ESG credentials.



A strategic location well connected to global markets, particularly the Asia-Pacific region, and a reputation for supply reliability that contributes to our competitive advantage.

To set Queensland up for continued success and industry growth, we are committed to:

1

Deploying the \$5.84 billion **Queensland Jobs Fund**, which brings together the Queensland Government's current flagship industry development programs to boost the state's industry footprint, create jobs and strengthen Queensland's economy.

The Queensland Jobs Fund includes programs such as the Queensland Renewable Energy and Hydrogen Jobs Fund, the Invested in Queensland program and the Industry Partnership Program. Its purpose is to:

- Back our existing industries and sustain jobs in our foundational areas of economic strength.
- Expand our existing industry footprint and create jobs, through innovation and growth in adjacent industries (e.g., agricultural cropping into biofuels).
- Attract new employers and create investment in Queensland.

2

Establishing a state-wide **Local Economic Opportunities Network (LEO)** to work with communities across the state to identify opportunities for economic diversification and promote these for investment consideration.

The LEO will help communities understand the risk and opportunities associated with decarbonisation. These opportunities come from leveraging the natural endowments, existing skills, and established supply chains associated with existing industries to create the new industries demanded in a decarbonising world.

Each of Queensland's regions will have a single point of contact who will take a place-based approach to making clear to government the economic aspirations of local communities and to provide information on government-wide initiatives related to decarbonisation.

For First Nations communities, local decision-making bodies provide one mechanism for engagement and development of a place-based approach that aligns with the Statement of Commitment to a reframed relationship between Aboriginal and Torres Strait Islander peoples and the Queensland Government.

3

Deploying our catalyst **Regional Economic Futures Fund** to deliver initiatives that help regional economic transformation in communities that will be directly impacted by the transition to a low-emission economy.

The Regional Economic Futures Fund will provide funding for specific projects in four regions:

- North West Minerals Province (and the economic corridor through to Townsville).
- Greater Whitsunday.
- Central Queensland.
- Darling Downs South-West and South Burnett.

These regions have been identified as they face higher impacts due to the prevalence of high-emitting industries or opportunities in emerging clean energy industries. Some communities within these regions also are reliant on coal-fired power stations for a significant proportion of economic activity.

Specific projects will be identified by Stakeholder Advisory Committees in each region. These committees will include local government, industry and community representatives. The committees will advise government on a Regional Transformation Plan and identify projects to inform the development of an implementation plan. Regional Transformation Plan outcomes will be enabled via coordinated infrastructure and land use planning in regions.

4

An accelerated program of **integrated land use and infrastructure planning** across regions via a coordinated framework for regional growth, enabling the delivery of the State Infrastructure Plan and the land use and infrastructure plans for each region.

5

Regional communities eager to seize the opportunities that come with **responsible and sustainable industry development**.

6

Continuing to deploy our **sector-wide industry development services**, including project facilitation, infrastructure delivery and supply chain development.

# 2032 Olympic and Paralympic Games



Queensland will be in the global spotlight before, during and after the 2032 Olympic and Paralympic Games in Brisbane. This provides immense opportunities to showcase our commitment to sustainable economic growth and a decarbonised future. We must act now to be ready for the investment, job and supply chain opportunities Brisbane 2032 will bring.

**N**OT ONLY WILL Brisbane 2032 be a hallmark event, it is also a demonstration of a new, more sustainable way of hosting Olympic and Paralympic events in the future. It will be the first 'climate positive' Games, with commitments made to ensuring that the impact of such a large-scale event is managed and mitigated effectively. It will be critical that Queensland is ready to deliver on this commitment, and that the value and supply chains supporting its delivery are centred on more efficient, sustainable and decarbonised ways of operation. We can unlock and showcase our commitment to a reframed relationship

with First Nations communities and the Yhurri Gurri Framework in an ESG conscious world in the lead up to, during and after the event.

Brisbane 2032, and its legacy, provides an opportunity to develop infrastructure to ensure the use of renewable energy and implement sustainability building ratings to meet the already agreed targets. In addition to this, we can drive growth in construction and demolition recycling, and the use of recycled products in building and refurbishment, ensuring that materials used can be recycled at their end of life, and that the event itself minimises waste.





# Queensland's industry development levers

**U**NDERPINNING OUR SUCCESS are a wide array of industry development levers used to accelerate the development and investment attractiveness of our industries, including:

- **Legislation** to support industry growth and economic activity through land acquisition, zoning, project facilitation and approvals, such as the Coordinator-General and Economic Development Queensland.
- **Policy and strategy** to clearly articulate our focus and commitment to economic transition, such as the Queensland Energy and Jobs Plan and the Queensland Hydrogen Industry Strategy.
- **Increased opportunities for local businesses** through promoting ESG investment, building industry capability and implementing the commitments under the Queensland Charter for Local Content.
- **Targeted financial assistance**, such as the Queensland Jobs Fund, offering catalyst funding for critical economic development initiatives.
- **Infrastructure delivery**, including common use infrastructure funding and integrated planning and delivery across all asset classes, from water to electricity to ports and road networks.
- **Facilitation**, including integrated case management across government and via the Coordinator-General to support navigation of approvals and impact mitigation processes for proponents.
- **Skills development**, including significant ongoing investment in education infrastructure and the training programs and pathways that will be critical to ensuring our workforce is prepared for the economic transition.
- **R&D and innovation** initiatives such as those identified through the Queensland Innovation Strategy.
- **Land use** certainty, through the delivery of statutory land use plans across each of our regions. By combining these statutory plans with Regional Infrastructure Plans the state will provide a clear foundation for regional growth, liveability and prosperity.
- **Contributing to 'social license'** by building the public consensus for change and tailoring project delivery to reflect and enhance this social license (e.g. through the Central Queensland Statement of Cooperation – a government and private sector commitment to decarbonisation pathways).

Queensland has the beautiful combination of wind and solar, you have hard-working, educated people and a great government steering into a green hydrogen future. Countries out there are beginning to move, but none with the speed and leadership of Queensland.

– Andrew “Twiggy” Forrest, Executive Chairman, Fortescue

# 50 years of delivering industry growth



Queenslanders can have confidence in this approach to industry development. It builds on the Queensland Government's proven track record of successful intervention and partnership with the private sector to proactively achieve economic growth and new industrial activity.



Accelerating the creation of high-value jobs in Queensland through major projects and driving local business participation in critical supply chains.



Getting our land use and infrastructure connections right by focusing on economic and social outcomes.



Working with business to seize decarbonisation opportunities, securing legacy investments that build new industries and uplift global supply chains.



Leveraging our land assets for emerging industries, amending regulatory settings to attract investment, and incentivising projects to open new industries and adopt new technologies.



Building strong industry and academia climates to pursue growth, capitalise on our strengths and meet the global demands of priority industries.



Working with local governments to identify economic opportunities that diversify regional economies and support the transition towards greener and more sustainable industries.

The Queensland economy has been shaped by targeted action and policy over the last five decades. It has grown from strength to strength, driven by robust partnerships between the public and private sectors and industry development initiatives that have unlocked new waves of opportunity throughout the state. We need to build on this strong foundation and pivot towards

the new trend of advanced industries and opportunities to ensure that Queensland is at the forefront of global markets.

We can harness the learnings of our past successes to ensure that the positive impacts of economic growth and transition are realised, and that our well-planned communities remain liveable and prosperous.

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## Primary and resources industry boom 1970s and 1980s

- Unlocked key resource basins such as the Bowen Basin and developed a world-leading mining industry, including connecting to global markets.
- Value added to our resource base through minerals processing.
- Supported agricultural supply chains and resilience.
- Value added to our agricultural base, particularly in relation to food processing and exports.
- Strengthened the role of the Coordinator-General through the *State Development and Public Works Organisation Act 1971*, following its establishment in the 1930s.

## Knowledge economy boom 1990s and 2000s

- Invested in significant R&D activities across a range of industries to enable the diversification of traditional sectors like manufacturing.
- Invested in new technologies and capability development to harness the benefits of technological change and the advancement of traditional sectors and activities.
- Invested in land and infrastructure to coordinate and fast track industrial development throughout the state.
- Exported our established mining expertise globally and brought in world-leading environmental and worker protections.
- Initial investments to deliver the Smart State Strategy to improve productivity and global competitiveness, which helped to foster commercialisation.
- Enabled the growth of high-tech industries, like biotechnology, and their application to add value to existing and emerging industries and economic activities.
- Pursued the deepening of value chains underpinning traditional industries, including the diversification of the manufacturing industry for the state.

## Innovation and entrepreneurship boom 2010s

- Launched the ‘Building Our Future Economy’ review, aimed at ensuring Queensland’s innovation system meets the many major economic, social and community challenges that will arise through digital and technological disruption in coming decades.
- Delivered the Advance Queensland strategy, including significant investment to drive a more diversified Queensland economy, strengthen regional growth and create jobs.
- Implemented industry strategies to build on competitive strengths and seize new opportunities in LNG, advanced manufacturing, aerospace, biofutures, biomedical, defence, and mining equipment, technology and services (METS).

## A sustainable economic future 2020-2030

- Pivoting towards leveraging existing industry strengths for more sustainable, decarbonised activities, including via the implementation of the Queensland Energy and Jobs Plan.
- Generating the globally cost-competitive renewable energy critical to underpinning our economy and liveability, including hydrogen and biofuels.
- Adding value to the critical mineral inputs we produce and that the world is demanding, including investing in battery industry development.
- Improving recycling in our value chains to improve competitiveness and reduce waste.
- Reducing the cost of investment through sharing risk and promoting common user infrastructure and co-location opportunities.
- Capitalising on our unique advantages and traditional industrial strengths in areas like manufacturing, biomedical, defence, aerospace and agriculture to generate new products and services in more sustainable ways.

# Sun Metals Corporation

The Sun Metals Townsville zinc refinery is aiming to become the first refinery in the world to produce green zinc — and is committed to powering its entire operations with 100% renewable electricity by 2040. Parent company Korea Zinc established the Ark Energy Corporation to decarbonise the energy supply of the entire group of companies, beginning with Sun Metals Corporation. Ark Energy will produce green hydrogen from a behind-the-meter connection to the co-located Sun Metals Solar Farm, which will power five hydrogen fuel-cell electric trucks (pictured), removing 1,300 tonnes of CO2 emissions every year. The company has received a \$5 million grant from the Queensland Government through its Hydrogen Industry Development Fund.







# Our new industry priorities

The Queensland Government is supporting a new wave of sustainable economic growth by focusing attention on unlocking the opportunity presented by new global demand driven by decarbonisation and our competitive advantages in the following priority areas.



**Renewable energy  
manufacturing  
and infrastructure  
development**



**Critical mineral  
processing,  
manufacturing and  
product development**



**Battery industry  
development**



**Green hydrogen**



**Circular economy  
including resource  
recovery and recycling**

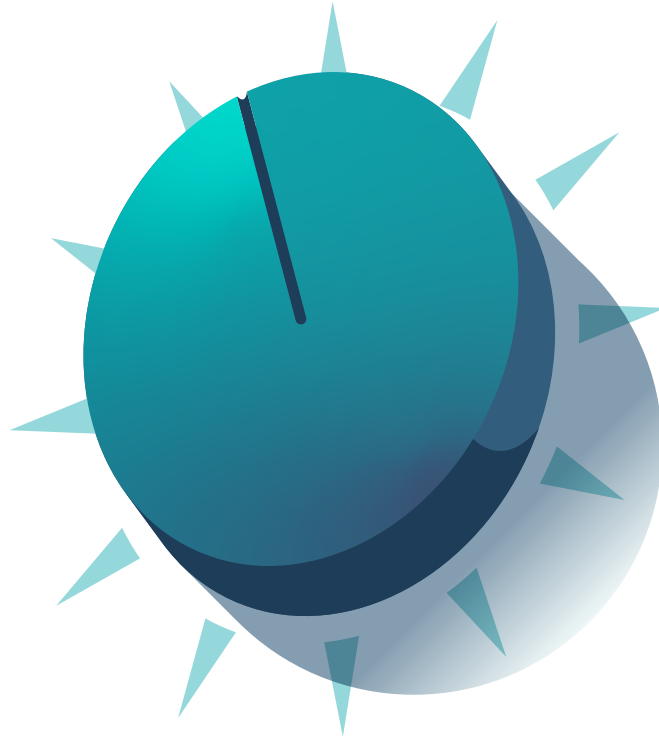


**Bioeconomy including  
biofuels and sustainable  
aviation fuel (SAF)**

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Our existing industry strengths and natural endowments position Queensland strongly to capitalise on global demand for more sustainable products and processes in existing and adjacent industries. We are committed to proactively supporting growth and

unlocking opportunities within these sectors to meet global demand for decarbonisation, and accelerate industry growth, and deliver the highly skilled jobs of the future.



# Renewable energy

As countries and industries move towards low-carbon practices, renewable energy commitments are being set to provide clarity and confidence to businesses and consumers.

**I** NCREASING RENEWABLE ENERGY supply will also sustain existing jobs in traditional manufacturing sectors, by facilitating the development of affordable, competitively priced energy.

Queensland Government actions in renewable energy include:

- Investing \$62 billion<sup>1</sup> between the public and private sectors into the state's energy system via the implementation of the Queensland Energy and Jobs Plan, which will support thousands of jobs and deepen the value of our supply chains supporting key industries.
- Establishing and operating Queensland Renewable Energy Zones across the state to capitalise on the natural advantages and transmission lines across different regions and unlock potential along the value and supply chains within them.
- Investing in the development of the Queensland SuperGrid, including the delivery of approximately 1,500 km of transmission lines from Brisbane up to North Queensland and out to Mt Isa. The SuperGrid will open up new renewable energy zones across Queensland and support the decarbonisation of metals processing.
- Facilitating the use of renewable energy as a key input to help make Queensland attractive to industrial growth and competitiveness of our export businesses in an ESG and climate responsive world.

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<sup>1</sup>Energy and Jobs Plan: Premier's 2022 State of the State address



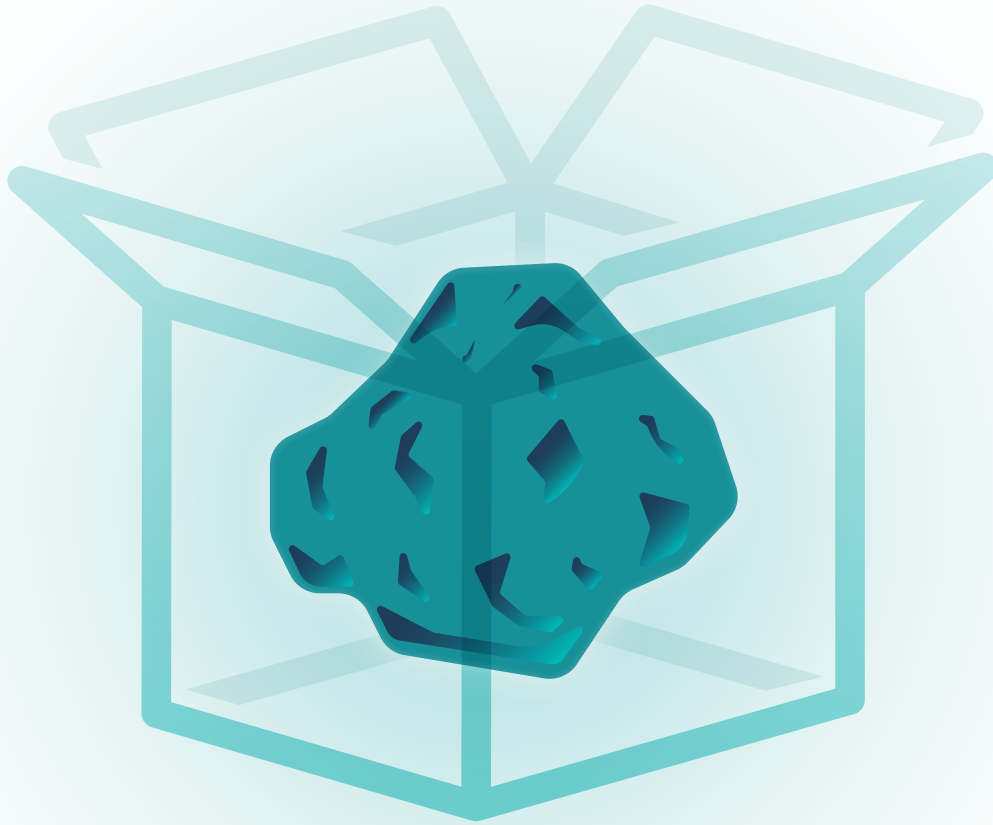


# Kidston Wind Farm

**Our Kidston stage 3 wind project is the final piece of our flagship Kidston Clean Energy Hub, which will comprise of solar, hydro and wind generation. It is not only economically and socially significant for the region, we are proud that it will contribute to Queensland’s renewable energy targets.**

**– James Harding, Chief Executive Officer, Genex Power**

The \$1.6 billion Kidston Clean Energy Hub, including the Kidston Wind Farm, will provide large-scale solar, pumped hydro storage and wind energy at a single location. When operational, it will enable generation, storage and dispatch of renewable energy on demand during peak periods.



# Critical minerals

The global demand for critical minerals is rapidly increasing given their key role in the development of modern technology and specialised equipment required to decarbonise global economies. Queensland's North-West Minerals Province is one of the world's richest mineral-producing regions with major deposits of copper, lead, zinc, nickel, cobalt, gold, graphite, vanadium, as well as silver and phosphate. The Queensland Resources Industry Development Plan (QRIDP) will be central to the pursuit of critical mineral opportunities across the state.

Queensland Government actions in critical minerals include:

- Expanding an Australian-first government-owned, common-user critical minerals demonstration facility to be built in Townsville. The \$75 million facility will be located at Cleveland Bay Industrial Park and will include a focus on proving up the commerciality of critical minerals in Queensland.
- Investing in exploration activities to improve scientific understanding and supply the valuable geoscience data needed by industry to help locate and define deposits for future production.
- Launching a pilot to examine the potential for the re-commercialisation of activities at the abandoned Wolfram Camp Mine via new critical minerals and targeted rehabilitation works.



# The Queensland Resources Common User Facility

The Queensland Government has allocated \$75 million to establish the Queensland Resources Common User Facility in Townsville. Initially targeting vanadium production, the facility will be designed and equipped to trial processes for a range of critical minerals and rare earths. The aim is to accelerate the development of commercial vanadium projects, promote investment in advanced mineral manufacturing opportunities, pilot mineral production processes, train staff on equipment and production processes, and enable development of supply chain and supporting industries in Queensland.



# Battery industry development

A growing focus on forms of energy that are less reliant on fossil fuels means that batteries and battery manufacturing are becoming increasingly important to the global economy. The ability to effectively store energy once it is generated via renewable sources is as important as the generation itself and is in high demand.

**D**EVELOPING QUEENSLAND'S BATTERY industry could generate up to \$1.3 billion of economic activity and 9,100 jobs by 2030<sup>2</sup>, with investment and support by both government and industry to meet this growing demand and leverage our state's natural and other competitive advantages.

Queensland Government actions to support battery manufacturing include:

- Committing investment, via the Queensland Energy and Jobs Plan, for Queensland's publicly owned energy businesses to invest in battery projects across the state that maximise local content for large-scale and community batteries.
  - Working in partnership with the Australian Government to facilitate an investment of up to \$100 million to establish an Australian Made Battery
- Precinct in Queensland. This precinct will bring together the expertise of industry and research institutions to commercialise battery technologies.
- Supporting the establishment of the Queensland Energy and Storage Technologies Hub (QUEST Hub) at the Queensland University of Technology Pilot Plant Precinct in Banyo, Brisbane via a \$15 million investment that leverages a further \$35 million in contributions from industry and university.
  - Investing \$21.7 million toward the establishment of a low carbon-footprint commercial-scale High Purity Alumina manufacturing plant in Gladstone. Products produced at the plant will supply high-technology products, including LED lighting, semiconductors, lithium-ion batteries, specialist ceramics and laser crystals.

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<sup>2</sup> Battery Industry Opportunities for Queensland Discussion Paper, January 2023



# QUEST Hub – Advancing Queensland’s energy storage technologies

The Queensland Government is proud to be collaborating with the Queensland University of Technology (QUT) and local industry partners to establish QUEST Hub. To be co-located with the National Battery Testing Centre at QUT’s Pilot Plant Precinct, QUEST Hub will build on existing battery research, development and testing to support the growth of a wider range of Queensland battery industries. In strengthening existing collaborations, QUEST Hub will attract emerging industry to Queensland by providing world-class capabilities, facilities and services to industry proponents.



# Green hydrogen

Global demand for renewable hydrogen is accelerating to support energy transition and domestic energy security. The investment and development needed to deliver this global demand will support the government's emission reduction target of net zero by 2050 as well as the ambitious renewable energy targets set out in the Queensland Energy and Jobs Plan. Modelling undertaken to explore the opportunity for Queensland has suggested that the state's hydrogen industry could be \$19 billion larger in 2040, creating 4,350 direct additional jobs.

**T**HE QUEENSLAND GOVERNMENT is committed to working with the private sector to accelerate the production, use and export of green hydrogen as part of the state's new wave of sustainable economic growth and future-facing industry development.

Queensland Government actions to facilitate green hydrogen opportunities include:

- Supporting Japan's largest oil company to start green hydrogen production in Brisbane. Japanese energy giant ENEOS officially opened the demonstration plant at its Bulwer Island site in Brisbane in early 2023.
- Supporting a strong pipeline of green hydrogen production, including facilitating the Fortescue Future Industries Green Energy Manufacturing Centre in Gladstone.
- Applying the land development and planning capability of specialised groups such as Economic

Development Queensland and the Office of the Coordinator-General, to ensure suitable land is available for development and the coordination and streamlining of development assessment processes.

- Establishing the Hydrogen Industry Development Fund, with over \$30 million committed to drive investment and accelerate development of domestic hydrogen projects.
- Investing more than \$50 million in facilities to service the emerging hydrogen-related industry training and skills development needs.
- The \$4.5 billion Queensland Renewable Energy and Hydrogen Jobs fund, to enable increased ownership of commercial renewable energy and hydrogen projects by government owned corporations as well as supporting infrastructure in partnership with the private sector.



# Fortescue Future Industries

**In developing projects that rely on Australia's incredible natural renewable resources, it is vital to include the voices of those who have looked after those resources for tens of thousands of years.**

**– Felicity Underhill, Australia East Director, Fortescue Future Industries**

**I**N 2021, FORTESCUE FUTURE Industries (FFI) 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 will establish Australia's first multi-gigawatt-scale electrolyser manufacturing facility, with an initial capacity of two gigawatts (GW) per annum – more than doubling current global production. Hundreds of jobs will be delivered over the project lifetime.

In November 2022, FFI signed an MOU with the First Nations Bailai, Gurang, Gooreng Gooreng, Taribelang

Bunda Peoples Aboriginal Corporation RNTBC (PCB) that commits to co-design of initiatives where shared values exist, including connection to culture, shared prosperity, community and economic development and project management.

FFI also plans to establish a Vocational Training and Employment centre (VTEC) in Queensland. 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.



# Circular economy including resource recovery and recycling

**R**EDUCING AND REUSING waste is a global priority. Demand for a more circular approach to material production, use, reuse and disposal is increasing rapidly, driven by the need to reduce landfill and its associated impacts on the environment. Development of a sustainable resource recovery and recycling industry is also central to transitioning to a more circular economy model in Queensland. In response to this, Queensland has set waste reduction targets for 2050 including:

- 25% reduction in household waste.
- 90% of waste is recovered and does not go to landfill.
- 75% recycling rates across all waste types.

Existing investment in the circular economy includes:

- Commitment to ongoing funding through the Waste Levy to facilitate industry development.

- Supporting delivery of 29 projects under the Resource Recovery Industry Development Program diverting up to 1.34 million tonnes of waste from landfill annually. This was almost 13% of waste created in 2018-19.
- Supporting ResourceCo BRRF Pty Ltd to establish a \$41 million resource recycling facility to create fuels from residual waste, which would otherwise go to landfill.
- Establishing the Queensland Recycling Modernisation Fund with \$40 million co-investment from the Queensland and Australian governments to create new or expanded facilities and increase manufacturing using recycled materials, while diverting more than 150,000 tonnes of waste from landfill annually.
- Supporting BlockTexx to set up a first-of-its-kind multi-fibre textile recycling plant in Woodridge.





# Disruptive Packaging

**We intend to expand our reach by simplifying how the product is recovered and recycled.**

**– Nathan Hall, Compliance and Produce Director, Disruptive Packaging**

**D**ISRUPTIVE PACKAGING IS revolutionising the industry with its fully recyclable UNiCOR packaging. Now, thanks to a \$275,000 resource recovery grant, the team is creating UNiCOR collection points all around Queensland. The collection points will start in South East Queensland and will expand as demand increases, building the infrastructure for this closed loop packaging solution. Developed over the last

four years, this innovative packaging material is 100% recyclable. The water-proof packaging is also replacing single-use wax cardboard, corflute and polystyrene, reducing the amount of non-recycleable packaging used by food producers, non-recycleable packaging that used to go to landfill at the end of its life. Used to package fresh produce and seafood, it's made from up to 70% natural earth materials and can be used multiple times.



# Bioeconomy

## including biofuels and sustainable aviation fuel (SAF)

Global demand for alternative sources of food and fuel is accelerating, driven by strong commitments to decarbonisation and increased use of more renewable resources. Biofuels are a cleaner, more sustainable alternative to traditional combustible fuels and their role in decarbonising Queensland's industrial supply chains is critical.

**Q**UEENSLAND IS IN A prime position to capitalise on the opportunity presented by growing global demand and use of waste and other by-products from traditional industry activity. We are positioned for a new wave of growth in higher-value industries, including the production of renewable diesel and SAF. The Queensland Government has invested and developed the bioeconomy through a number of initiatives, including:

- Expansion of the QUT Mackay Renewable Biocommodities Pilot Plant (based on the site of an operating sugar mill), with investment via the Industry Partnership Program.
- Delivery of Australia's first containerised shipping biofuel trial with shipping and logistics operator ANL. The trial has resulted in preliminary potential emissions reductions of 17%, as well as reductions in air and marine pollutants.
- Facilitating Oceania Biofuels' selection of Gladstone as the location for the development of a \$650 million SAF refinery, which will deliver 350 million litres of SAF and renewable diesel each year.
- Embedding sustainability criteria focused on demonstrating reduced greenhouse gas emissions and environmental sustainability outcomes that help mitigate any unintended environmental impacts of biofuel production.
- Supporting Jet Zero on a potential alcohol-to-jet SAF refinery that will use sugarcane waste to make SAF. Jet Zero has announced the commencement of their pre-feasibility study to determine the best site to establish their refining capability and are engaging with offtake partners to see their SAF used in aircraft across Australia and the world.



# Jet Zero

Queensland is leading the way in establishing a viable Sustainable Aviation Fuel (SAF) industry to fuel aircraft and contribute to decarbonisation targets for the state and Australia. SAF is one of the strongest levers available to airlines to reduce emissions and can be used in today's aircraft engines and fuel delivery systems with no required modifications.

**J**ET ZERO, WITH the support of the Queensland Government, Qantas, Airbus and LanzaJet's Alcohol-To-Jet conversion technology, is aiming to develop a refinery that will use agricultural by-products to make SAF.

When built, the facility will produce up to 100 million litres of SAF annually and transform ethanol from

agricultural waste into fuel for use in the domestic and international aviation marketplace.

In the short term Jet Zero Australia will be completing feasibility studies on a site in Queensland ahead of construction targeted for late 2024.



# Continuing support for our existing industries

We want all businesses to thrive in Queensland. As part of this, we're supporting critical industries that are already providing thousands of jobs for Queenslanders.

**I**N 2015 THE QUEENSLAND GOVERNMENT announced it would focus on six industries to drive the next wave of growth: advanced manufacturing, aerospace, biofutures, biomedical, defence, and mining equipment, technology and services (METS). Since then, additional industry strategies have come online to seize an economic opportunity or maintain competitiveness, such as resource recovery, space and beef processing.

Continued support of these industries is critical because they:

- Currently employ increasing numbers of workers, which will ensure jobs continue to grow as new and emerging sectors develop and offer long term employment opportunities in the state.
- Offer business and workforce opportunities in regional centres, which sustain and diversify local economies.

- Are fundamental strengths of our state and are the foundation for ongoing economic success. Supporting their success alongside growth in the sectors that will help us to decarbonise will ensure stronger economic performance across the board.

To enable this ongoing performance:

- Our critical industries will continue to access the services of the Department of State Development, Infrastructure, Local Government and Planning.
- Our multi-year industry roadmaps and strategies, developed in partnership with industry, will continue to be implemented.

We will develop information for our critical industries to support their transformation.



# Sanofi

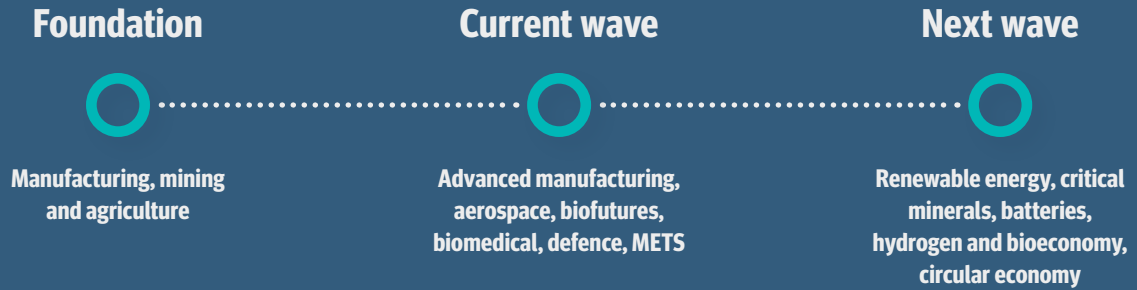
**We have been seduced from day one by the quality of the science that we saw here, but also very much seduced by the ‘one Queensland team’ approach. We’re also coming here to Queensland because of the vision of the government of Queensland and the universities, working together with the ambition to make Queensland a global biomedical hub.**

**– Dr Jean-Francois Toussaint, Global Head of Vaccine Research and Development, Sanofi.**

**A** \$280 MILLION PARTNERSHIP WITH the Queensland Government, Sanofi, University of Queensland and Griffith University, the Translational Science Hub (TSH) will be a global centre of excellence for biomedical science and research, with a particular focus on mRNA vaccine development.

Queensland’s expertise in infectious diseases, vaccinology and clinical infrastructure combined with the agility and collaborative approach by the Queensland Government and the universities were critical factors in Sanofi selecting Queensland as its preferred location.

We are ready for a new wave of economic growth in a decarbonised global economy. We will build on our strengths in existing industries and those adjacent:



Our state has benefited from previous transitions:



Now we move into a *new economic future* in a decarbonised global economy. We have the tools and levers available to realise growth:





