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The Department of Resources 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.

The 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. We recognise the contribution of First Nations peoples and communities to the State of Queensland and how this continues to enrich our society more broadly.

The world is transitioning to a low-carbon economy—and Queensland can fuel this future.

We have the mineral and energy resources below the ground, the renewable energy above the ground, and the skilled and innovative people to bring the world what it needs.

For Queensland's resources industry, a foundation stone of our economy, this will bring change but also exciting new opportunities.

Together, industry, government, and Queenslanders in communities across our state, can seize these new opportunities, support the world's transition, and provide jobs and prosperity for our future generations.

### **Annastacia Palaszczuk**

Premier of Queensland and Minister for the Olympics

# **Minister's foreword**



Honourable Scott Stewart MP
Minister for Resources

As I travel around our state, from Mount Isa, which was built on the back of copper, to the coal mines and communities in the Bowen Basin, to the farmlands and gasfields of Queensland's south-west, I hear the same message. The Queenslanders who live and work there tell me that our state wants and needs our resources industry, and the jobs and prosperity that come with it.

But they also want to protect our environment, and act on climate change.

Globally, momentum towards net zero emissions by 2050, demand for a sustainable resources industry, and an increasing emphasis on corporate social responsibility are both a challenge and an opportunity for our industry.

This plan is our response to this opportunity.

This is a plan that has been created by government, industry and communities. It lays out a smooth transitional path for the next 30 years for Queensland's resources industry and the businesses and communities it supports—a path to a sustainable, responsible industry that continues to grow and create jobs and prosperity, especially for our regions.

The greatest opportunity we have to achieve this vision is to accelerate our new economy minerals sector.

We already know that Queensland is home to many of the new economy minerals and metals that are critical to the production of renewable energy technologies such as solar panels and wind turbines, as well as grid-capacity batteries to store renewable energy. Our future opportunity is to move these resources from discovery to production to manufacturing—all in Queensland. We know that this reality won't happen overnight, but our commitment to build a new industry—from pit to product—all in Queensland is a vision we are 100 per cent committed to achieving.

My personal goal is in 10 years' time to be talking to local high school students across Queensland about their clear path to well-paid, secure jobs in the resources industry—jobs that allow them to stay in their communities.

Importantly, the plan doesn't shy away from the challenges.

Communities are demanding more from our resources industry. Companies must transparently demonstrate their commitment to environmental, social and corporate governance.

Together, industry and government must also continue to ensure the health and safety of workers. Industry must nurture its social licence through positive, productive coexistence with landholders and engaging and sharing project benefits with First Nations peoples.

Queensland has the renewable energy resources above the ground and the mineral resources markets need into the future. We have the human resources and innovation capability to mine, process and manufacture them sustainably.

This plan provides the path ahead for a transforming resources industry that will continue to create jobs and prosperity for generations to come—responsibly and sustainably.





# **Executive summary**

Queensland's resources industry has underpinned our state's economic development and prosperity for more than a century. Our metals, coal and gas industries have helped define our state and are part of Queensland's identity at home and abroad.

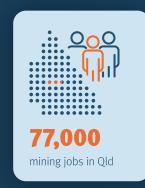
Every Queenslander benefits from our resources industry. Mining royalties help pay for government services like schools, hospitals and roads, as well as police, teachers and healthcare workers. The industry also supports thousands of regional businesses and jobs, and earns export revenue that grows our economy.

In the 2020–21 financial year, the resources industry contributed \$27.5 billion to Queensland's economy. This represented more than 8 per cent of the Queensland economy. The resources industry is also a major employer across Queensland, directly employing around 77,000 Queenslanders across the state. Around 70 per cent of resource industry jobs are located in regional areas.

Key to the success of our resources industry has been its ability to evolve and diversify to meet the needs of Queensland and the wider global economy. Beginning with minerals and metals (particularly gold), the Queensland resources industry moved on to develop the state's vast, high-quality coal resources to meet the needs of rapid growth in Asia. Over the past decade, the industry diversified itself once again to bring Queensland's coal seam gas resources to the international market, supporting Australia's rise to become one of the largest exporters of liquefied natural gas (LNG) in the world.

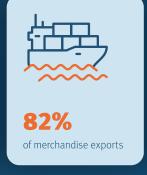
Today, we find the world is once again changing rapidly, driven by the gathering momentum behind decarbonising the global economy and the Queensland Government's own policy to achieve net zero emissions by 2050. The resources industry will need to evolve and diversify again to meet the needs of the Queensland economy and our international trade partners.

Queensland's resources industry must also respond to a number of other emerging global trends that will inevitably shape its future, such as growing investor and customer expectations regarding the industry's environmental, social and











governance (ESG) performance, and the disruption caused by increased automation.

These trends create great challenges for the resources industry, but they present even greater opportunities for transformation and diversification. New markets and opportunities will open up with continued strong economic growth in the

for the four quarters to March 2022

Indo-Pacific region, including new pockets of demand for our high-quality coal. The resources industry also has a critical role to play in global decarbonisation by providing the new economy minerals that global markets need to produce green technologies that will help them meet climate change targets.

Bridging the gap between the existing profile of the resources industry and the resources industry of the future will not happen without dedicated effort and partnership. Coordinated government effort and facilitation, coupled with focused industry action and investment, will allow Queensland to seize the opportunity to scale up new economy mineral developments and new processing and manufacturing capacity, well before global conditions begin to reduce demand for thermal coal and, eventually, metallurgical coal and gas.

This Queensland Resources Industry Development Plan is a whole-of-government plan that purposefully integrates and harmonises with other key Queensland Government plans. It sets out the government's ambition and actions to enable the resources industry to successfully transform by 2050. This plan's vision is for a resilient, responsible and sustainable Queensland resources industry that grows as it transforms.

To support this transformation, the plan outlines six key focus areas where government and industry need to work together to respond to emerging global trends. If we can collaborate on tackling these challenges, Queensland's industry, communities and economy will be rewarded with new opportunities.

### These six key focus areas are:



Grow and diversify the industry



Strengthen ESG credentials and protect the environment



Foster coexistence and sustainable communities



Ensure strong and genuine First Nations partnerships



Build a safe and resilient future workforce



Improve regulatory efficiency

Each focus area contains actions to be undertaken over the short to medium term to position Queensland's resources industry for long-term, sustainable growth over the next 30 years.

VISION—

A resilient, responsible and sustainable Queensland resources industry that grows as it transforms

# REALISING OUR VISION

Emerging **global trends** are reshaping our future and the resources industry must adapt



Decarbonisation



Corporate social responsibility



Scarcity and complexity of access to quality resources



Increasing consumer base in the Indo-Pacific



Geopolitics



Emerging innovations

**Key focus areas** identify actions needed to address trends and achieve our vision



Grow and diversif the industry



Strengthen ESG credentials and protect the environment



Foster coexistence and sustainable communities



Ensure strong and genuine First Nations partnerships



Build a safe and resilient future workforce



Improve regulatory efficiency

Delivering on the actions in this plan will achieve our **2050 outcomes** for the resources industry



Global recognition for Queensland as an ESG leader



Diversified, global supplier of new economy minerals



Making a greater contribution to Queensland's economy



Providing more high-quality, high-wage jobs and careers

# **Strategic outlook**

Queensland has an abundance of the minerals, metals and traditional resources—metallurgical and thermal coal and gas—that the world needs.

## Global trends affecting the resources industry

The world will change dramatically over the next three decades. In particular, there are six major trends that will reshape Queensland's resources industry:



**Decarbonisation** will continue to reshape commodity demand as the world seeks to address and limit the impacts of climate change by reducing emissions.



**Corporate social responsibility** considerations will increasingly influence investor and customer decisions as they seek ethical investments and products.



>> Together, demonstrable decarbonisation and corporate social responsibility actions are largely the **environmental**, **social and governance (ESG)** factors that investors and markets are considering when making investment and supply decisions. Transparent and independent demonstration of ESG credentials is becoming increasingly required to operate competitively as a jurisdiction and in business.



**The growing scarcity and complexity of access to quality resources** will drive companies to change their way of doing things, including shifting from simply extracting minerals to processing—and even reprocessing—minerals as part of emerging circular economy business models.



**An increasing consumer base in the Indo-Pacific** will further increase demand for Queensland's resources.



**Geopolitical instability** due to conflicting economic and political ideologies will increasingly have impacts on international trade and supply chains. Queensland's reputation for stability and supply reliability will benefit Queensland in an unpredictable geopolitical environment and drive onshoring of value-adding supply chains.



**Emerging innovations** will make mining safer, more productive and digitally focused, creating opportunities in mining equipment, technology and services (METS) and affecting employment patterns.

These trends create challenges and will require government and industry to adapt to new ways of doing business. But they also present unprecedented opportunities for Queensland's resources industry to expand, diversify and transform.

Queensland's coal and gas sectors are our state's traditional resource commodity strengths. To ensure these traditional strengths remain stronger for longer, both industry and government must take immediate steps to lower the emissions intensity of their extraction and embed emerging low-emission practices and technologies in the current portfolio of assets. Industry leadership in decarbonising operations and contributing to Queensland's emissions reductions targets will be essential to securing a long-term future for these commodities.

Decarbonisation of the global economy provides a significant opportunity for Queensland's resources industry to grow and diversify. Queensland can transform into a global leader by exploring for, mining and processing the new economy minerals required by economies across the globe to decarbonise, and seize the opportunity to add more value domestically through processing and advanced manufacturing (including the local manufacture of batteries).

## **Queensland Government climate targets**

The Queensland Government has committed to the following targets to reduce emissions and take strong action on climate change:

- >> 50 per cent renewable energy target by 2030
- >> 30 per cent emissions reduction below 2005 levels by 2030
- » net zero emissions by 2050.

For more information, visit des.qld.gov.au/climateaction

Global market developments will continue to shape demand for Queensland's resources, providing opportunities to further diversify Queensland's resources industry and export partners. Growing economies within the Indo-Pacific region will see a growth in demand for Queensland's high-quality resources, while demand for ethically sourced resources—such as from Europe and North America—will provide a significant opportunity for Queensland resource companies that can prove strong, independent ESG credentials and resource provenance.

Opportunity for further diversification of the resources industry comes from capitalising on Queensland's growing mining equipment, technology and services (METS) sector's innovations, which also pay dividends in boosting productivity, increasing worker safety, and growing export value. The METS sector will increasingly play an important role in developing the technology necessary for the industry to reduce its emissions.

If government and industry work collaboratively and quickly to achieve these outcomes, the industry will successfully transform, ensuring that it makes a greater contribution to Queensland's economic growth and provides high-quality jobs for Queenslanders for decades to come. This change will provide significant benefits to regional Queenslanders and their communities, with resource companies, other industries and the communities in which they operate coexisting successfully.

And while the sector's transformation will lead to changes in the way industry operates, the overall result will be a more resilient and diversified Queensland resources industry that is well positioned for growth now and beyond 2050.

## New economy minerals



Supplying the minerals, metals and equipment needed to decarbonise the global economy and meet emissions targets



3x-6x increase

in projected global demand as the world moves to net zero emissions



**34%**of total exploration spend in Queensland between 2017 and 2021



17%

of the **value of Queensland's resources industry exports** in the two years to March 2022

Queensland is home to many of the new economy minerals and metals that the world needs to decarbonise. These minerals and metals are critical in the production of renewable energy technologies such as solar panels and wind turbines, as well as the grid storage batteries required to store the energy when the sun goes down and the wind eases.

The opportunity that new economy minerals present to Queensland is immense. The International Energy Agency estimates that demand for new economy minerals will increase over the years to 2050, tripling under current global measures to reduce emissions, and increasing by up to six times if efforts to achieve net zero emissions by 2050 escalate.<sup>1</sup>

Queensland's resources sector must move quickly to capitalise on this demand by supplying the minerals and metals the world needs to decarbonise in line with emissions targets. A failure to do so will impact the world's ability to fulfil its decarbonisation ambitions, and slow the development of more low-emission technologies, including electric vehicles, renewable energy components and batteries.

<sup>1</sup> IEA (2021) World Energy Outlook 2021, page 271. https://www.iea.org/reports/world-energy-outlook-2021

The greatest contribution Queensland can make to meeting global emissions targets is to sustainably mine, process, manufacture and supply the new economy minerals, metals and equipment needed to decarbonise the global economy.



### Copper

- » Solar and wind technology
- Electric vehicles and batteries, and other energy storage systems
- » Infrastructure for transmitting electricity



#### Vanadium

- Emerging battery technologies, especially those used for gridscale electricity storage
- » Important for a range of defence technologies
- » Used to manufacture highstrength steel alloys



#### Aluminium

- » Important input into the manufacture of solar panels
- Electric vehicles and batteries, and other energy storage systems
- » Used to manufacture aircraft



#### Cobalt

- » Energy storage, especially lithium-ion technology batteries
- Wind turbine technology, including their blades



## Graphite

- » Electric vehicles and battery storage
- » Solar technology



#### Tungsten

- » Heavy metal alloys
- Important input into manufacturing the turbines in jet engines



#### Zinc

- > Used for galvanising metals, including iron and steel
- » An input into batteries



#### Nickel

- > Used across a range of battery technologies
- » Manufacturing stainless steel

#### Coal

Queensland coal has powered economic growth at home and abroad for decades. Our thermal coal has kept the lights on in Queensland homes and across the globe, and our high-quality metallurgical coal has helped produce the steel that has built the powerhouse economies of Japan, South Korea and China.

There are many views about the future of coal. The market's attitude to coal continues to evolve as countries seek to limit emissions in response to climate change. Banks, insurance companies, and investors, including superannuation funds, are all closely considering their exposure to fossil fuel projects, both existing and new. Coal projects in Queensland will continue to be supported as long as they stack up economically, environmentally, and socially. The Queensland Government will continue to monitor demand for coal closely and consider any necessary future action to ensure communities and workers are supported.

While the global market for thermal coal is likely to decline as countries choose their own path to reduce emissions, demand from the fast-developing countries in the Indo-Pacific region could create pockets of future growth. The high quality of our thermal coal means that Queensland is well placed to respond to these opportunities.

Demand for metallurgical coal is expected to be stronger for longer than thermal coal. This is because the steelmaking process that uses metallurgical coal does not face as many immediate, low-emission alternatives as the thermal coal used to produce electricity. Steel will also remain in strong demand, including for renewable energy equipment such as wind turbines.

The future opportunities for both thermal and metallurgical coal will be supported further by mines decarbonising their operations. The more Queensland's coal mines can reduce their operational emissions, the more competitive they can remain. Equally important, this decarbonisation will support Queensland in achieving its emissions reductions targets in 2030 and 2050.

#### Metallurgical coal



Queensland's greatest contributor to export revenue

# about half

the value of all Queensland resources industry exports



accounts for approximately

65%

of all coal produced in Queensland

#### Thermal coal



Ahout

**70%** 

of Queensland's thermal coal is exported



accounts for approximately

35%

of all coal produced in Queensland

#### Gas

Queensland's gas industry is an example of how well the Queensland resources industry can pivot to meet the global market's changing needs. This previously small industry has transformed into an export powerhouse, generating more than \$80 billion in export earnings and making Australia one of the largest exporters of liquefied natural gas (LNG) in the world.

As the world continues to decarbonise its energy system, Queensland's gas will continue to support greater renewable energy generation both in Australia and internationally by assisting with grid reliability and security. Gas will also continue to be a vital feedstock for fertiliser production and many manufacturing processes, such as plastics and polymers, textiles, paints, and dyes.

Future global demand for gas will be shaped by the energy transition, and consideration will need to be given to developing new sources of gas supply to meet domestic and international needs as existing gas reserves decline between now and 2050, such as through the Bowen Basin pipeline study.

The emerging hydrogen industry will also create opportunities for Queensland to grow new markets and utilise its expertise in gas supply for hydrogen development both domestically and internationally.





## Bowen Basin pipeline study

Gas is critical to Queensland's manufacturing sector. A more affordable gas supply will support jobs in our supply chain and industries as well as providing gas to firm electricity supplies, allowing the integration of greater volumes of renewable electricity.

Increasing supply to the east coast will not only mean more affordable gas for domestic customers but will also provide more royalties and jobs for Queenslanders.

That is why the Queensland Government is undertaking a study to investigate potential Bowen Basin pipeline pathways, ways to optimise the Bowen Basin gas resources and opportunities to use fugitive emissions from coal mines to help Queensland transition to a low-carbon economy.

This study is expected to be completed in late 2022.



# A resources plan for Queensland

This Queensland Resources Industry Development Plan outlines six key focus areas where government and industry need to work together to address and respond to key global emerging trends. If we can collaborate on tackling these challenges, Queensland's industry, communities and economy will be rewarded with new opportunities.

These six key focus areas are:

- **1.** grow and diversify the industry
- 2. strengthen our ESG credentials and protect the environment
- **3.** foster coexistence and sustainable communities
- **4.** ensure strong and genuine First Nations partnerships
- 5. build a safe and resilient future workforce
- **6.** improve regulatory efficiency.

Each focus area contains actions to be undertaken over the short and medium-term to position Queensland's resources industry for long-term, sustainable growth over the next 30 years.

With concerted and coordinated effort from both industry and the Queensland Government, we can achieve our shared vision of a resilient, responsible and sustainable resources industry that grows as it transforms.



## Whole-of-plan action

#### **ACTION**

 Establish a Ministerial Queensland Resources Industry Development Plan Advisory Group

#### LEAD AGENCY AND TIMELINE

Lead: Government (Department of Resources)
When: Ongoing

#### DESCRIPTION

The Queensland Government will establish a Ministerial Queensland Resources Industry Development Plan Advisory Group to monitor, guide and advise on implementation of government and industry actions and expectations agreed to in the plan.

The group will meet at least twice a year, at rotating locations across Queensland. The group will consist of a core membership of government and industry peak bodies and representatives invited by the Minister for Resources. Other community and stakeholder groups will be invited to attend where the focus of the agenda is relevant to those stakeholders.

The group will be governed by a terms of reference and will be a key mechanism to ensuring the plan fulfils its ambitions by driving ongoing engagement with all stakeholders.

# Monitoring and reporting

The Queensland Resources Industry Development Plan is intended to be a living document, reviewed and iterated at intervals to respond to emerging industry and community stakeholder needs. The actions in this plan will be monitored and progress reported on a public website, with new actions added as issues arise. This public website will also provide links to other government initiatives that work together with the Queensland Resources Industry Development Plan to support the resources industry's growth, sustainability and diversification.

To provide a mechanism for ongoing engagement and accountability, a Queensland Resources Industry Development Plan Ministerial Advisory Group will be established. This group will be governed by terms of reference and chaired by the Minister for Resources, with representation from each of the peak organisations—the Association of Mining and Exploration Companies, Australian Petroleum Production and Exploration Association, Queensland Exploration Council, and Queensland Resources Council—as well as other community and

stakeholder groups. This will ensure that implementation progress is shared and emerging policy and reforms continue to be collaboratively developed. It will also provide industry with a structured way to share with government how they are delivering on expectations.



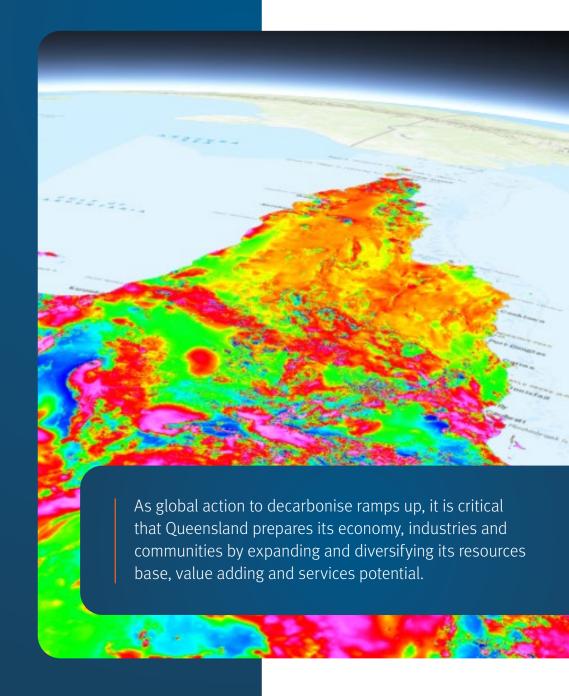
## **KEY FOCUS AREA 1:**

# **Grow and diversify the industry**

Outcomes for Queensland's resources industry by 2050:

- >>> The new economy minerals industry is supporting a vibrant processing and value-adding sector.
- >>> We are the global supplier of choice for premium commodities that are critical for low-emission technologies and we have supported global decarbonisation.
- >>> The METS industry is solving many global industry problems and is a major contributor to the Queensland economy.
- >>> Efficient exploration is driven by world-class data and digital technologies, including real-time digital earth visualisation.
- >>> Queensland's traditional resources strengths have remained competitive for longer by decarbonising their operations and taking advantage of new pockets of demand growth in fast growing Indo-Pacific economies.

To achieve these outcomes, the Queensland Government and resources industry must work in partnership to grow and diversify the resources industry. We will attract investment, and extend and strengthen supply chains, to create a new wave of industrialisation in Queensland regions based on new economy minerals mining, processing, value adding and manufacturing.



## **Exploration is critical**

An immediate priority for the Queensland Government is capitalising on the significant increase in demand for new economy minerals. Some new economy minerals such as copper, zinc and aluminium have been mined in Queensland for decades. Others such as vanadium—a material used for large-scale stationary batteries—are about to be mined for the first time.

The Queensland Government is committed to building and supporting a new economy minerals supply chain in Queensland through expanded mineral processing and manufacturing capacity. To achieve this ambition for the future, we must lay the foundations for success today.

A critical first step will be expanding the Queensland Government's support for exploration. That is why the Queensland Government is investing \$42.6 million in exploration and associated geological science that will catalyse the next frontier discovery, including \$22.6 million for the Collaborative Exploration Initiative. This funding will allow the Queensland Government to:

- provide strong and concerted support for exploration and discovery of new deposits
- >> fast-track new development approvals
- >> assist research and development of innovative mining and exploration techniques, including circular economy opportunities.

# Supporting new economy minerals projects

Successful growth and diversification of Queensland's resources industry relies heavily on industry and government working together effectively to stand up new economy mineral development projects. This will involve overcoming regulatory barriers and de-risking through collaboration, including through common user infrastructure.

Government has long supported the development of common user infrastructure, such as roads, rail, ports, and electricity, to stimulate investment and assist major

The Queensland Government has committed at least \$10 million to establishing a common user demonstration minerals processing facility. The first mineral that will be processed through the facility will be vanadium.

resource developments to proceed. While traditional common user infrastructure will remain important, very different infrastructure and processes are needed to unlock the value of and extract new economy minerals in Queensland.

A key risk is not knowing whether the proposed new processes will work at the commercial production scale.

That is why the Queensland Government is supporting industry by constructing and making available a common user demonstration minerals processing facility that will minimise development risks and cost risks to industry while maximising the benefits and opportunities from a single facility.

Government is committed to ensuring the industry policy, common user infrastructure, incentives and regulation exist to facilitate not only growth in new economy mineral exploration and extraction, but also expansion into value-adding industries across Queensland.

# Maximising the commercial opportunity of abandoned mines

The Queensland Government is developing principles, pilots and research and development to support the re-commercialisation, and where appropriate, repurposing, of abandoned mines provided it is in the public benefit and delivers net environmental benefit.

There are around 120 significant abandoned mines in Queensland, and the Queensland Government spends significant funds annually to mitigate and manage the risks and impacts associated with these mines. Some of these sites have economic potential due to remaining resources and by-products that are increasingly of interest to prospective investors due to rising commodity demand, site characteristics, new technologies and circular economy opportunities.

# METS, renewable energy, batteries and advanced manufacturing

There is immense opportunity for Queensland to provide the new economy minerals, such as copper, zinc, vanadium and cobalt, needed to build renewable energy generation and Battery Energy Storage Systems (BESS) needed here and globally.

Significant new investments are needed in Queensland to meet the forecast demand for renewable energy generation required to achieve our emission reduction targets. Where possible, the Queensland Government will leverage our natural advantage to help build new low-cost, home-grown renewable energy and BESS for Queensland's electricity system. The local benefit opportunities are being further explored through the development of the Queensland Energy Plan, to be released later in 2022.

Alongside the Queensland Energy Plan, the Queensland Government is developing a multi-technology Queensland Battery Industry Strategy. Over the next five years, the strategy will focus on growing a local value chain for our battery minerals, focusing on the development of battery chemicals and advanced materials manufacturing. Over time, as our capabilities grow, Queensland will become home to battery cell manufacturing, providing not only regional economic development outcomes but also the highly skilled jobs of the future.

Growing Queensland's world-leading METS sector is fundamental to driving the diversification of our resources sector and capitalise on value-adding opportunities in renewables and BESS. The Queensland Government's active support and funding of our local METS businesses and researchers has made it the largest in Australia. It supports more than 800 companies, worth \$7.2 billion, and employs about 20,000 Queenslanders. The market focus on reducing emissions and other environmental outcomes, extraction of difficult-to-access resources and demands around productivity and safety, position Queensland as a primary global destination for mining innovation. The Queensland Government will provide \$1.4 million in funding over four years until 2024–25 and refresh the Queensland METS

10-Year Roadmap and Action Plan to ensure it is supporting the sector to grow and respond to critical and emerging issues.

The updated Queensland Government Advanced Manufacturing 10-Year Roadmap and Action Plan will continue to support manufacturing in mining industry sectors. This aims to transform the industry by adopting industry 4.0 technologies, systems, practices and processes. Advanced manufacturing in Queensland will diversify and benefit from Queensland's abundance of new economy minerals.

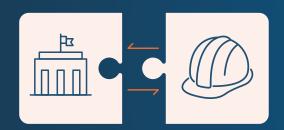
The Queensland Government will also investigate partnering with the Australian Government to establish specialist Battery Manufacturing Precincts in Queensland, and to create a Powering Australia Industry Growth Centre to provide advanced technology and skills development to businesses looking to locally manufacture renewable energy technologies.

# **Supporting traditional commodities**

While Queensland's coal and gas sectors will continue to be key strengths of the resources industry over coming decades, they are facing some challenges.

The global trend towards decarbonisation is driving resources companies—particularly coal and gas operators—to consider ways to reduce emissions to remain competitive in the global market. This includes investigations into carbon capture, use and storage technologies and the electrification of mine sites.

Another challenge is ensuring adequate gas supplies for the domestic market. This is critical as gas is a key enabler in both renewable energy—as it supports grid reliability and security—and domestic manufacturing. The government will continue to issue acreage with domestic supply conditions to deliver gas to meet domestic market needs.



## Government and industry collaboration

Both government and industry have an important role to play in **growing and diversifying the resources industry**.

## **Government commitments**

- >> Ensure that industry policy nurtures new commercial activity across new economy mineral value-adding supply chains.
- >> Facilitate common user infrastructure—where the case for government intervention is clearly made—to support sector-wide growth and sustainable public benefit.
- >> Foster investment in our local value-adding supply chains and promote Queensland opportunities, particularly in regional communities and for small and medium-size businesses.
- >> Investigate the feasibility of re-commercialising abandoned mines and the market needs required to support it, including circular economy opportunities.
- >> Investigate opportunities to bring more gas to market to ensure adequate gas supplies for domestic use.
- >> Investigate carbon capture, use and storage by continuing to release suitably unconstrained land under the *Greenhouse Gas Storage Act 2009* as part of the Queensland Exploration Program.
- >> Support the continued development of Queensland's world-leading METS sector and its ability to export its expertise to the world.
- >> Ensure that data on Queensland's resources potential is easily accessible and promotes the discovery and development of new resource projects.

## **Expectations of industry**

- >> Work with government to attract investment and extend and strengthen supply chains.
- >> Collaborate to identify opportunities for common user infrastructure and shared benefits of intellectual property.
- >> Actively explore and develop tenures to optimise the state's resources for the benefit of all Queenslanders.
- >> Provide high-quality information to government to enable greater opportunities for collaboration, innovation and exploration through shared and open datasets.



# Actions for key focus area 1: **Grow and diversify the industry**

ACTION		LEAD AGENCY AND TIMELINE	DESCRIPTION	
2. \$22.6 million Queensland's Exploration In	Collaborative	Lead: Government (Department of Resources) When: 2022–27	Finding the deposits that will deliver to market the new economy minerals that the world needs to decarbonise is a key opportunity for Queensland.  The Queensland Government will increase investment to the Collaborative Exploration Initiative (CEI) to \$22.6 million over the next five years to support Queensland's exploration companies to discover the future mines to produce the minerals and metals that the world needs.	
3. \$10 million for for Discovery	Geophysics	Lead: Government (Department of Resources) When: 2022–24	It is essential that prospective investors and mineral exploration companies operating in Queensland have a strong 'big picture' understanding of the state's geology.  The Queensland Government will invest \$10 million in geophysical data such as aeromagnetics, gravity, and magnetotellurics, which are essential for the discovery of mineral systems underground (such as the majority of those in outback Queensland), to help build a picture for developers and investors.  The data will be freely and publicly available through the Geological Survey of Queensland's Open Data Portal.	
	better defining our mineral potential	Lead: Government (Department of Resources) When: 2022–24	The Queensland Government will invest \$5 million in geoscience research on existing copper, cobalt, rare earth, indium and other new economy mineral deposits to better understand their occurrence and distribution. This will provide the resources sector with the tools they need to overcome challenges and develop new techniques to aid exploration, discovery, and extraction of minerals. It is increasingly essential as the frontier for discovery moves into deeper and more difficult terrains, while the demand for new economy minerals increases exponentially.	
5. \$5 million for economy in m		Lead: Government (Department of Resources) When: 2022–24	The circular economy works to use resources at their highest value for as long as possible, and design out waste. This initiative will include programs to determine the extent to which valuable minerals can be extracted by reusing waste from existing resources-related activities—for example, the tailings of current and previously operated mines.  The Queensland Government will invest \$5 million to help prepare Queensland miners to optimise their ability to access mineral markets, customers and investors who are coming under increased pressure to demonstrate with rigour that their raw material inputs have been obtained consistent with high ESG standards, in particular with minimal environmental disturbance and maximum environmental sustainability.	

ACTION	LEAD AGENCY AND TIMELINE	DESCRIPTION
6. Investigate promotion strategies for Queensland's new economy minerals	Lead: Government (Department of Resources) When: Ongoing	The resources industry will need specialist promotion, engagement and advocacy to capitalise effectively on shifts in both the global economy and the industry.  Multiple strategies could be used to promote and advocate our new economy minerals to international markets, particularly the Indo-Pacific, Europe and North America.  The Queensland Government will investigate whole-of-government promotion strategies to take full advantage of shifts in the global economy and the local resources industry.
7. Re-commercialising abandoned mine pilot program	Lead: Government (Department of Resources) When: 2022–23	The Queensland Government has commenced a pilot program to re-commercialise the area that includes the former Wolfram Camp mine, Bamford Hill mine, and surrounding exploration areas. Learnings from this competitive tender process will help to inform the process for future releases.  Queensland's abandoned mines portfolio has considerable potential for recommercialisation. This is a growing area of commercial interest as investors increasingly consider how to mine with reduced impacts and the benefits of the circular economy.
8. Establish abandoned mines recommercialisation principles	Lead: Government (Department of Resources, Department of Environment and Science, and Queensland Treasury) When: 2022–23	The Queensland Government will establish abandoned mines re-commercialisation principles to guide and inform future re-commercialisation decisions to ensure that they deliver:  » in the public benefit  » net environmental improvement  » economic performance.  Agencies will consult with the independent Rehabilitation Commissioner and industry in developing these principles.
9. \$5 million to develop a Queensland Battery Industry Strategy	Lead: Government (Department of State Development, Infrastructure, Local Government and Planning, and Department of Regional Development, Manufacturing and Water)  When: 2022–27	The Queensland Government will invest \$5 million to develop the Queensland Battery Industry Strategy.  This strategy will outline actions to seize the opportunities that this supply chain offers and integrate Queensland's efforts with work being done nationally. Growing a battery industry in Queensland will bring economic development and employment opportunities for regional Queensland by extending the local supply chain for new economy minerals, particularly the development of battery chemicals and possibly multi-technology battery manufacturing.  Leveraging our new economy minerals—such as copper, zinc, vanadium and cobalt—and battery manufacturing capabilities in Queensland will be important for the growth of renewable energy generation and Battery Energy Storage Systems as part of the state's future electricity mix.



# Actions for key focus area 1: **Grow and diversify the industry** (continued)

ACTION	LEAD AGENCY AND TIMELINE	DESCRIPTION
10. Rent deferral for new economy minerals projects	Lead: Government (Department of Resources) When: 2022–23	To help incubate and accelerate development of the new economy minerals industry, the Queensland Government will develop and implement a framework to allow the Minister for Resources to approve the deferral of the first year's rent for new economy mineral mining leases that meet certain criteria. This deferral will enable proponents to redirect funds towards their project during a time that is critically cash-flow dependent and deliver an improved chance of success.  Any deferral that a proponent receives would need to be paid back to the state over an agreed number of years. The proponent would need to prove that the amount of rent deferred will be expended on project start-up costs and development to the value of the deferred annual rent, which could be a condition of the grant of the mining lease.
11. Facilitate and investigate common user infrastructure	Lead: <b>Government</b> When: <b>Ongoing</b>	The Queensland Government has long supported the development of common user infrastructure—such as roads, rail, ports, and electricity—to stimulate investment and assist major resource developments to proceed. While traditional common user infrastructure will remain important, very different infrastructure will be needed to extract and process new economy minerals. Further, the systems and digital platforms required to support regulatory efficiency and data optimisation will be the new frontier of common user infrastructure.  The Queensland Government will continue to investigate the feasibility and financial sustainability of common user infrastructure opportunities in partnership with industry. Where government support for this infrastructure is required to help de-risk development, improve project viability, and attract additional investment, proponents must be able to demonstrate how it will support industry and provide sustainable public benefits, and support jobs in regional Queensland.
12. Deliver new economy mineral common user demonstration processing facility for vanadium	Lead: Government (Queensland Treasury and Department of Resources) When: 2022–23	The Queensland Government will provide at least \$10 million from the \$520 million Invested in Queensland program to a new economy minerals common user facility, with the final amount depending on the outcome of the construction tender.  The facility will be used by multiple, smaller mining companies that do not have the available capital to set up their own processing facilities. The initial mineral that will be processed in the facility is vanadium.  By supporting the development of common user infrastructure, the Queensland Government is helping to de-risk investment by these small and innovative miners and helping attract investor interest and future off-take agreements.

ACTION	LEAD AGENCY AND TIMELINE	DESCRIPTION
13. Complete the Bowen Basin pipeline study	Lead: Government (Department of Resources) When: 2022	The Queensland Government is undertaking a study investigating potential Bowen Basin pipeline pathways, to optimise the Bowen Basin gas resources, and opportunities to use fugitive emissions from coal mines to help Queensland transition to a low-carbon economy. A concept study completed in November 2021 confirmed:  *** there is need to secure additional gas to meet demand  *** the Bowen Basin is the prime candidate if the appropriate infrastructure is put in place  *** there is opportunity to capture fugitive emissions from coal mines in the Bowen Basin.  Building on the results of this study, a structured market engagement is now underway to determine the commerciality of a pipeline in the Bowen Basin. This work is expected to be completed by the end of 2022. The Queensland Government will then consider the findings of this study and determine the appropriate next steps.
14. Enabling hydrogen and other clean energy sources review	Lead: Government (Department of Energy and Public Works) When: 2022–24	Hydrogen, its carriers, and other carbon-neutral gases, such as biogas and biomethane, are clean energy resources that will be vital for Queensland's and the world's transition to net zero emissions by 2050. Developing an efficient and facilitative regulatory environment for hydrogen and other clean energy resources will be an important step in supporting the expansion of these industries.  The draft plan proposed a review of the <i>Petroleum and Gas (Production and Safety) Act 2004</i> ; however, a broader focus beyond this Act will assist in identifying the most effective regulatory processes for the streamlined assessment of hydrogen projects in Queensland. The Queensland Government will complete a review of relevant regulatory and assessment frameworks to focus on delivering a world-class regulatory assessment process for hydrogen that provides certainty for investors and the community.
15. Investigate carbon capture, use and storage (CCUS)	Lead: Government (Department of Resources) When: Ongoing	The Queensland Government will identify areas suitable for greenhouse gas storage, including areas for carbon storage feasibility exploration (under the <i>Greenhouse Gas Storage Act 2009</i> ) in the Queensland Exploration Program.  This will involve a competitive tender process for relevant permits. Government will not issue permits until robust environmental impact assessments have been completed.  CCUS technology and innovation enable greenhouse gas emissions to be stored geologically. This presents opportunities for emissions-intensive industries like power generation and resources to decarbonise their operations.



# Actions for key focus area 1: **Grow and diversify the industry** (continued)

ACTION	LEAD AGENCY AND TIMELINE	DESCRIPTION
16. Refresh and implement the Queensland METS 10-Year Roadmap and Action Plan	Lead: Government (Department of State Development, Infrastructure, Local Government and Planning) When: 2017–27	In 2017, the Queensland Government launched the Queensland METS 10-Year Roadmap and Action Plan. The plan is halfway through its implementation and will be refreshed before the end of 2022 to ensure that the priorities and actions going forward are responsive to the METS industry's emerging needs and challenges.  As part of the roadmap's implementation, the government has committed \$1.4 million in funding over four years to 2024–25 to support the continued growth of the METS sector.
17. \$3 million for METS support	Lead: Government (Department of State Development, Infrastructure, Local Government and Planning) When: 2022–25	The Queensland Government will invest \$2.67 million in the METS Collaborative Project Fund and continue to bring together METS subject matter experts, researchers, government agencies, resource companies, and industry bodies to address challenges facing the resources industry. Emerging priorities for the fund will include environmental challenges, emissions management, renewable energy, and safety. Funding through the current program has encouraged industry partners to collaborate by reducing some of their investment risk.  The Queensland Government will also invest \$0.315 million into the METS Accelerator to help METS companies to engage with resources companies by providing financial support to take a perceived risk and try a new technology. To date, METS Accelerator partnerships have resulted in technologies that have been commercial successes and assisted many Queensland resource companies to improve their operations.
18. \$5.7 million to expand the Resources Centre of Excellence	Lead: Government (Department of Resources) When: 2022–25	The Queensland Government will provide the Resources Centre of Excellence (RCOE) in Mackay with \$5.7 million to extend the capacity of their highly successful resources training and METS incubator facility by developing a new Future Industries Delivery Hub.  The hub will deliver a new facility that meets current and emerging resources industry needs, as well as continue to embed the RCOE's successful model of connecting the brightest minds in resources research, technology, education, and METS to shape the resources industry of the future.

# Other Queensland Government initiatives supporting the Queensland resources industry

#### Continue to support regional manufacturing hubs

Regional manufacturing hubs in Cairns, Townsville, Rockhampton, Gladstone, Mackay and the Gold Coast support the growth of regional manufacturers. The hub program will create more than 3,350 jobs and an estimated \$153 million of economic growth by mid-2022. The Manufacturing Hubs Grants Program provides \$13.5 million of funding to eligible businesses in the Cairns, Townsville, and Central Queensland regions. This grants program will remain open to eligible applicants until June 2022 or until the program is fully subscribed.

# Continue to implement the Queensland Government's Advanced Manufacturing 10-Year Roadmap and Action Plan

Since the 2016 release of the Advanced Manufacturing 10-Year Roadmap and Action Plan, the government has supported Queensland manufacturers to transform the industry by adopting industry 4.0 technologies, systems, practices and processes. Queensland's abundance of new economy minerals provides significant opportunities for Queensland's manufacturing sector to value-add locally. The Department of Regional Development, Manufacturing and Water will continue to implement the Advanced Manufacturing Roadmap and Action Plan.

### Driving innovation through Advance Queensland

After seven years of delivering Advance Queensland, the Queensland Government is committed to building on the success of Advance Queensland as a key driver of economic growth and jobs, particularly in our regions.

Advance Queensland is driving innovation opportunities for the state's innovators and companies to compete globally, attract investment and reach new markets. It is investing in innovation to support new skills and talent, help transform existing industries, create new industries, strengthen sovereign capability and prepare Queensland for tackling the challenges of tomorrow.

Advance Queensland focuses on building Queensland's strengths, growing our regions' unique competitive strengths to compete globally, scaling up local solutions for new markets and investing in new technologies. This includes unlocking opportunities for both our traditional and emerging industries through new applications of our resources and skills.



## **KEY FOCUS AREA 2:**

# Strengthen ESG credentials and protect the environment

Outcomes for Queensland's resources industry:

- >>> Our industry is known globally as an ESG leader and recognised as safe, highwage, environmentally responsible, and well regulated, with a strong focus on genuine partnerships with First Nations peoples and sustainable community legacy.
- >> The industry has taken decisive action to decarbonise operations and is leading the way in transparently demonstrating independent ESG credentials.
- >>> Queensland's resources companies have transformed from delivering mainly extraction activities to being leaders in materials handling throughout the circular economy. The industry is a leader in disassembly technology and recycling.
- >> The industry is consistently seeking to exceed regulatory requirements to ensure maximum community and environmental benefit from their activities.

To achieve these outcomes, the resources industry and government must work to strengthen our ESG credentials and protect the environment.



# Strengthen our ESG credentials

The Queensland resources industry is in a unique position to become a global ESG leader and leave a positive legacy for all Queenslanders.

ESG can be outlined into its three respective concepts:

**Environmental** components focus on the impact of operations on the natural environment, including emissions and climate change, the pollution outputs in air and water, cumulative impacts on groundwater, the use of water and energy.

**Social** components consist of the quality of a company's relationship with its workforce, diversity and inclusion in the workforce, skills and training initiatives, health and safety precautions, and relationships with communities, which, for Queensland, are predominantly regional and First Nations communities.

**Governance** refers to business ethics, stakeholder satisfaction, procedures surrounding fraud and bribery, and a company's overall compliance with industry standards and frameworks.

ESG is an increasing priority for investors and markets that want the new economy minerals, metals and energy resources Queensland supplies to the world. Queensland already has a comparative advantage over other jurisdictions by having a rigorous regulatory framework that facilitates economic development in the public benefit. Much of these regulatory requirements support indices that are measured across the various ESG standards

The Queensland Government is committed to creating a bold ESG brand for our resources industry that maximises the inherent strength of how we do business.

Strengthening our place within markets and with customers as a leading ESG jurisdiction will help continue Queensland's resources industry's strong economic and community legacy. As resources companies are increasingly required to demonstrate leadership and adopt independent ESG standards, this will help position the industry in the long term for growth, diversification and transformation.



Failure to respond to the growing need for demonstratable ESG accountability puts Queensland at risk of failing to catch the next wave of mining investment, driven by global decarbonisation.

That is why the Queensland Government will establish a Queensland Resources Industry ESG Expert Advisory Panel to provide advice on how the government and industry should respond to emerging ESG needs and embed a Queensland ESG competitive advantage.

## **Protecting our environment**

Queensland's regulation protects the environment while allowing for development that improves the total quality of life for all Queenslanders, both now and into the future.

Resources projects in Queensland will continue to be supported as long as they stack up economically, environmentally and socially. The Queensland Government is committed to ensuring that the regulatory frameworks supporting these considerations are continuously improved to ensure that the public interest is protected.

## **Decarbonisation plans for resources projects**

The Queensland Government expects the resources industry to contribute to Queensland's climate action targets, including a pathway to net zero emission operations.

Some leading resource companies are committing to emissions reduction targets and demonstrating action to achieve these. The Queensland Government believes it is time to ensure this leadership is happening right across the resources industry. The government is committed to working in partnership with stakeholders to determine how emissions management can become a key consideration and facilitate decisive action to reduce emissions.

The Queensland Government will work with the resources industry to develop a decarbonisation plan policy that:

- >> results in substantial and consistent reductions in Scope 1 and 2 emissions
- >> is outcomes-based, allowing companies to achieve least-cost abatement from across their portfolio of Queensland assets
- >> includes transparent and regular reporting on progress
- >> is adaptive, providing a basis for future actions to ensure new technologies, approaches and progress can be taken into account
- >> enables the energy system to plan Queensland's renewable energy requirements.

The Queensland Government will develop and consult on a draft decarbonisation plan policy, in the context of wider action to achieve the state's emissions reduction targets for 2030 and 2050, before finalising the approach.

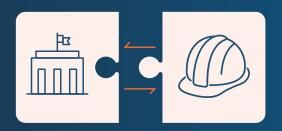
The Queensland Government will also provide \$3.5 million over five years to build capacity and skills in the environmental regulator to assess decarbonisation plans and provide additional guidance to applicants.

#### Financial assurance and mine rehabilitation

The Queensland Government's financial assurance and mine rehabilitation program has been in operation since 2020. This program delivers industry with clarity and certainty about the surrender and end-of-life management of resources sites, and protects Queenslanders in situations where mines and associated assets, as well as degraded and contaminated environments, are abandoned by proponents.

In September 2021, Queensland's first Mine Rehabilitation Commissioner was appointed, with the remit to advise government on best-practice mine rehabilitation, raise awareness of rehabilitation matters and facilitate better public reporting on rehabilitation performance.

Moving forward, the government will continue to engage with industry and the community to identify opportunities for progressive rehabilitation and collaboration and innovation when it comes to post-mining land uses, including re-commercialisation opportunities.



# Government and industry collaboration

Both government and industry have an important role to play in strengthening our ESG credentials, safeguarding our environment, and taking strong action on climate change.

#### **Government commitments**

- >> Actively market Queensland's resources into foreign markets and seek more trade and investment opportunities in new and existing markets to capitalise on the growing demand for ethically sourced minerals and products.
- >> Assist Queensland's resources industry to take up independent ESG standards.
- Maintain the highest standards of environmental regulation, fair and safe working conditions, and engagement with First Nations communities as strong ESG foundations.
- >> Continue to enhance groundwater management in response to emerging technologies, such as carbon capture, use and storage, and environmental impacts, such as fugitive gas migration, subsidence and produced water.
- >> Identify opportunities to report Queensland's ESG credentials to domestic and international financial institutions.
- >> Continue to provide a rigorous environmental approval framework for resource projects, including requiring more consideration of emissions mitigation and management from resource activities.
- >> Work with industry to investigate ways to reduce fugitive emissions from resource activities, particularly in the Bowen Basin.
- >> Facilitate industry access to renewable energy to reduce on-site emissions, consistent with the government's commitment to achieve 50 per cent renewable energy generation by 2030.
- >> Work with government owned corporations in the energy sector on storage requirements to support local battery supply chains.

## **Expectations of industry**

- >> Maintain its social licence by demonstrating good ESG performance.
- >> Build the trust of Queenslanders by going above and beyond in meeting evolving ESG responsibilities.
- >> Prepare for and seize the opportunities that ESG-conscious investors, customers and global jurisdictions offer.
- >> Conduct thorough environmental impact studies and make environmental protection a central part of operational decision making.
- >> Reduce emissions, including fugitive emissions, in line with the government's climate targets by decarbonising resources operations.
- >> Develop and implement plans that provide a pathway to net zero emissions operations and report on progress publicly.
- >> Support the research and development of innovative technology to reduce onsite emissions, including through collaboration with the METS sector.



# Actions for key focus area 2: Strengthen ESG credentials and protect the environment

ACTION	LEAD AGENCY / TIMELINE	DESCRIPTION
19. Establish a Queensland Resources Industry ESG Expert Advisory Panel	Lead: Government (Department of Resources) When: 2022–25	The Queensland Government will establish a Queensland Resources Industry ESG Expert Advisory Panel to provide advice on proposed policy and actions on how the government and industry should respond to emerging ESG needs. The panel will meet at least twice a year and consist of representatives from industry, academia, First Nations people, community, and government.  Due to the quickly changing parameters that surround ESG, the ability to gather real-time expert advice and input will support the government and industry's respective roles in leading ESG actions that are useful, relevant, and impactful.
20. Embed Queensland's ESG competitive advantage	Lead: Government (Department of Resources) When: 2022–25	The Queensland Government will work across agencies, with industry and the Queensland Resources Industry ESG Expert Advisory Panel to support and develop the Queensland resources industry's ESG competitive advantage. Actions to support this might include development of an ESG prospectus and further investigation into capability support regarding ESG standards and technology that supports minerals traceability and decarbonisation.
21. Continue to implement financial assurance and mine rehabilitation reforms	Lead: Government (Department of Environment and Science co-lead with the Department of Resources and Queensland Treasury) When: Ongoing	The Queensland Government will continue to embed the rehabilitation and financial assurance reforms. This includes completing the transition to Progressive Rehabilitation and Closure Plans for approximately 200 mine sites.  One of the final actions in the financial assurance and mine rehabilitation program addressed residual risk. These reforms give industry more clarity and certainty about the surrender of resources sites. Another reform was the establishment of a Queensland Mine Rehabilitation Commissioner, who will commission research, publish best-practice advice, and report more publicly on progressive rehabilitation outcomes.  Moving forward, the government will continue to engage with industry and the community to identify opportunities for collaboration and innovation on post-mining land uses.  Pilot projects will be identified to explore innovative approaches that aim to deliver:  **Non-ground** of the projects will be identified to explore innovative approaches that aim to deliver:  **Non-ground** of the projects will be identified to explore innovative approaches that aim to deliver:  **Non-ground** of the projects will be identified to explore innovative approaches that aim to deliver:  **Non-ground** of the projects will be identified to explore innovative approaches that aim to deliver:  **Non-ground** of the projects will be identified to explore innovative approaches that aim to deliver:  **Non-ground** of the projects will be identified to explore innovative approaches that aim to deliver:  **Non-ground** of the projects will be identified to explore innovative approaches that aim to deliver:  **Non-ground** of the projects will be identified to explore innovative approaches that aim to deliver:  **Non-ground** of the projects will be identified to explore innovative approaches that aim to deliver:  **Non-ground** of the projects will be identified to explore innovative approaches that aim to deliver:  **Non-ground** of the projects will be identified to explore innovative approaches that aim t

ACTION	LEAD AGENCY / TIMELINE	DESCRIPTION
22. Require industry to develop plans to decarbonise operations	Lead: Government (Department of Environment and Science) When: 2022–27	The Queensland Government will work with the resources industry to develop a decarbonisation plan policy that:  """ results in substantial and consistent reductions in Scope 1 and 2 emissions  """ is outcomes-based, allowing companies to achieve least-cost abatement from across their portfolio of Queensland assets  """ includes transparent and regular reporting on progress  """ is adaptive, providing a basis for future actions to ensure new technologies, approaches and progress can be taken into account  """ enables the energy system to plan Queensland's renewable energy requirements.  The Queensland Government will begin engaging with industry in 2022 to establish a framework for decarbonisation plans to be developed and implemented.  The Queensland Government will also provide \$3.5 million over five years to build capacity and skills in the environmental regulator to assess decarbonisation plans and provide additional guidance to applicants.

# Other Queensland Government initiatives supporting the Queensland resources industry

# Investigate establishment of an independent Environmental Protection Agency

The Queensland Government is investigating and consulting on the establishment of an independent Environmental Protection Agency (EPA) to:

- >> protect Queensland's environment
- >> provide more certainty for investment
- >> support Queensland's economic recovery.

The Department of Environment and Science has started investigating the feasibility of an independent EPA. This includes public consultation, which will give everyone an opportunity to have their say about environmental protection in Queensland.

## Continue Kati Thanda-Lake Eyre Basin consultation

The Queensland Government remains committed to working with stakeholders and communities to ensure adequate protection of Kati Thanda—Lake Eyre Basin streams and watercourses, which also supports sustainable economic development.

The government has established a Stakeholder Advisory Group (SAG) for the Queensland Lake Eyre Basin region. It includes Traditional Owner representatives, industry bodies, environment groups, land managers, local government, and scientific experts.

The SAG will help inform the development of a consultation Regulatory Impact Statement (RIS) for a proposed Lake Eyre Basin Framework. It is expected that the RIS will be released by the end of 2022. The final proposed framework is intended to ensure more comprehensive protections for the rivers and flood plains while also providing regulatory certainty for activities including resources developments elsewhere within the basin.



# KEY FOCUS AREA 3:

# Foster coexistence and sustainable communities

Outcomes for Queensland's resources industry in 2050:

- >>> Local communities have benefited from years of coexistence with resources companies operating in their region.
- >>> Projects throughout regional Queensland have left and continue to leave a positive legacy in host communities.
- >>> Mine rehabilitation and post operations are providing local benefit, as sites have been converted to their highest and best social, economic, and environmental use.

To achieve these outcomes, government and industry must work together to foster coexistence and ensure sustainable communities.





Sustainable coexistence is a key ingredient for the resource industry growing over the long term. This requires resources companies, Aboriginal and Torres Strait Islander peoples, landholders, and communities to go beyond tolerance to form long-lasting relationships founded on mutual benefit for everyone involved. While most resources companies are doing this well, there is always room for improvement.

The Queensland Government has established several institutions to assist resources companies and landholders to coexist successfully. While these institutions have served Queenslanders well in balancing the interests of the resources industry and those affected by it, the Queensland Government will review some of the current coexistence institutions to ensure that they remain contemporary, efficient, and effective.

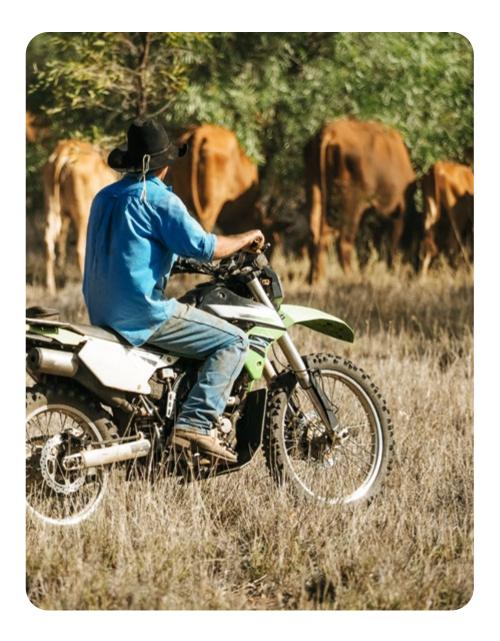
Sustainable coexistence needs to include a positive legacy for communities once resource projects end in recognition that projects have a limited life. This needs to start from the early stages of planning for a project and engagement with the community is a critical part of this process. The Queensland Government expects the resources industry to consult with regional communities and relevant government agencies to ensure that projects leave positive legacies in these communities.

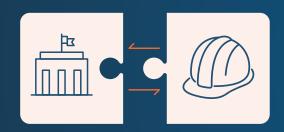
Resource companies must consider the required rehabilitation outcomes for the site—whether for future economic development, regional biodiversity, agriculture, or other land uses. They must put in place plans early to realise these outcomes and regularly report to government and community about their progress.

Sustainable coexistence needs to include a positive legacy for communities once resource projects end in recognition that projects have a limited life.

The Queensland Government is helping to drive a positive legacy by partnering with resources companies to deliver the \$100 million Resource Community Infrastructure Fund.

This fund was established as a voluntary partnership between coal and mineral companies through the Queensland Resources Council and the Queensland Government. The resources industry will be contributing \$70 million and the state contributing \$30 million. The first round of projects supported through this fund was announced in December 2021, with \$47 million being provided to 20 projects in 15 communities to deliver improved and additional local facilities.





#### Government and industry collaboration

Both the Queensland Government and the resources industry have an important role to play in **fostering sustainable coexistence**.

#### **Government commitments**

- >> Provide a clear coexistence framework that supports the resources industry to build and maintain strong and mutually beneficial relationships with landholders and other land users such as agriculture and renewable energy.
- >> Ensure regional plans are developed with coexistence principles at their core.
- >> Ensure that regulatory frameworks support communities and that resources projects provide benefits to the regions.
- >> Continue to thoroughly assess the social and economic impacts of proposed resource projects assessed under the State Development and Public Works Organisation Act 1971, Strong and Sustainable Resource Communities Act 2017 and Environmental Protection Act 1994 on regional communities.
- >> Continue to implement the *Strong and Sustainable Resource Communities Act* 2017 and findings from the post-implementation review.
- >> Deliver the Resources Community Infrastructure Fund to provide community infrastructure that enables access to services that meet resource community needs and maximise and enhance community wellbeing.

#### **Expectations of industry**

- >> Work with other industries, communities, and landholders to deliver the spirit of coexistence and optimise the state's resources.
- >> Demonstrate best-practice engagement and adherence to coexistence principles to create long-standing, mutually beneficial relationships.
- >> Negotiate in good faith and seek to understand the needs of landholders and communities to build social licence through legitimacy, transparency, credibility, and trust.
- Apply the principles of the Social Impact Assessment statutory framework in a proactive and positive spirit.
- >> Ensure that projects leave a positive legacy in the community.
- >> Pay royalties, rent and other charges to ensure Queenslanders receive their fair share from the extraction of their resources.
- >> Work with local governments and social service providers in regional communities throughout projects.
- >> Integrate projects and workforces with the community.



### Actions for key focus area 3: **Foster coexistence and sustainable communities**

ACTION	LEAD AGENCY / TIMELINE	DESCRIPTION
23. Publish and implement principles for coexistence in the Land Access Code	Lead: Government (Department of Resources) When: 2022	Positive relationships between resources companies, landholders, First Nations people, and the community are essential for sustainable development.  In response to stakeholder feedback, the government will revise the land access principles and integrate them into the Land Access Code.  The Land Access Code is a best-practice guideline for communication and negotiation between resource companies and landholders. It applies to most resource authority types in Queensland.  As the relevant resource company must provide a copy of the Land Access Code to landholders with an initial entry notice and negotiation notice, this will ensure that both parties are aware of government expectations.
24. Review land access and coexistence institutions	Lead: Government (Department of Resources) When: 2022–23	The Queensland Government will review the land access institutions to ensure they are well aligned, contemporary and efficient. In particular, the review will investigate the scope and functions of the Land Access Ombudsman and GasFields Commission Queensland, including whether:  ** their functions could be expanded to assist in more circumstances  ** these entities could perform their functions under the banner of a single entity.  While the focus will be on land access institutions, the government will also review:  ** whether roles and responsibilities across agencies and institutions are clear  ** whether some roles could be better aligned  ** how to reduce duplication and overlap for key coexistence issues, such as water, subsidence, and make-good arrangements.
25. Capture emerging coexistence issues in updated regional plans	Lead: Government (Department of State Development, Infrastructure, Local Government and Planning) When: Ongoing	Some regional plans—set under the <i>Planning Act 2016</i> —pre-date emerging industry activities like the renewable energy industry. The Queensland Government will ensure that, when updated, the regional plans capture the changing and competing demands for land use.

ACTION	LEAD AGENCY / TIMELINE	DESCRIPTION
26. Improve mapping to better support coexistence	Lead: Government (Department of Resources, Department of Energy and Public Works, Department of Agriculture and Fisheries, and Department of State Development, Infrastructure, Local Government and Planning)  When: 2022–23	As the Queensland Government works towards achieving its emissions and clean energy targets, more renewable energy projects will be developed. This presents an emerging need to manage coexistence between the location of new renewable energy projects in relation to existing resources projects, agricultural activities and amenity.  To enable greater understanding of these issues, the Queensland Government will develop and maintain mapping layers on the GeoResGlobe and Queensland Globe that spatially map:  *** resource tenures (including exploration permits)  *** renewable energy zones and projects  *** approved and proposed renewable energy projects  *** agricultural land of state and regional planning significance (e.g. strategic cropping land and priority agricultural areas).  This public and free mapping tool will help to inform all stakeholders to understand where projects are situated in relation to each other, to identify appropriate sites for proposed renewable energy projects, and to see where coexistence between them may be required.
27. Implement findings of Strong and Sustainable Resource Communities Act review	Lead: Government (Office of the Coordinator-General) When: Ongoing	In 2021, the Queensland Government reviewed the effectiveness of the <i>Strong and Sustainable Resource Communities Act 2017</i> (SSRC Act). The final report recommends that the government:  ** retain the SSRC Act  ** review the SSRC Act further, particularly the effectiveness of the social impact assessment provisions and enhanced Social Impact Assessment Guideline (2018)  ** implement collaborative data collection for the SSRC Act  ** improve the awareness and understanding of the anti-discrimination provisions among resource communities.  The Queensland Government will continue to implement the SSRC Act and these recommendations over coming years. A future review will occur after three large projects have completed the social impact assessment process and been operational for at least one year.
28. Deliver the Resources Community Infrastructure Fund	Lead: Government (Department of State Development, Infrastructure, Local Government and Planning) When: 2022	The Queensland Government has partnered with resources companies through the Queensland Resources Council to deliver the \$100 million Resource Community Infrastructure Fund. The fund is open to not-for-profit organisations and local councils for community infrastructure projects that provide a positive, long-term benefit to the community.



KEY FOCUS AREA 4:

# **Ensure strong and genuine First Nations partnerships**

Outcomes for Queensland's resources industry in 2050:

- >> Aboriginal and Torres Strait Islander peoples are true decision-making partners in resource projects taking place on Country, and are realising economic benefits as equity partners, owners, and operators.
- >>> The resources industry will continue to recognise, protect, and conserve Aboriginal and Torres Strait Islander peoples' cultural heritage through strong partnerships and meaningful engagement.

To achieve these outcomes, the resources industry must consider Aboriginal and Torres Strait Islander peoples and communities as critical partners in future development. This will involve growing, investing in, and maintaining strong and genuine partnerships.





#### Realising the benefits of genuine partnerships

Aboriginal and Torres Strait Islander peoples hold distinct and continuing cultural rights and responsibilities as Australia's first people, including Traditional Ownership and safeguarding the sustainable management of land and waters for future generations.

The principles for strong landholder relationships (outlined in key focus area 3) provide a positive starting point for industry to develop genuine partnerships with Aboriginal and Torres Strait Islander peoples. However, meaningful engagement with Aboriginal and Torres Strait Islander peoples must also be supported by:

- >> recognition of the value of shared decision making
- >>> respect for each community's unique and diverse cultures, knowledge, history, rights, and interests
- willingness to work with First Nations communities to achieve their aspirations within the sector.

Given Queensland's Aboriginal and Torres Strait Islander peoples have a strong and enduring knowledge of, and connection to, Country, industry must embrace the opportunities and unique value that this brings, including to decision making, the local workforce, investors, contractors, procurement, and suppliers. Aboriginal and Torres Strait Islander peoples are well represented as employees in resource projects in Queensland, with about 5 per cent of Queensland resources employees identifying as Aboriginal and/or Torres Strait Islander, putting the industry at parity with the broader Queensland population. However, more can be done to grow employment within the sector and embed, engage, and partner with local First Nations people and communities. This will be especially important as more mineral exploration and mines—associated with smaller, more disparate deposits—become increasingly prevalent across Queensland.

True investment in and demonstration of strong and genuine partnerships with Aboriginal and Torres Strait Islander peoples is also an essential element of strong ESG performance for any resource operation taking place on Country.

In coming decades, the Queensland Government expects opportunities to arise across these three areas:

First Nations proponents	Increasingly, Aboriginal and Torres Strait Islander peoples will become resource project proponents and/or partners with the resources industry on developments in ways that are consistent with their aspirations, ambitions, capital settings, and obligations.
	More Aboriginal and Torres Strait Islander peoples will invest in ventures, acquire equity at market rates, and develop projects, achieved through sustainable co-design working relationships with their community leaders.
Procurement	Commercial opportunities can be found within the core business of every resource operation that involves contracting. Every subcontract is an opportunity to bring a First Nations firm into the supply chain.
	Resources companies may need to adapt their procurement approaches to increase their procurement of Aboriginal and Torres Strait Islander businesses. This may include modifying standard procurement practices and supporting capacity-building exercises for First Nations businesses.
People	The people assets of every industry and company are critically important to success. Aboriginal and Torres Strait Islander peoples will be valuable contributors in the boardroom, in management, as professionals, as people leaders, and in employment and training.
	The Queensland Government expects the resources industry to continue to engage with Aboriginal and Torres Strait Islander peoples and communities to maximise genuine economic development and employment opportunities. Resources companies and their contractors can achieve this by:  **setting economic participation and employment targets for Aboriginal and Torres Strait Islander peoples and creating initiatives to achieve these targets
	» developing pathways into employment for local Aboriginal and Torres Strait Islander school students
	» providing a culturally safe organisational culture that supports diversity and inclusion in the workplace
	» funding scholarships for Aboriginal and Torres Strait Islander university students
	» implementing apprenticeship and traineeship programs for Aboriginal and Torres Strait Islander peoples
	» employing Aboriginal and Torres Strait Islander peoples across all levels of the organisation, including developing objectives and measures to facilitate employment into senior management and executive roles
	» providing pathways for existing Aboriginal and Torres Strait Islander workers to upskill
	» enabling self-determination and committing to work in partnership with First Nation Queenslanders, based on mutual high-expectation relationships, to achieve their aspirations within the industry.

#### Path to Treaty

The Queensland Government's Path to Treaty commitment is the journey to create a new future between First Nations and non-Indigenous Queenslanders. This commitment has commenced the journey towards negotiated treaties with First Nations Queenslanders, and has included:

- >> the Queensland Government's Statement of Commitment to reframe the relationship with Aboriginal and Torres Strait Islander peoples
- >> initiating the Path to Treaty conversation with all Queenslanders
- >> implementation of the Local Thriving Communities (LTC) reform, which seeks to improve government service delivery, governance, and economic opportunities.

A Treaty Advancement Committee Report will shape the implementation design for the treaty-making process with First Nations people in Queensland. The Queensland Government will carefully consider the report and provide a response to the recommendations.

To support the Path to Treaty commitment, the Queensland Government has established a \$300 million fund. Returns from the fund will be used to provide more support to and a strong foundation for the treaty-making process in Queensland.

# Reframed relationship with Aboriginal peoples and Torres Strait Islander peoples

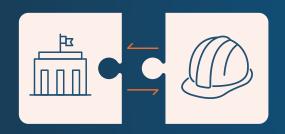
In July 2019, the Queensland Government committed to reframing the relationship with Aboriginal and Torres Strait Islander peoples and signed the Statement of Commitment to give practical and meaningful effect to a reframed relationship. This commitment included:

- >> initiating the Path to Treaty conversation with all Queenslanders and working towards negotiated treaties with First Nations Queenslanders
- >> implementing the LTC reform, which seeks to improve government service delivery, governance, and economic opportunities.

A Treaty Advancement Committee Report will shape the implementation design for the treaty-making process with Aboriginal and Torres Strait Islander people in Queensland. The Queensland Government will carefully consider the report and provide a response to the recommendations.

To support the Path to Treaty commitment, the Queensland Government has established a \$300 million fund, with returns from that fund to be used to provide more support and a strong foundation for the treaty-making process in Queensland.

The reframing the relationship commitment includes a commitment to implementing the LTC reform, which is about improving whole-of-government coordination, enabling local decision making, and changing government systems and practices so that self-determination is embedded in the design and delivery of services, programs and policies that will have impact on Aboriginal people and Torres Strait Islanders.



#### Government and industry collaboration

Both the Queensland Government and the resources industry have a role to play in **building strong and genuine First Nations partnerships**.

#### **Government commitments**

- >> Work with Aboriginal and Torres Strait Islander peoples to understand the challenges faced by prescribed body corporates and registered native title body corporates. Ensure they are empowered to negotiate outcomes for Country and community that move the dialogue and action beyond charitable to true economic development.
- >> Deliver on its Statement of Commitment to build a reframed relationship that focuses on strengths; moves from surviving to thriving; and prioritises doing things 'with' and not 'to' Aboriginal and Torres Strait Islander peoples.
- >> Continue our progress on the Path to Treaty and Local Thriving Communities reforms.
- >> Continue to improve Queensland's cultural heritage regime.

#### **Expectations of industry**

- >> Develop and maintain genuine and strong partnerships with Aboriginal and Torres Strait Islander peoples, including commercial partnerships.
- >> Uphold the principles to recognise, protect, and conserve the cultural heritage of Aboriginal and Torres Strait Islander peoples.
- >> Support local economic, social, and cultural aspirations, and work with local leaders to support the aspirations and goals of First Nations communities.
- >> Negotiate all Indigenous land use agreements, rights to negotiate, cultural heritage agreements and other agreements in good faith.
- >> Embrace existing community leadership structures to enable local decision making.
- >> Ensure investment makes communities stronger, which will help industry build respectful and enduring relationships with First Nations communities.
- >> Partner with Reconciliation Australia to develop and implement reconciliation action plans.



# Actions for key focus area 4: **Ensure strong and genuine First Nations partnerships**

ACTION	LEAD AGENCY / TIMELINE	DESCRIPTION
29. Local Thriving Communities reform	Lead: Government (Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships) When: Ongoing	Local Thriving Communities (LTC) is a significant and long-term government reform that changes the way the Queensland Government works with Aboriginal and Torres Strait Islander communities by giving them a greater voice in service delivery and economic development decision making.  The reform is based on the principles of self-determination, collaboration, mutual respect, and high-expectations relationships.  LTC will establish local decision-making bodies, which will be the point of direct engagement between the Queensland Government and the community.
30. Review, strengthen and improve cultural heritage Acts	Lead: Government (Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships) When: Ongoing	In 2019, the Queensland Government commenced a review of the two cultural heritage Acts to establish how to improve and strengthen them.  While the review was paused in part due to COVID-19, it has now recommenced. In December 2021, an options paper containing three reform proposals was publicly released for consultation and will inform the next steps for further government consideration.  The Queensland Government is committed to finalising the review of these Acts to ensure they continue to protect and conserve Queensland's First Nations peoples' cultural heritage, while facilitating business and development activity.



## Actions for key focus area 4: **Ensure strong and genuine First Nations partnerships** (continued)

ACTION	LEAD AGENCY / TIMELINE	DESCRIPTION
31. Develop and implement plans to support First Nations reconciliation and economic development outcomes	Lead: Industry When: Ongoing	The Queensland Government is committed to reconciliation between Aboriginal and Torres Strait Islander peoples and non-Indigenous Queenslanders. To help move towards this, the government has developed the <i>Queensland Government Reconciliation Action Plan 2018–2022</i> .  The government's expectation of resources companies is that they will commit to a similar vision. Leading companies have already developed reconciliation action plans in consultation with Reconciliation Australia.  All resource companies should develop and implement reconciliation action plans or other plans (as appropriate). These plans should contain targeted actions that work towards improved outcomes for Aboriginal and Torres Strait Islander peoples, such as:  » improving employment outcomes, including through building the capacity and capability of Aboriginal people and Torres Strait Islanders to participate in the resources sector at all levels, from boardroom to operations  » engaging with and providing opportunities for Aboriginal people and Torres Strait Islanders and communities in the management of land and environmental resources at all stages of resources projects  » increasing value of procurement with for Aboriginal and Torres Strait Islander—owned businesses  » improving cultural heritage outcomes.
32. Assist in Closing the Gap through economic development opportunities	Lead: Government (Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships) When: Ongoing	Resource development provides vast economic opportunities for Aboriginal people and Torres Strait Islanders and communities, and the resources industry has an important role to play in Closing the Gap.  Under the National Agreement on Closing the Gap, the Queensland Government has committed to:  » changing how government works with Aboriginal and Torres Strait Islander peoples  » meeting a range of economic targets.

# Other Queensland Government initiatives supporting the Queensland resources industry

## Implement a new Queensland Aboriginal and Torres Strait Islander Economic Strategy

The Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships is leading the development of a new strategy to improve economic empowerment and self-determination for Aboriginal and Torres Strait Islander Queenslanders.

The new strategy is anticipated to be launched in 2022, and provide a high-level, strategic framework that centres and celebrates the contribution of Aboriginal and Torres Strait Islander peoples to Queensland's economy.



#### **KEY FOCUS AREA 5:**

# **Build a safe and resilient future workforce**

Outcomes for the resources industry in 2050:

- >>> Queensland's resources industry employs more Queenslanders, providing high-wage, highly skilled, safe, and fulfilling careers.
- >>> The resources industry is diverse and inclusive, representing host communities and providing careers that young people want to pursue.
- >>> While the workforce, mechanisms and methods used for mining will have fundamentally changed, the industry will have prepared workers to take advantage of the benefits of automation and digital transformation, ensuring that regional communities are thriving and jobs are still local.

To achieve these outcomes, the Queensland Government and the resources industry must work together to ensure the safety and health of workers and build a resilient future workforce.



#### Protecting our resources industry workers

The Queensland Government expects worker safety and health to characterise all aspects of the resources industry. Government and industry must work together to protect resources industry workers.

In any workforce, workers must always be safe. No person should lose their life or suffer serious injury or occupational illness at work. Every worker has the right to return home safe and healthy.

Therefore, worker safety and health must underpin all resource operations in Queensland. The protection of workers must come before profit and productivity considerations.

The Queensland Government will continue to enforce its strong resources safety and health legislation to ensure the safety and health of all workers in the sector.

#### Resources, an employer of choice

Queensland's resources industry employs around 77,000 people, making it one of the largest employers in the state. The industry has been a profession of choice for Queenslanders for decades and will continue to offer fulfilling careers as it transforms.

When Queenslanders choose a career in the resources industry, they are helping to deliver the resources the world needs to achieve its emissions targets, to build technologies that save lives, and to deliver energy to emerging and developing economies. Whether Queenslanders are leaving school, already working in the industry, or looking for a career change, the resources industry offers many opportunities for values-based, highly paid, highly skilled, and diverse work.

#### **Resources Safety and Health Queensland**

Since 2020, Resources Safety and Health Queensland (RSHQ) has been operating as an independent statutory body. RSHQ reports directly to the Minister for Resources.

RSHQ is responsible for regulating, educating, and assisting the resources industry to meet their obligations to protect and promote the safety and health of workers.

RSHQ's vision is zero serious harm across the state's resources industry. As a risk-based regulator, it focuses its resources and effort on protecting workers and affected communities from:

- fatality
- injury requiring hospital admission
- >> occupational disease, such as mine dust lung disease.

For information on RSHQ and their current priorities, refer to <a href="www.rshq.qld.gov.au">www.rshq.qld.gov.au</a>.

Attracting workers to the sector requires continual investment from the resources industry. This goes beyond offering a high-wage career, and includes offering workplaces that are flexible, purposeful, inclusive, and diverse.

Inclusive and diverse workforces create new and innovative ways of doing things. To truly capture this value, it is important for the resources industry to increase participation by women, Aboriginal and Torres Strait Islander peoples, defence force veterans, and people with a disability.

#### Building a resilient future workforce

Employment within the resources industry is changing, in line with external forces such as technological innovations and increasing use of low-emission technologies. These changes will benefit the resources industry by improving safety and health outcomes for workers while also optimising production and operations. For workers, automation and the increase in data analysis and digitisation may cause some disruption, changing the nature of their jobs. Despite this, the Queensland Government expects work to remain locally based.

The Queensland Government is working with the industry to invest in skills and training to ensure Queenslanders can seize job opportunities along the whole resources supply chain from exploration, to extraction, processing, advanced manufacturing, and the METS industry.

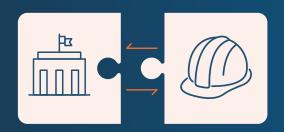
The government understands that future workforce needs will be met through a range of pathways, including through professional skills and qualifications at a tertiary level. While the Queensland Government has a limited role in the tertiary education sector, it is committed to working with the Australian Government and the university sector to foster innovation in our resources industry as well as identify and address skills shortages to maintain the required workforce.

The resources industry must also be a leader in preparing its existing workforce for this disruption. As companies plan for and implement new automated and digital technologies, industry is expected to re-skill its affected workers to take on these new roles, giving them every opportunity to realise ongoing career success and continue to work in their industry of choice.

#### Our current support

The Queensland Government is committed to supporting workers in the resources industry to ensure that Queensland's regional communities continue to thrive. The Queensland Government has a good track record of working with industry and the Australian Government to prepare, train, and upskill current and future workforces. Some of these actions include:

- >> establishing the Industry Skills Advisors to provide advice on industry training needs. These advisors help inform our skills priorities, training products, program design and investment decisions
- >> working with the Australian Government and the university sector to foster innovation in our resources industry as well as identify and address skills shortages to maintain the required workforce
- >> working with the Australian Government to ensure the skilled migration program provides a vital additional avenue for the resources industry to meet needs that the existing domestic labour supply cannot
- working with the Australian Government and the resources industry to attract former Australian Defence Force personnel to the sector. Veterans are a unique talent pool with transferable skills and a wide range of backgrounds and perspectives applicable to the resources industry.



#### Government and industry collaboration

There is a role for both government and the resources industry to realise our shared objective of a safe and resilient future workforce.

#### **Government commitments**

- >> Promote and maintain a strong safety and health regulatory framework for the resources industry.
- >> Continue to engage the resources industry through the development of national training packages that align with industry skills requirements.
- >> Facilitate and support workers, students, employers, and small businesses to connect and engage with vocational education and training (VET) providers and appropriate VET pathways.
- >> Work with the resources industry to explore opportunities to attract defence veterans to the sector.
- >> Continue to promote the skilled migration program as a way to fill occupations that are experiencing identified skills shortages.
- >> Continue to work with resources industry stakeholders to encourage the participation of underutilised cohorts and tackle barriers to starting and remaining in employment for diverse Queenslanders.
- >> Assist Queenslanders to seize the job opportunities that are emerging through automation and digitisation.
- Monitor the automation trend and its impact on the resources industry, including working with resources companies to keep jobs local.

#### **Expectations of industry**

- >> Define its operations by practices that protect workers from safety and health harms.
- >> Continue to provide opportunities and pathways for school leavers and people wanting to change their career and join the resources industry.
- Work with government and stakeholders to design training for the miners of tomorrow.
- >>> Provide opportunities to increase the participation of women, Aboriginal and Torres Strait Islander peoples, people with a disability, and veterans in the workforce.
- >> Prepare existing workers for any disruption that automation and other emerging technologies will bring, particularly by investing in retraining and reskilling.
- >> Maintain skilled local workforces to share the benefits of automation with regional communities and keep all work in Queensland.



### Actions for key focus area 5: **Build a safe and resilient future workforce**

ACTION	LEAD AGENCY / TIMELINE	DESCRIPTION
33. Develop a Queensland resources industry workforce plan	Lead: Government (Department of Employment, Small Business and Training), with industry support When: 2022–23	The skills that the resources industry needs are changing. It is essential that industry and the Queensland Government plan for this change to ensure workers have access to the right skilling opportunities.  The Queensland Government will establish a working group to develop a workforce plan for the Queensland resources industry to identify the future skills needed in the regions. The working group will comprise industry, training providers, worker representatives and government. This group will build on the work that government and industry has already started, as well examine ways to make the workforce more diverse and inclusive by attracting and retaining women, former defence personnel, Aboriginal and Torres Strait Islander peoples, and people with a disability.
34. Support industry to attract a skilled workforce	Lead: Industry, with support from government When: Ongoing	A key challenge facing the resources industry is attracting appropriately skilled workers to pursue careers in the sector. Experiential learning opportunities and high-quality information are needed to help people with these career choices.  The Queensland Government will continue to support the Gateway to Industry Schools Program, for the Queensland Mining and Energy Academy (QMEA). The QMEA has been a successful in exposing high school students to the resources industry and helping them decide whether to pursue a career in the industry.
35. Support the training needs of existing and future workers through the Queensland Future Skills Partnership	Lead: Government (TAFE Queensland and Department of Resources) When: 2022–26	The Queensland Future Skills Partnership (QFSP) is an initiative led by BHP Mitsubishi Alliance with education partners TAFE Queensland and CQUniversity Australia. QFSP has successfully defined the first wave of new skills required to support automation and technology advances in Queensland's resources industry.  The Queensland Government will invest over \$3 million to deliver the following for QFSP initiatives to Queensland's school leavers and workforce:  *** \$1.2 million for the Queensland Future Skills for All Program, which will make the QFSP microcredentials, skill sets, and qualifications broadly available to those seeking to upskill and reskill in autonomous technologies fields  *** \$2.1 million to fill higher-level skills gaps by developing pathways into higher education courses for those interested in pursuing a career in automation.

# Other Queensland Government initiatives supporting the Queensland resources industry

### Continue to implement the Digital Professional Workforce Action Plan 2020–2024

The *Digital Professional Workforce Action Plan 2020–2024* is part of the Queensland Government's \$200 million Future Skills Fund. This includes an \$8 million investment aimed at supplying an additional 10,000 digital professionals by 2024 to meet the expected increase in digital jobs. Digital professionals will be critical in creating new opportunities for the resources industry going forward, and this plan will help ensure it has access to the requisite skills it needs. The Department of Communities, Housing and Digital Economy will continue to implement the *Digital Professional Workforce Action Plan 2020–2024* over the coming years.



#### KEY FOCUS AREA 6:

### **Improve regulatory efficiency**

Outcomes for the resources industry:

- >>> Queensland is benefiting from risk-based, efficient, effective, and transparent regulation that ensures the state's resources are explored and developed in the public interest.
- >>> Regulation is contemporary and insights-driven, and the community is confident that the resources industry is well regulated.

To achieve these outcomes, the Queensland Government will ensure that its regulatory regime is risk-based, efficient, effective and transparent.



# Risk-based, efficient, effective and transparent regulation

Rigorous and contemporary regulation has always been vital to instil community confidence in the industry. Increasingly, it will also be a solid foundation on which the industry can build their ESG credentials to attract more capital and customers to their projects.

To ensure that our regulatory framework remains contemporary and fit for purpose, the Queensland Government will continue to improve existing assessment processes and systems, and the regulatory framework.

The Queensland Government is committed to working openly and collaboratively with the resources industry and other stakeholders to continuously improve its regulatory framework. The government will consult with stakeholders on any regulatory change that has a material impact, and where appropriate ensure that it is subject to a 12-week consultation process consistent with the Queensland Government Guide to Better Regulation.

Achieving a regulatory framework that is more efficient, effective, and transparent will involve a significant investment over coming years as outlined in the actions.

#### Active tenure management

The Queensland Government will remain a modern regulator by using active tenure management to ensure that companies meet their work program and development plan obligations.

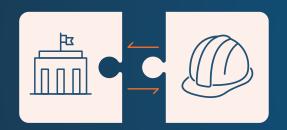
Resources companies are expected to do the right thing and develop Queenslanders' resources responsibly. However, if companies break the community's trust, the government has an obligation to take appropriate and proportionate compliance action.

#### New economy minerals 'sandbox' regulatory innovation in practice

In recognition of the emerging opportunity that new economy minerals present for Queensland, the government will scope an innovative sandbox co-design process to ensure that the regulatory framework supporting this industry is fit for purpose and drives investment attraction.

Many of the new economy mineral deposits that will be explored and developed have a relatively small footprint. As such, the Queensland Government is keen to ensure that the regulatory framework is proportionate—operating robustly to manage impacts, but also not creating unnecessary roadblocks to development.

Action 43 will be co-designed with industry to establish an optimal, fit-for-purpose regulatory environment to support new economy minerals projects and allow Queensland to lead the charge to help build the low-emission technologies we and the world need to reduce emissions.



#### Government and industry collaboration

Both government and industry have obligations to **ensure** the efficiency of Queensland's regulatory processes.

#### **Government commitments**

- >>> Ensure that its resources-related assessment processes, systems and regulations are efficient, effective, and transparent, and promote certainty.
- >> Provide clear guidance materials.
- >> Process applications quickly and transparently, and inform applicants and the community as applications progress.
- >> Ensure that resources companies actively manage their tenure portfolios to optimise the development of state resources.
- >> Ensure any regulatory change that has a material impact, and where appropriate, is subject to a 12-week consultation process consistent with the Queensland Government Guide to Better Regulation.
- >> Ensure that the resources industry complies with all regulatory requirements.

#### **Expectations of industry**

- >> Ensure full understanding of, and compliance with, all regulatory requirements.
- >> Actively develop and comply with work programs and development plans to optimise state resources for the benefit of all Queenslanders.
- >> Provide high-quality applications to make assessment processes more efficient.



### Actions for key focus area 6: Improve regulatory efficiency

ACTION	LEAD AGENCY / TIMELINE	DESCRIPTION
36. Improve resource project assessment processes	Lead: Government (Department of Resources, Department of Environment and Science, and the Office of the Coordinator-General)  When: 2022–24	A credible, transparent, and efficient assessment system, which is easily understood and respected by industry and the community, is an essential element of effective government.  The Queensland Government will collaborate with stakeholders to implement business process reform and efficiency improvements to achieve:  *** a transparent and engaged customer experience**  *** improved clarity of material to drive application quality*  *** technology and data platforms and requirements that achieve fit-for-purpose integrated automated systems to support and operationalise reforms.
37. Improve land release process	Lead: Government (Department of Resources) When: 2022–23	The Queensland Government has a land release process that includes both direct applications (for non-coal minerals) and competitive tendering (all commodities) for resources tenure. Recent reviews of Queensland's land release and competitive tendering process have identified issues that affect operational efficiency, industry, and community confidence in the process, and, ultimately, the level of investment in Queensland's exploration sector. The Queensland Government will consult stakeholders on reforms to the land release process and implement improvements such as:  » updating the land release model, tender timing, and frequency  » streamlining decision making and reduce timeframes  » including highly prospective minerals exploration areas in the Queensland Exploration Program.



### Actions for key focus area 6: **Improve regulatory efficiency** (continued)

ACTION	LEAD AGENCY / TIMELINE	DESCRIPTION
38. Implement reforms for objections, review and notification processes for resources project approvals	Lead: Government (Department of Resources and Department of Justice and Attorney-General)  When: 2022–25	There are inconsistencies in approaches to objection and review mechanisms for administrative decisions across the resources Acts. These can cause delays and create inequities for stakeholders. The Queensland Government intends to refer to the Queensland Law Reform Commission (QLRC) a review of the objections processes for mining leases under the <i>Mineral Resources Act 1989</i> , and associated processes with environmental authorities under the <i>Environmental Protection Act 1994</i> . The QLRC will be asked to consider the role of the Land Court in this process, and whether a consistent process should be applied to applications for production tenures under other resources Acts. The terms of reference for the review will be developed in consultation with key stakeholders.  The review will be delivered in two stages:  **Stage 1: The government will investigate opportunities to harmonise review mechanisms for non-production resource authorities across the resources Acts to provide more transparency, consistency, and equity for stakeholders. We will also investigate legislative amendments to streamline public notification processes for resource projects, while maintaining opportunities for community participation.  **Stage 2: The QLRC will commence its review in January 2023 and is expected to deliver its recommendations to government by January 2025.
39. Implement reforms for small-scale mining	Lead: Government (Department of Resources) When: 2021–24	The Queensland Government supports the small-scale mining sector and the benefits it brings to many regions. However, a more effective system for regulating and administering the small-scale mining sector is needed.  The government received a large number of submissions on the proposal to remove mining claims from the <i>Mineral Resources Act 1989</i> during consultation on the draft plan. A large number of submissions provided suggestions for the future of small-scale mining.  As a result, the government will continue to refine options for small-scale mining reform in consultation with stakeholders before making a decision on whether to remove mining claims from the <i>Mineral Resources Act 1989</i> . If a proposed change to legislation is required, further consultation with stakeholders will be undertaken.  While this work is ongoing, the current moratorium on new applications for mining claims will be retained.

ACTION	LEAD AGENCY / TIMELINE	DESCRIPTION
40. Implement reforms for use of steel casing	Lead: Government (Department of Resources) When: 2022–23	The Queensland Government will remove the prohibition on the use of steel casing in horizontal coal seam gas wells where there is no overlapping tenure. This approach provides beneficial outcomes for both the petroleum and coal industries, reducing industry burden and providing for greater flexibility to optimise future resources where there are no immediate safety risks.  To ensure the government and the public are aware of the use of steel casing in horizontal wells in Queensland, the exact location and well type will be reported and made publicly available.  The government is currently working with stakeholders about the merits of additional regulatory reform.
41. Develop a fit-for-purpose framework for extractive industry assessment	Lead: Government (Department of Resources) When: 2022–23	Key resource areas (KRAs) are areas of land where the Minister for Resources identifies extractive resources of state or regional significance, such as sand and aggregates, which are needed to support the construction and infrastructure sectors. The State Planning Policy states that, when KRAs are identified, the relevant local government must protect the extractive resource through provisions in its planning scheme. The Queensland Government will consult with stakeholders, including local governments, the community and extractive industry operators, to develop a fit-for-purpose extractive industry assessment framework. This framework will balance the impacts of extractive industries with local and state need for construction materials to support infrastructure priorities.



### Actions for key focus area 6: **Improve regulatory efficiency** (continued)

ACTION	LEAD AGENCY / TIMELINE	DESCRIPTION
42. Improve cost recovery for government services provided to industry and review rent settings to ensure tenures are actively explored and developed	Lead: Government (Department of Resources) When: 2022–23	The implementation of a package of process and regulatory reforms will improve the efficiency of the services and functions that the government provides to the resources industry. The Department of Resources currently recovers only around 15 per cent of the total cost of administering the regulatory framework that applies to the resources industry. Consistent with the government's Principles for Fees and Charges, it is appropriate that the fees and charges paid by the resources industry be reviewed to ensure they better reflect the costs of services being provided.  Resource tenure holders pay annual rent to compensate for the exclusive right to explore and develop mineral and energy resources in the area. The Queensland Government will
		also undertake a review of rent to ensure that rents charged to resource authority holders are appropriate and encourage active exploration and development.  A Consultation Regulatory Impact Statement will be developed to consult with stakeholders on the review of fees, charges, and rents. This is expected to be released by the end
		of 2022.
43. New economy mineral regulatory sandbox	Lead: Government (Department of Resources)	The Queensland Government will collaborate and co-design with industry and other stakeholders a 'regulatory sandbox' process to ensure a streamlined approach for new economy mineral projects.
	When: <b>2022–25</b>	The government understands a fit-for-purpose regulatory assessment is critical to accelerate development of these projects and ensure that Queensland is able to optimise the opportunity.
		The process will not reduce the opportunity for community to have a say or lessen environmental standards. Departments will also work together to develop a case management approach to support better coordinated and streamlined assessments across agencies.
		The government will consult further on the regulatory sandbox concept in late 2022.

# Other Queensland Government initiatives supporting the Queensland resources industry

#### Develop a data resources development program

Quality data is essential for making evidence-based decisions and supporting industry innovation for economic prosperity. Through the Queensland Globe and GeoResGlobe, the government publishes thousands of datasets on land, property, geospatial and geoscience. Industry uses this information to make business investment decisions. The Department of Resources is developing a program that will unlock the value of our data and ensure our high-quality data is accessible and reusable by industry. This program will implement initiatives for efficient data collection and improvements to resource project assessment processes.

# **Action plan**

ACTION	LEAD AGENCY	TIMELINE
Establish a Ministerial Queensland Resources     Industry Development Plan Advisory Group	Government (Department of Resources)	Ongoing
2. \$22.6 million to deliver Queensland's Collaborative Exploration Initiative	Government (Department of Resources)	2022–27
3. \$10 million for Geophysics for Discovery	Government (Department of Resources)	2022–24
4. \$5 million for better defining our new economy mineral potential	Government (Department of Resources)	2022–24
5. \$5 million for circular economy in mining	Government (Department of Resources)	2022–24
6. Investigate promotion strategies for Queensland's new economy minerals	Government (Department of Resources)	Ongoing
7. Re-commercialising abandoned mine pilot program	Government (Department of Resources)	2022–23
8. Establish abandoned mines re-commercialisation principles	Government (Department of Resources, Department of Environment and Science, and Queensland Treasury)	2022–23
9. \$5 million to develop a Queensland Battery Industry Strategy	Government (Department of State Development, Infrastructure, Local Government and Planning, and Department of Regional Development, Manufacturing and Water)	2022–27
10. Rent deferral for new economy minerals projects	Government (Department of Resources)	2022–23
11. Facilitate and investigate common user infrastructure	Government	Ongoing
12. Deliver new economy mineral common user demonstration processing facility for vanadium	Government (Queensland Treasury and Department of Resources)	2022–23

ACTION	LEAD AGENCY	TIMELINE
13. Complete the Bowen Basin pipeline study	Government (Department of Resources)	2022
14. Enabling hydrogen and other clean energy sources review	Government (Department of Energy and Public Works)	2022–24
15. Investigate carbon capture, use and storage (CCUS)	Government (Department of Resources)	Ongoing
16. Refresh and implement the Queensland METS 10-Year Roadmap and Action Plan	Government (Department of State Development, Infrastructure, Local Government and Planning)	2017–27
17. \$3 million for METS support	Government (Department of State Development, Infrastructure, Local Government and Planning)	2022–25
18. \$5.7 million to expand the Resources Centre of Excellence	Government (Department of Resources)	2022–25
19. Establish a Queensland Resources Industry ESG Expert Advisory Panel	Government (Department of Resources)	2022–25
20. Embedding Queensland's ESG competitive advantage	Government (Department of Resources)	2022–25
21. Continue to implement financial assurance and mine rehabilitation reforms	Government (Department of Environment and Science co-lead with the Department of Resources and Queensland Treasury)	Ongoing
22. Require industry to develop plans to decarbonise operations	Government (Department of Environment and Science)	2022–27
23. Publish and implement principles for coexistence in the Land Access Code	Government (Department of Resources)	2022
24. Review land access and coexistence institutions	Government (Department of Resources)	2022–23
25. Capture emerging coexistence issues in updated regional plans	Government (Department of State Development, Infrastructure, Local Government and Planning)	Ongoing

# Action plan (continued)

ACTION	LEAD AGENCY	TIMELINE
26. Improve mapping to better support coexistence	Government (Department of Resources, Department of Energy and Public Works, Department of Agriculture and Fisheries, and Department of State Development, Infrastructure, Local Government and Planning)	2022–23
27. Implement findings of Strong and Sustainable Resource Communities Act review	Government (Office of the Coordinator-General)	Ongoing
28. Deliver the Resources Community Infrastructure Fund	Government (Department of State Development, Infrastructure, Local Government and Planning)	2022
29. Local Thriving Communities reform	Government (Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships)	Ongoing
30. Review, strengthen and improve cultural heritage Acts	Government (Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships)	Ongoing
31. Develop and implement plans to support First Nations reconciliation and economic development outcomes	Industry	Ongoing
32. Assist in Closing the Gap through economic development opportunities	Government (Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships)	Ongoing
33. Develop a Queensland resources industry workforce plan	Government (Department of Employment, Small Business and Training), with industry support	2022–23
34. Support industry to attract a skilled workforce	Industry, with support from government	Ongoing
35. Support the training needs of existing and future workers through the Queensland Future Skills Partnership	Government (TAFE Queensland and Department of Resources)	2022–26

ACTION	LEAD AGENCY	TIMELINE
36. Improve resource project assessment processes	Government (Department of Resources, Department of Environment and Science, and the Office of the Coordinator-General)	2022–24
37. Improve land release process	Government (Department of Resources)	2022–23
38. Implement reforms for objections, review and notification processes for resources project approvals	Government (Department of Resources and Department of Justice and Attorney-General)	2022–25
39. Implement reforms for small-scale mining	Government (Department of Resources)	2021–24
40. Implement reforms for use of steel casing	Government (Department of Resources)	2022–23
41. Develop a fit-for-purpose framework for extractive industry assessment	Government (Department of Resources)	2022–23
42. Improve cost recovery for government services provided to industry and review rent settings to ensure tenures are actively explored and developed	Government (Department of Resources)	2022–23
43. New economy mineral regulatory sandbox	Government (Department of Resources)	2022–25

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