



QUEENSLAND **resources industry** development plan

Draft for consultation

November 2021

resources.QLD.GOV.AU



Queensland
Government

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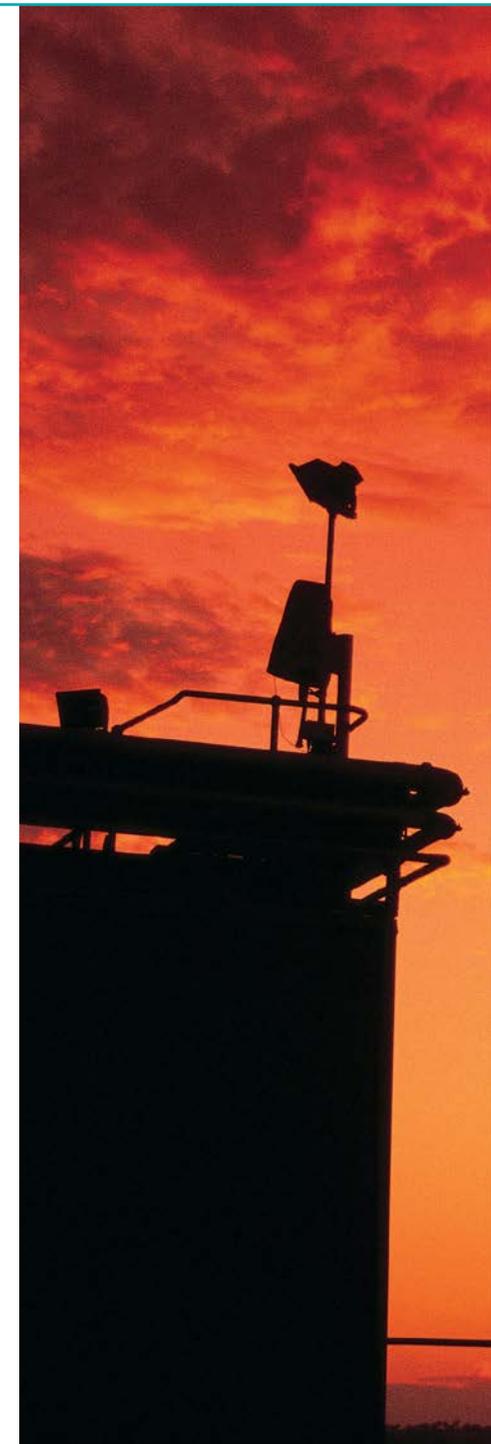
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Acknowledgement of Country

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.

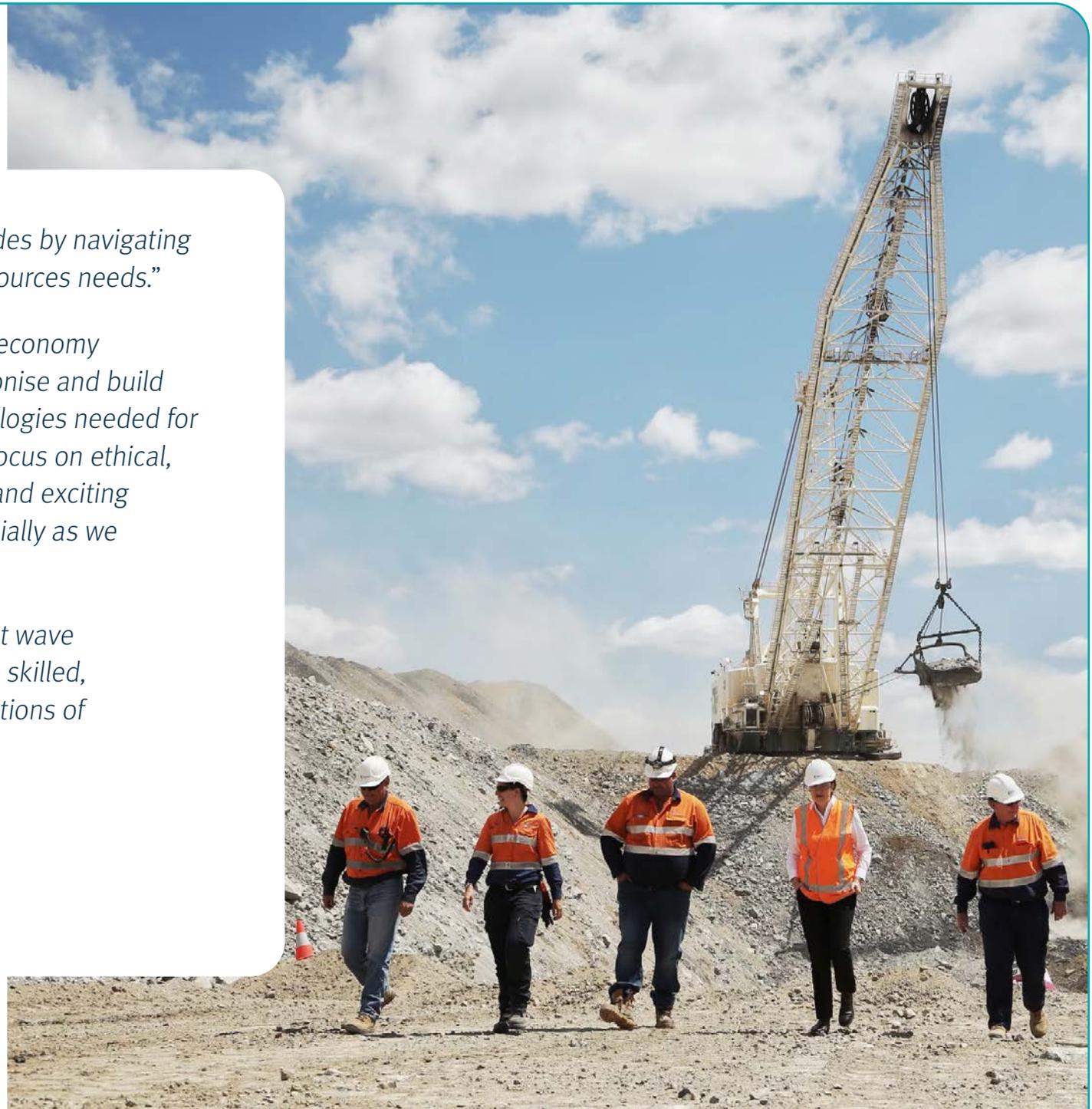
“Queensland has prospered for decades by navigating the changing tides of the world’s resources needs.”

“The next wave is supplying the new economy minerals the world needs to decarbonise and build the renewable and advanced technologies needed for this transformation. The increasing focus on ethical, sustainable production offers fresh and exciting opportunities for Queensland, especially as we prepare for the 2032 Olympics.”

“We are poised, ready to ride this next wave of prosperity and create sustainable, skilled, and rewarding jobs for future generations of Queenslanders.”

Annastacia Palaszczuk

Premier of Queensland and
Minister for the Olympics



Foreword



Honourable Scott Stewart MP
Minister for Resources

Resources have long been one of the cornerstones of the Queensland economy, generating jobs and prosperity, particularly in our regional communities.

Economic, environmental and social forces continually change our world. History shows that success lies in anticipating and embracing this change, a capability Queensland's resources industry has demonstrated over decades through cycles of gold, base metals, coal, and LNG.

A world seeking to decarbonise offers the resources industry challenges, but also great opportunities for sustainable growth.

With forethought and cooperative effort, government, the community and the resources industry can meet these challenges and seize these opportunities, including the beckoning next wave of demand for new economy minerals.

In coming decades, the resources industry will continue to grow and diversify. The Queensland Government will play its part in this transformation by streamlining the touchpoints we have with industry. For its part, industry will need to embrace ESG and continue to improve its interactions with the community.

The Queensland Resources Industry Development Plan will be a plan for growth. It is being developed to provide coordinated direction and momentum to underpin this cooperative effort.

I encourage you to contribute to a plan that can guide sustainable prosperity for all Queenslanders.





Have your say on our resources industry



The Queensland Government is seeking your feedback on this draft Queensland Resources Industry Development Plan.

This draft plan provides a vision for the state's resources industry over the next 30 years. It outlines the:

- » global challenges and changes facing the resources industry
- » opportunities for industry growth and diversification
- » industry's lead role in Queensland's economic recovery from the COVID-19 pandemic
- » government and industry collaboration and commitments required to achieve the vision.

This draft plan also sets out six key focus areas with associated actions that, once achieved, will give Queensland a resilient, responsible and sustainable resources industry that grows as it transforms.

How we've developed this draft

This draft plan has been developed through extensive stakeholder engagement. Information about the stakeholder engagement activities and analysis of feedback is included in the Consultation Report.¹

We have also obtained expert advice to inform the draft plan, including:

- » an end-to-end business mapping exercise of Queensland's resources framework to identify streamlining opportunities, undertaken by PwC²
- » an evaluation of the effectiveness of government support for the resources sector, particularly the Collaborative Exploration Initiative, undertaken by KPMG.³



Questions to consider

We want to hear your feedback on this draft plan. Here are some questions to consider as you review the document:

- » Will the draft plan's six key focus areas support delivery of the 30-year vision?
- » Does the draft plan address the future challenges and opportunities facing the resources industry and ensure that regional communities continue to benefit from the industry?
- » Is there adequate support to help the resources industry leverage future opportunities?
- » How will industry demonstrate its commitment to the expectations of industry? Will these expectations ensure that the shared vision for the industry is realised?
- » Overall, will the proposed actions help deliver the vision of a resilient, responsible and sustainable Queensland resources industry that grows as it transforms?

How to provide feedback

You can provide your feedback online by visiting <https://haveyoursay.resources.qld.gov.au/qridp>.

Finalising the plan

Consultation on this draft plan will close on 11 February 2022.

We will consider your feedback when we finalise the plan, which is due for release in mid-2022.

If you have any questions, please contact the department at communication@resources.qld.gov.au.



Formal submissions and online survey

Our online submission and survey opened (May 2021).



Co-developing the draft plan

We partnered with stakeholders and communities to develop a draft plan (April–June 2021).



Initial consultation and survey

Initial consultation and survey on the plan closed on 30 June 2021



Reviewing feedback and consultation responses

We reviewed the input we received from the consultation and started to put together a draft plan (July–October 2021)



Consultation on the draft plan

We will seek feedback from targeted stakeholders on the draft plan (November 2021–February 2022).



Release final plan

The final plan will be released (Mid-2022).



Implement the plan

We will work with stakeholders and community to implement the plan (2022 and beyond).

Executive Summary

The resources industry has underpinned Queensland's economic development and prosperity for more than a century. It has helped define the state and is part of Queensland's identity at home and abroad.

The industry currently represents 8 per cent of the state's economic output overall and is the dominant industry in many of Queensland's regional centres.

While Queensland has relied on the resources industry to provide jobs, royalties and prosperity, our overseas customers have used its commodities to fuel industrial development and social advancement.

The resources industry faces several trends that will reshape Queensland and the global economy over the coming decades:



1. **decarbonisation** will reshape commodity demand as the world seeks to address and limit the impacts of climate change



2. **corporate social responsibility** will influence investor and customer decisions as they seek ethical investments and products



3. **scarcity and complexity of access to quality resources** will drive companies to shift their business models from mineral extraction to material handling in a circular economy



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



5. **geopolitics** will favour our reputation for supply reliability and drive onshoring of supply chains



6. **emerging innovations** will make mining safer, more productive and digitally focused; create opportunities in mining equipment, technology and services (METS); and impact employment patterns.

These trends create challenges, but also unprecedented opportunities to transform Queensland's resources sector.

In particular, the outlook for Queensland's resources commodities is shifting.

The government's position for all resource projects is that they must proceed on their own merits, based on demand and viability, and meet the highest environmental and community standards.

Thermal coal has kept the lights on in Queensland homes and across the globe for decades. While the global market for thermal coal is likely to decline as countries choose their own path to reduced emissions, demand from the fast-developing countries in the Indo-Pacific region could create pockets of future growth. Queensland's high-quality thermal coal deposits mean that we are well placed to respond to these opportunities, while continuing to support the coal industry to decarbonise and remain competitive for longer.

Demand for **metallurgical coal** is expected to be stronger for longer than thermal coal, even as decarbonisation efforts increase. This is because the steelmaking process that uses this coal has no immediate low-emissions alternatives and steel remains in strong demand, including for renewable equipment such as wind turbines.

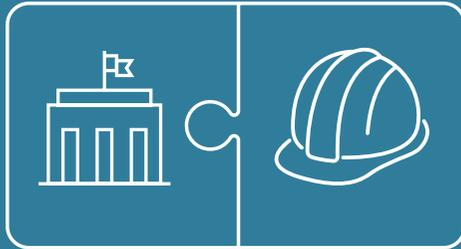
Queensland's **gas** is supporting greater renewable energy generation, both in Australia and internationally, by assisting with grid reliability and security. Additionally, gas will continue to be a vital feedstock for fertiliser production and many manufacturing processes, such as plastics and polymers, textiles, paints and dyes. The emerging hydrogen industry will create new markets and opportunities for the resources sector to utilise its expertise in gas supply for hydrogen development both domestically and internationally.

The International Energy Agency (IEA) estimates that demand for **new economy minerals** will increase enormously over the years to 2050. It will triple under current global measures to reduce emissions and will increase by up to six times if efforts to achieve zero net emissions by 2050 escalate. Capitalising on this demand will be critical, as the limited availability of these minerals for electric vehicles, renewable energy components and batteries may restrict the world's ability to fulfil its decarbonisation ambitions.

To ensure this transformation results in growth, the Queensland Government and the resources industry need to work hard and fast to meet changing demand and export imperatives.

By doing so, Queensland can capitalise on its competitive advantage and transform its industry, developing and supplying the minerals and metals that the world needs to decarbonise. With this, Queensland will create more jobs and further diversify the industry.





The growth and transformation of the Queensland resources sector is not a foregone conclusion.

To achieve this transformation, the Queensland Government and the resources industry will need to work collaboratively in several important ways:



1. **Grow and diversify the industry**

Take advantage of the world's growing demand for new economy minerals to decarbonise the economy by focusing on exploration and creating local mineral and metals supply chains, adding value at each step from mine to manufacture.



2. **Strengthen our ESG credentials and protect the environment**

Sustain the state's traditional commodity strengths in an environmentally responsible way and ensure our regulatory regime sustains the increasing focus of global investors and customers on environmental, social and governance (ESG) factors.



3. **Foster coexistence and sustainable communities**

Provide a framework that ensures mutual benefits for communities and the sector, including a positive ecological, social and economic benefit beyond the life of individual mines.



4. **Ensure strong and genuine First Nations partnerships**

Respect First Nations peoples' aspirations to achieve higher levels of equity ownership in the industry and embed Aboriginal and Torres Strait Islander knowledge at every stage in resource projects.



5. **Build a safe and resilient future workforce**

Ensure worker safety is not subject to profit and productivity considerations, and provide opportunities to train and reskill the workforce to support ongoing regional employment opportunities.



6. **Improve regulatory efficiency**

Attract investment by ensuring the regulatory regime is risk-based, efficient and transparent, and also protects the public interest effectively.

We can be confident that Queensland's resources industry can achieve this transformation because it has done so before. It has changed for the better many times over the decades, pivoting to adapt to new discoveries, new technologies and new global demand.

Right now, the greatest contribution Queensland can make to the world's efforts to meet emissions targets is to find, mine, process and manufacture the metals, minerals and equipment needed to decarbonise the global economy.

Queensland's current success in mining and processing metals, such as copper, zinc and aluminium, can be leveraged to create new mine-to-manufacturing value chains across a broader range of new economy minerals.

And our regulatory regime—which ensures fair wages, safe working conditions, high environmental standards and just outcomes for First Nations peoples—is a solid platform on which to build the ESG credentials that investors and customers demand.

If government and industry work collaboratively and quickly to achieve these outcomes, the industry will successfully transform by 2050 in line with the global economy, growing and diversifying to continue to make a vital contribution to Queensland's economic growth and provide high-quality jobs for Queenslanders.



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

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



Grow and diversify the industry



Strengthen our 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

Introduction

Considering global climate change targets and the Queensland Government’s own policy to achieve net zero emissions by 2050, it is clear the Queensland economy will need to transform in the coming decades.

Historically, the resources industry has been a major component of Queensland’s economic strength, both domestically and globally. The industry is, and will remain, critically important to the state’s economy.

In the 2020–21 financial year, the resources industry contributed \$27.5 billion to Queensland’s gross state product (GSP). This represented more than 8 per cent of the total GSP.

Additionally, the resources industry directly employs around 80,000 Queenslanders across the state, particularly in the regions, which account for around 70 per cent of all mining jobs.

Every Queenslander benefits from our resources industry. Mining royalties help pay for government-funded services like schools, hospitals and roads, as well as police, teachers and nurses. The industry also supports thousands of regional businesses and earns export revenue to grow our economy.

The resources industry’s best growth prospects will come from embracing the opportunities presented by global trends, and working hard and fast to meet changing demand and export imperatives.



2020–21 figures

During this transformation period, steps must be taken to shore up existing strengths—such as coal and gas—by lowering their emissions intensity. This can be done by supporting industry to decarbonise operations so they can remain competitive for longer and contribute to the state’s emissions targets, while also providing jobs and continuing to contribute to the State’s economy.

By doing so, Queensland can capitalise on its competitive advantage: developing and supplying the minerals and metals that the world needs to decarbonise. With this, Queensland will create more jobs and further diversify the industry.

For Queensland industry and government, this will involve capitalising on the new global market demand, particularly in the Indo–Pacific region, and emerging mining equipment, technology and services (METS) innovations around productivity.

Our state will transform into a global leader in mining the new economy minerals required to decarbonise the global economy, and seize the opportunity that global trends offer to add more value domestically through processing and advanced manufacturing.

If government and industry work collaboratively and quickly to achieve these outcomes, the industry will grow, diversify and transform, ensuring that it makes a greater contribution to Queensland’s economic growth and provides more high-quality jobs for Queenslanders.

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 beyond 2050.



Supporting economic recovery

Since 2020, Queensland has been challenged as never before, as the state has dealt with the ever-evolving impacts of COVID-19.

The Queensland Government was able to respond to the crisis quickly to protect our health, economy and community. Queenslanders, business and industry, have rallied to support the government's response and protect our state and each other.

As a result of this support and collaboration, Queensland is already on the path to economic recovery. However, there is a lot of work still ahead and the resources industry will play a major role in that.

Industry response during pandemic

Throughout the pandemic, the resources industry has worked tirelessly to respond and adapt quickly. This has included developing new health and safety practices for the industry, and working with government and health authorities to develop protocols to protect workers and their families, and the regional communities where they operate. The workforce responded by embracing new ways of working to protect colleagues and communities, while increasing production.

Queensland Government objectives

The Queensland Government has developed a set of long-term objectives for the community⁴, which lay out the government's priorities for Queensland.

These objectives build on Queensland's Economic Recovery Plan⁵, which will guide Queensland through its recovery from the impacts of the pandemic. These objectives can be achieved only through collaboration.



Of the government's nine long-term objectives, the resources industry has a major role in addressing six of them.



Growing our regions

Help Queensland's regions grow by attracting people, talent and investment, and driving sustainable economic prosperity.



Supporting jobs

Support increased jobs in more industries to diversify the Queensland economy and build on existing strengths in agriculture, resources and tourism.



Building Queensland

Drive investment in the infrastructure that supports our recovery, resilience and future prosperity.



Making it for Queensland

Grow manufacturing across traditional and new industries, making new products in new ways and creating new jobs.



Investing in skills

Ensure Queenslanders have the skills they need to find meaningful jobs and set up pathways for the future.



Protecting the environment

Protect and enhance our natural environment and heritage for future generations and achieve a 50 per cent renewable energy target by 2030.

The role of resources in Queensland's recovery

These objectives make it clear that the resources industry will continue to play a vital role in Queensland's economic recovery. Recognising this, in October 2020, the Queensland Government committed to developing the Queensland Resources Industry Development Plan.

This plan, and the actions arising from it, will support the government's objectives for the community and underpin the growth of the resources sector into the future beyond the pandemic.

The resources industry will remain a pivotal part of Queensland's economy.

A plan for opportunities, challenges and change

An evolving resources industry

Queensland's economy has long relied on coal, gas and mineral resources. However, this traditional industry is now facing global change, and will need to evolve.

While these resources will still play an important role in our future resource mix, the world is transitioning to a lower carbon economy and a focus on renewable energy. This will bring some challenges to our industry, but also a wealth of opportunity.

For example, there is increasing demand for new economy minerals to create the products of the future and tackle climate change. These are commodities Queensland is well positioned to provide.

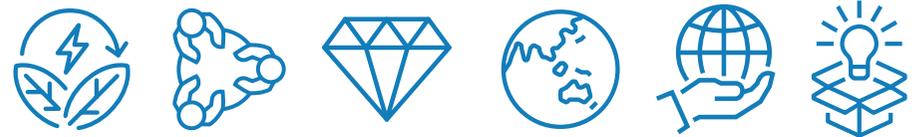
Domestically, Queensland's economy is setting out on a path to recovery from the impacts of COVID-19. The Queensland Government's priorities for recovery put the resources industry front and centre in its recovery strategy.

We need a plan to ensure that our resources industry can successfully navigate these changes, seize all the opportunities that the future brings and maintain Queensland's position as a world leader in resources.

Key trends influencing change

As Queensland is a trade-exposed economy, we need to constantly monitor, understand and adapt to international trends and the dynamics of the global economy.

Six major economic and social trends are emerging that will create both challenges and opportunities for the resources industry in coming years. This plan outlines actions that will enable industry and government to respond to these trends.





ESG: Environmental, social and governance—including decarbonisation and corporate social responsibility trends

Investors and consumers are increasingly seeking to invest in and purchase products from companies that can demonstrate strong environmental, social and governance (ESG) credentials. The demand for ethically produced resources is only expected to strengthen. Demonstrating actions targeted at decarbonising operations and strong corporate social responsibility will become increasingly important for resources companies seeking capital and securing insurance.

Decarbonisation

Recently, the Intergovernmental Panel on Climate Change's sixth assessment report concluded that climate change and its impacts are accelerating, and that the world is likely to reach warming of 1.5 degrees Celsius by the mid-2030s if more action to reduce emissions is not taken.⁶

To mitigate the environmental and economic impacts of climate change, many countries have committed to limiting global warming to below 2 degrees Celsius, and ideally less than 1.5 degrees. The global economy is shifting rapidly to a decarbonised economy, and ESG-conscious consumers and investors are demanding low-emissions energy, technology and services.

For Queensland's resources industry, this presents opportunities to supply the minerals and metals that the world needs to create the technology required to decarbonise. It also requires resources companies to invest in decarbonising their own operations as the world moves to net zero emissions.

Corporate social responsibility

Queensland's robust regulatory frameworks provide a solid foundation for resources companies to establish strong corporate and social governance practices, which they can use to demonstrate their ESG credentials.

This trend can be expected to focus organisations on:

- » an ability to demonstrate that they are socially conscious
- » ensuring that worker safety is not subject to profit or productivity considerations
- » being well governed
- » demonstrating strong engagement with First Nations peoples
- » valuing the protection of the environment.



Scarcity and complexity of access to quality resources

With demand for minerals increasing, access to quality resources to build the products that the world requires will become more challenging. As quality resources become scarcer and/or more difficult to mine, costs will increase and operational changes will be needed to access these resources competitively.

Queensland's resources industry will require innovation and operational shifts to find and access these resources. Access to quality data—such as Queensland's Open Data Portal—to inform the planning of exploration activities will become more critical, as many resources companies embrace data-driven exploration to find these resources.

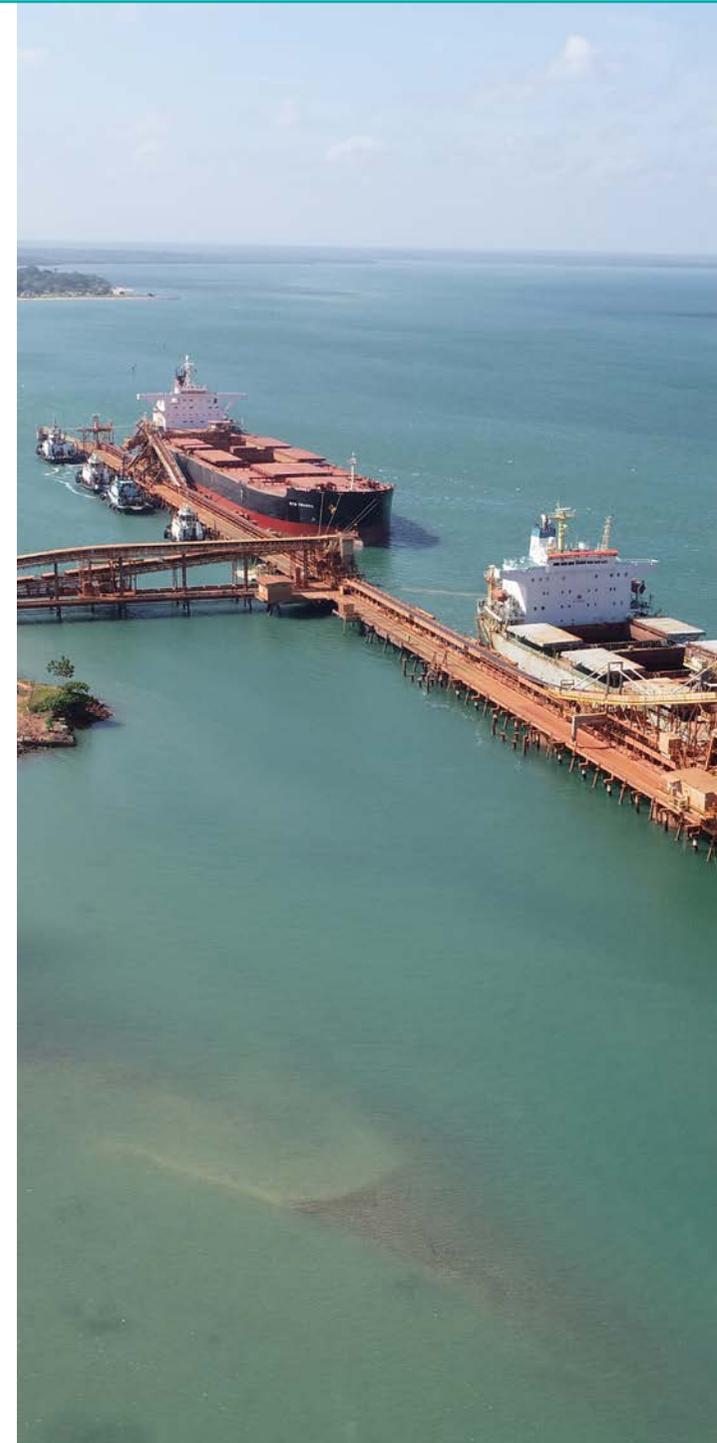
Resources companies are also expected to adopt more circular economy practices, moving along the value chain as they move from being mineral extraction to also being material handling corporations. This may initiate practices like leasing minerals to customers, which are processed and reprocessed time and time again while owned by circular resources companies.



Increasing consumer base in the Indo-Pacific

It is projected that approximately two-thirds of the global middle class will live in Asia by 2030. This will add billions of active participants to the global economy. This emerging consumer base will significantly increase demand for energy and resources as the Indo-Pacific increasingly develops, electrifies and industrialises.

Queensland's proximity to these markets will create significant opportunities for the state's resources industry to supply the resources and value-added goods that the region will need.





Geopolitics

Globalisation, and conflicting economic and political ideologies, are increasingly impacting international trade and supply chains. Geopolitical conflicts, such as trade disputes and trade barriers, increase the costs of trade and can restrict international demand.

While the future impact of this trend is difficult to quantify, Queensland and its resources industry must monitor this trend and remain agile in response to geopolitical changes. Queensland's reliable supply and political stability will ensure that the resources industry remains attractive to investors and companies in light of these geopolitical risks. This trend will also drive the onshoring and development of critical supply chains.



Emerging innovations

Technological innovations, such as automation, big data analytics and an increasing focus on digital workflow, will transform the resources industry and deliver a range of new techniques, such as remote mining, and predictive exploration and extraction capabilities.

These innovations provide opportunities to further improve safety on resource sites and sell our innovations to the world through our world-class mining equipment, technology and services (METS) sector.

While emerging innovations such as automation will change the skills that resources industry workers need in the future, the industry will continue to offer highly paid and highly skilled work. However, the industry must ensure that its workforce has the skills needed to make the most of these emerging innovations and must prepare existing workers for new opportunities within the industry.



Impacts of key trends on commodities

Queensland's three major resources commodities—coal, gas and minerals—will be impacted by global trends in different ways. It is essential to understand and plan for these impacts to resolve any challenges and take advantage of the substantial opportunities they provide to grow the industry sustainably.

Coal

For decades, coal mining (thermal and metallurgical) has contributed significantly to the Queensland economy, and is the dominant industry in many regions. It will continue to be a strength for Queensland over the coming years.

There are many views about the future of coal. While demand is expected to decline in line with global efforts to reduce emissions, the pace of this change will depend on individual customer choices in response to their own national policies and global capital market drivers.

In these circumstances, the quality and comparatively low emissions profile of Queensland coal should keep demand high for longer than would otherwise have been the case. Additionally, ongoing innovations to reduce emissions on site, as well as in coal-fired power and steelmaking, will be critical to maintaining the global competitiveness of coal.



The Queensland Government's position is that all proposed coal projects must stack up socially, environmentally and economically. Each project must proceed on its own merits, based on demand and economic viability, and meet the highest environmental and community standards.

However, the market's attitude to coal is evolving rapidly. Banks, insurance companies and investors, including superannuation funds, are all closely considering their exposure to fossil fuel projects, both existing and new.

This has implications not just for private finance, but public finance as well. As the Reserve Bank of Australia (RBA) noted recently, foreign investors are increasingly concerned about government exposure to climate change risk. While to date there have been few moves from foreign investors to withdraw from Australian bonds or equity, the RBA notes that the risk of this occurring is increasing.⁷

Given these risks, the Queensland Government will continue to monitor the situation closely and consider any necessary future action to ensure communities and workers are supported. The Queensland Government's position remains that coal projects will be supported provided they stack up financially, socially and environmentally.

Thermal coal

Thermal coal accounts for 35 per cent of coal currently mined in Queensland. This coal is used for power generation and has kept the lights on in Queensland homes and across the globe for decades. It has also helped overseas nations industrialise their economies and provide social and economic opportunities for their people.

Thermal coal will be an important commodity in the energy mix as we transform to a low-carbon economy.

Approximately 30 per cent of thermal coal mined in Queensland is used in the domestic market, largely supplying Queensland's coal-fired power generation fleet. These generators play an important role in Queensland's electricity system, but this role will change as renewable energy supply grows.

Queensland is going through a rapid energy transformation, with around \$10 billion of investment in renewables since 2015 and more investment in the pipeline. This addition of renewable energy, and global decarbonisation efforts, will continue to change Queensland's energy mix.

Through the 10-year Queensland Energy Plan, currently under development, the Queensland Government will provide a clear pathway for how more renewable energy is integrated into the electricity system, to power the state's industries and attract new, green industries to Queensland. The Queensland Energy Plan will also articulate how Queensland will achieve 50 per cent renewable energy by 2030 and ensure we are on track for net zero emissions by 2050.

About 70 per cent of Queensland's thermal coal is exported to the global market and demand for this coal will be affected by changes in this market. Consequently, as the world decarbonises and transforms its economy, the demand for thermal coal will decline over the coming decades, with the pace dictated by the speed at which Queensland's international customers decarbonise their economies.⁸

For example, continuing demand from the fast-developing economies in the Indo-Pacific region could create pockets of growth during this period.

Given the high quality of Queensland's thermal coal resources and our proximity to these markets, our resources will continue to meet this demand.

Metallurgical coal

Metallurgical coal is Queensland's greatest export strength. It represents approximately:

- » 65 per cent of all coal produced in Queensland
- » 85 per cent of the value of Queensland's coal exports
- » about half the value of all Queensland resources industry exports
- » over one-third of the value of all Queensland merchandise exports.

Metallurgical coal is used in the production of steel, iron alloys, carbon and other metals. Steel is an integral material to many applications, including renewable energy equipment that the world needs to decarbonise such as wind turbines and solar panels.

Demand for metallurgical coal is expected to be stronger for longer than thermal coal. This is because—as noted by the IEA—even as decarbonisation increases, the steelmaking process that uses this coal currently has fewer cost-competitive, low-emissions alternatives.⁹

Therefore, efforts to decarbonise steelmaking will focus firstly on reducing emissions from existing metallurgical coal-based technology. Much of the world's steelmaking capacity, particularly in North Asia, uses relatively new equipment that was designed for decades of use, such as coke ovens and blast furnaces. Efforts to achieve a return on investment for this equipment will likely drive owners to consider modifications, rather than adopt entirely new technology and capital equipment to reduce emissions from these operations. In these circumstances, demand for high-quality inputs such as Queensland's metallurgical coal is likely to be maintained for decades to come.¹⁰

The Queensland Government will partner with industry to take advantage of the opportunities ahead and manage any risks to the community that emerge.

Gas

The gas industry is one example of how well Queensland's resources industry and government can together pivot to meet the global market's changing needs.

This previously small local industry has transformed into an export powerhouse, generating more than \$66 billion in export earnings and making Australia the world's largest exporter of seaborne liquefied natural gas.

Our gas industry's role in supporting grid reliability and security is enabling the deployment of renewable energy generation in Australia and internationally. Additionally, gas will continue to be a vital feedstock for fertiliser production and many manufacturing processes, such as plastics and polymers, textiles, paints and dyes.

Queensland has supplied the bulk of Australia's gas to the domestic east coast market for many years. Over recent years, Queensland has released gas acreage for both exploration and production with domestic supply conditions to ensure demand from local industry is met.

A key challenge for Queensland's gas industry over coming years—as it will be for the entire east coast gas market—will be developing new sources of gas supply to meet domestic and international needs, as existing gas reserves decline between now and 2050.

Queensland is continuing to work with the Australian Government to unlock new sources of gas supply. This includes investigating bringing additional gas to market through the jointly funded, \$10 million Bowen Basin gas pipeline study.

Future global demand for gas will be shaped over the next few decades, as the world continues to decarbonise its energy system.

Demand for gas will decline over the coming decades, with the pace dictated by the speed at which the global economy decarbonises.

However, even as this occurs, there will be increasing opportunity for gas producers to become diversified energy providers by investing in low-emissions gases, including hydrogen. The IEA acknowledged this opportunity recently, noting that if international efforts to achieve net zero emissions by 2050 escalate, total demand for gases—natural and low emission—could be around 5 per cent higher in 2030 than today.¹¹

Over the next and subsequent decades, the industry—including Queensland operators—will consider ways to expand into diversified energy by applying their current expertise in upstream and downstream gas and LNG production to new markets for hydrogen.

Hydrogen presents a significant opportunity for Queensland. To prepare for this, the Queensland Government has already developed the Queensland Hydrogen Industry Strategy 2019–2024. The government has also established a Hydrogen Industry Development Fund. In 2020, the government committed a further \$10 million to this fund to drive investment and the development of hydrogen projects in Queensland.¹²



Minerals

The global shift towards electrification and low-carbon technologies presents vast opportunities for Queensland's minerals sector, particularly for the new economy minerals that Queensland has in abundance.

New economy minerals are minerals and metals that will power the economy of the future. They are used to produce emerging technologies, such as electric vehicles, renewable energy components, low-emission power sources, batteries, consumer devices and products for the medical, defence and scientific research sectors.

These include minerals that have been traditional strengths for Queensland, such as copper and bauxite/alumina and silica, as well as emerging technology minerals, such as vanadium and cobalt.

As the global economy evolves in response to global trends such as decarbonisation, ESG and technological innovation, the demand for new economy minerals will increase sharply. This demand will trigger a new wave of mining activity and industrialisation in the regions through minerals processing and manufacturing.

The IEA estimates that mineral requirements for clean energy technologies will increase enormously in the years to 2050. Demand will triple under current global measures to reduce emissions and will increase by up to six times more than today if efforts to achieve zero net emissions by 2050 escalate.¹³

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

One example is vanadium. With large deposits in the North West Minerals Province and new mines in the development pipeline, as well as a steep increase in global demand for vanadium batteries for electricity grids, Queensland is ready to create a new supply chain from mine to manufacturing.

This is just one example where rising global demand is giving Queensland an opportunity to create more jobs in more industries.

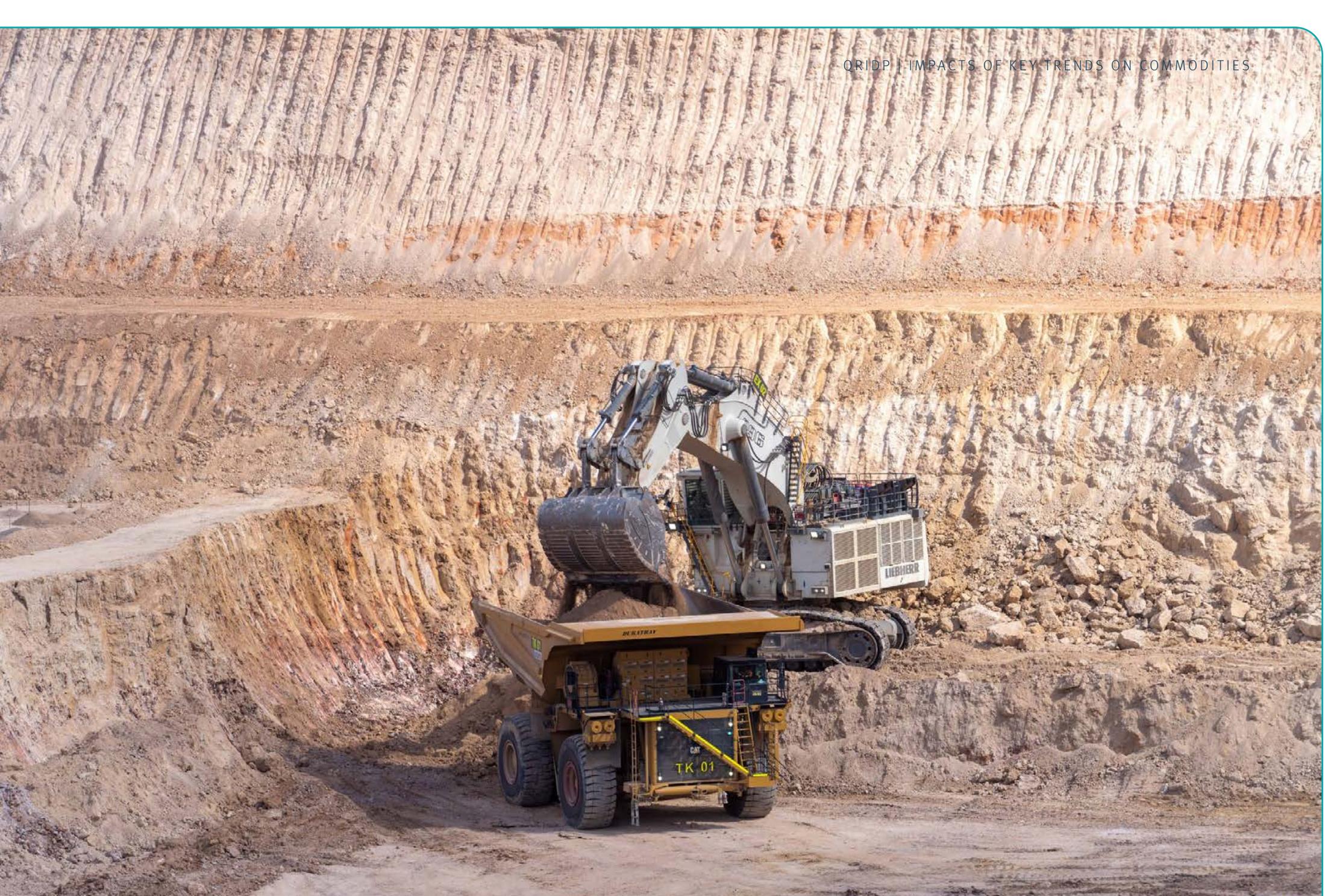
As our reliance on batteries for cars, homes and cities increases, the demand for cobalt may grow 6–30 times higher than it is today.

While the global energy system's transformation will be dramatic, one ongoing challenge will be resource security. Just as with traditional resources, an adequate and predictable supply of new economy minerals will be essential.

This gives Queensland the opportunity to generate a new wave of regional industrialisation and become a world-class supplier of new economy minerals by:

- » exporting the commodities
- » value-adding along the supply chain to create refined and manufactured products
- » developing METS to support their definition and extraction.

Circular economy innovations will complement this work by providing ways to repurpose, reuse and recycle our extracted minerals. Many resources companies will reshape their business models from being minerals extractors to being materials handlers, potentially leasing minerals to customers while retaining ownership of the commodity throughout its entire life. This means that a mineral will be processed, disassembled and reprocessed time and time again.



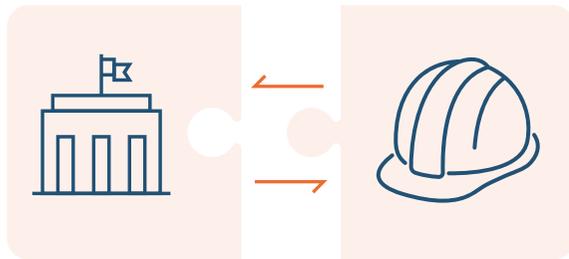
A resources plan for Queensland

Government and industry commitments

The growth and transformation of the Queensland resources industry is not a foregone conclusion.

To achieve our vision, government and industry must commit to coordinate joint action.

By working cooperatively, the resources industry and government will deliver jobs in more Queensland industries, diversify our economic and skills base, and strengthen our regional communities.



Our key focus areas

This draft Queensland Resources Industry Development Plan outlines six key focus areas where government and industry need to take action to:

- » face emerging challenges and seize new opportunities
- » lead Queensland to economic recovery post-pandemic
- » achieve our vision of a resilient, responsible and sustainable resources industry that grows as it transforms.

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 will explicitly outline individual government commitments and expectations for industry. They will also provide a set of outcomes for the industry in 2050, enabling us to look beyond the challenges we face now to a bright new future with a strong, sustainable industry.

The actions coming out of this plan will require dedicated effort from both industry and the Queensland Government. These actions will be undertaken over the short and medium term to position the resources industry for long-term, sustainable growth.

Our resources industry in 2050

Together, government and the resources industry will grow a diversified sector that delivers significant benefits for all Queenslanders.

If we deliver on this plan together, the industry will transform, ensuring it makes a greater contribution to Queensland's economy, and provides more high-quality jobs across Queensland.



**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**

Outcomes for the resources industry in 2050

We will monitor our success across these six key focus areas:



Grow and diversify the industry

- » Queensland's new economy minerals sector will be supporting a vibrant processing and manufacturing sector.
- » Queensland will be a global supplier of choice for premium commodities that are critical for low-emission technologies.
- » Queensland will have supported global industries to decarbonise.
- » Our METS sector will be solving many global industry problems and be a major contributor to the Queensland economy.
- » Efficient exploration will be driven by world class data and digital technologies including real-time digital earth visualisation.



Strengthen our ESG credentials and protect the environment

- » Our industry will be known globally as a leader in ESG. It will have taken decisive action to decarbonise operations and embed strong ESG factors into operations.
- » The industry will be known and respected globally for being safe, high wage, environmentally responsible, well regulated and partnering with Aboriginal and Torres Strait Islander peoples.
- » Queensland's resources companies will have transformed from delivering mainly extraction activities to being leaders in materials handling throughout the circular economy. The industry will be a leader in disassembly technology and recycling.
- » The industry will operate beyond regulatory requirements and be trusted to do the right thing.



Foster coexistence and sustainable communities

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



Ensure strong and genuine First Nations partnerships

- » Aboriginal and Torres Strait Islander peoples will be true partners in any resource project taking place on Country.
- » Aboriginal and Torres Strait Islander peoples will be realising economic benefits as equity partners, owners and operators of resources development occurring on Country.
- » The resources industry will be continuing to recognise, protect and conserve Aboriginal and Torres Strait Islander peoples' cultural heritage through strong partnerships and meaningful engagement.



Build a safe and resilient future workforce

- » Queensland's resources industry will employ more Queenslanders, providing high-wage, highly skilled, safe and fulfilling careers.
- » The resources industry will be diverse and inclusive, representing host communities and providing careers that young people want to pursue.
- » While the workforce, mechanisms and methods used to mine 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.



Improve regulatory efficiency

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



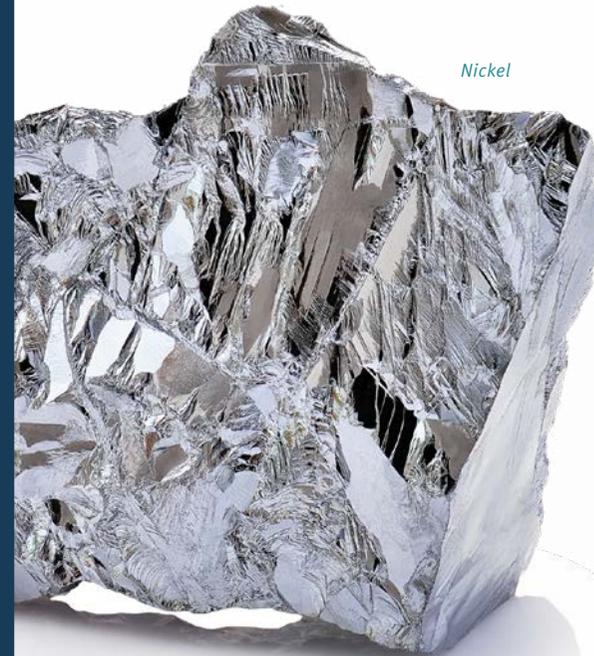
KEY FOCUS AREA 1

Grow and diversify the industry

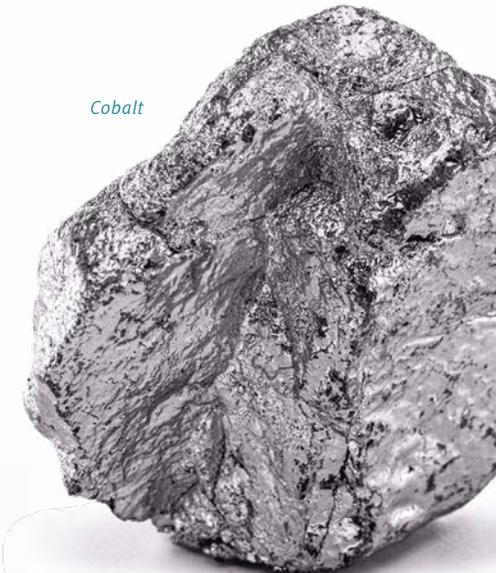
Outcomes for the resources industry in 2050

- » Queensland's new economy minerals sector will be supporting a vibrant processing and manufacturing sector.
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- » Queensland will have supported global industries to decarbonise.
- » Our METS sector will be solving many global industry problems and be a major contributor to the Queensland economy.
- » Efficient exploration will be driven by world class data and digital technologies including real-time digital earth visualisation.

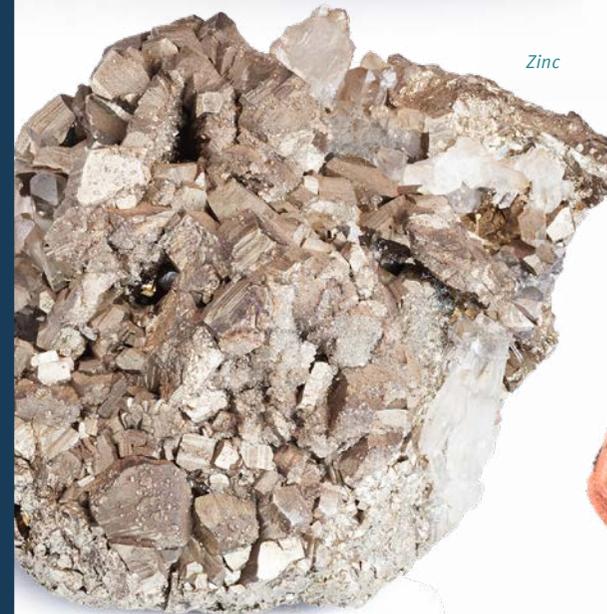
To achieve these outcomes, the Queensland Government and resources industry must work in partnership to grow and diversify the resources industry. We will attract investment, and extend and strengthen supply chains, to create a new wave of industrialisation in Queensland regions based on new economy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



Nickel



Cobalt



Zinc



Vanadium

Queensland's new economy minerals potential

Diversifying Queensland's resources industry is essential to encourage sustainable, long-term development and economic growth. Growing Queensland's new economy minerals industry and seizing the opportunities of a decarbonising global economy are both central to this.

Queensland is endowed with rich and diverse new economy minerals. Unlocking these minerals responsibly will give Queensland the opportunity to:

- » deliver a high-value product that supports the global transformation into a low-emissions economy
- » foster a new wave of mineral processing, supply-chain activity and potential circular economy innovation in regional Queensland.

There is enormous potential for the production and export of these minerals right across our state, and the Queensland Government is actively supporting exploration in greenfield and brownfield development sites. Investigations are also underway to identify any contained minerals in existing mine tailings and mine wastes.

As global demand for new economy minerals increases, Queensland is in a prime position to build on our mining and manufacturing strengths and become a central player in the value chain of new economy minerals.

Additionally, Queensland's proximity to the Indo-Pacific and its increasing consumer base, will maximise our opportunity to export value-added minerals that have been mined and processed in Queensland. Europe and North America also represent enormous opportunities for Queensland's new economy minerals sector.

Developing strong trade relationships with these markets will be essential. International free trade agreements, negotiated by the Australian Government, will enable Queensland's resources industry to grow. We will continue to work with the Australian Government to ensure that Queensland's resources industry benefits from these agreements.

Tungsten



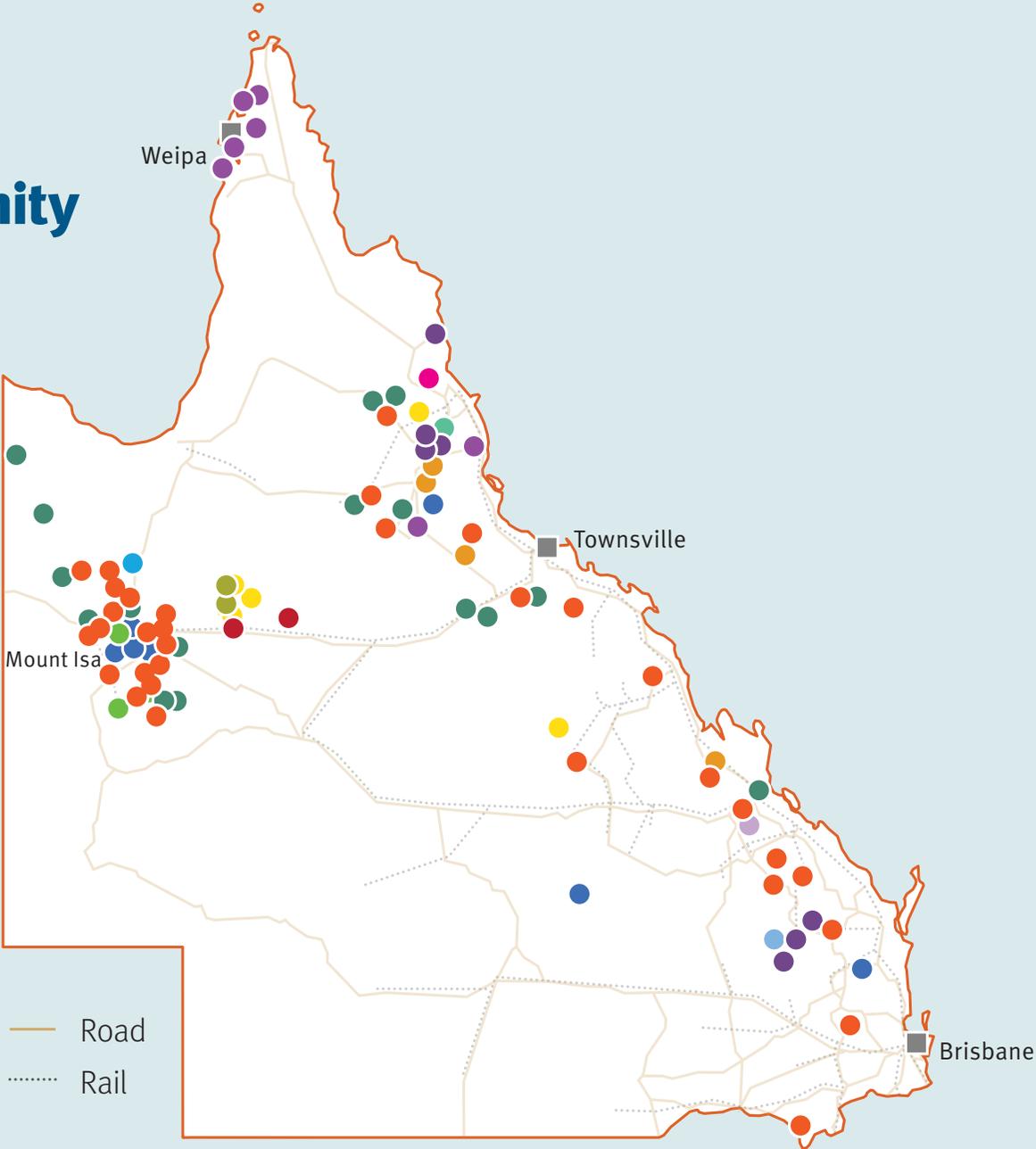
New economy minerals— Queensland’s future opportunity

New economy minerals (sometimes referred to as critical minerals) are a range of metals and minerals used in many emerging technologies including electric vehicles, renewable energy products, low-emission power sources, consumer devices, and other advanced technologies in medical, aerospace, defence and scientific research sectors.

Global demand for renewable energy products and technology is growing rapidly, creating increasing demand for the new economy minerals needed to make these products—and Queensland has these minerals in abundance.

New economy minerals have a wide range of uses from batteries to smart phones, wind turbines and electric vehicles, as well as defence and medical technology. Here’s just a snapshot of how some of Queensland’s new economy minerals are used (opposite).

- Aluminium / Bauxite
- Cobalt
- Copper
- Graphite
- Indium
- Molybdenum
- Nickel
- Rare Earth Elements
- Rhenium
- Scandium
- Thallium
- Tin
- Tungsten
- Vanadium
- Zinc



29
Cu
Copper
63.546



Copper

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



23
V
Vanadium
50.9415

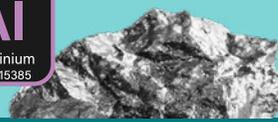


Vanadium

- » Emerging battery technologies, especially those used for grid-scale electricity storage
- » Important for a range of defence technologies
- » Used to manufacture high strength steel alloys



13
Al
Aluminium
26.9815385

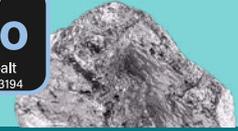


Aluminium

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



27
Co
Cobalt
58.933194



Cobalt

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



6
C
Carbon
12.011



Graphite

- » Electric vehicles and battery storage
- » Solar technology



74
W
Tungsten
183.84



Tungsten

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



30
Zn
Zinc
65.38



Zinc

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



28
Ni
Nickel
58.6934



Nickel

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



Exploration is critical

It all starts with exploration. Increased exploration is required to find the new economy minerals needed to support emerging and future industries and markets and develop them into mines.

To facilitate this, the Queensland Government has streamlined the process for obtaining an exploration permit. We have developed and implemented environmentally relevant activities (ERA) standards for exploration¹⁴, which enable those who meet the eligibility criteria and standard conditions to obtain an environmental authority either automatically online or in less than 10 business days for a hard copy application.

Exploration can be costly, as it can take several hundred exploration projects to yield a deposit of sufficient quality and size to be developed into a mine. To help discover and define deposits, the Queensland Government has been investing in exploration for new economy minerals, including through the \$27 million Strategic Resources Exploration Program¹⁵ and the current \$23 million New Economy Minerals Initiative.¹⁶

Maximising opportunities for collaboration between government and industry to share knowledge and intellectual property will be critical to support the development of the new economy minerals sector.

Supporting traditional commodities and METS sector

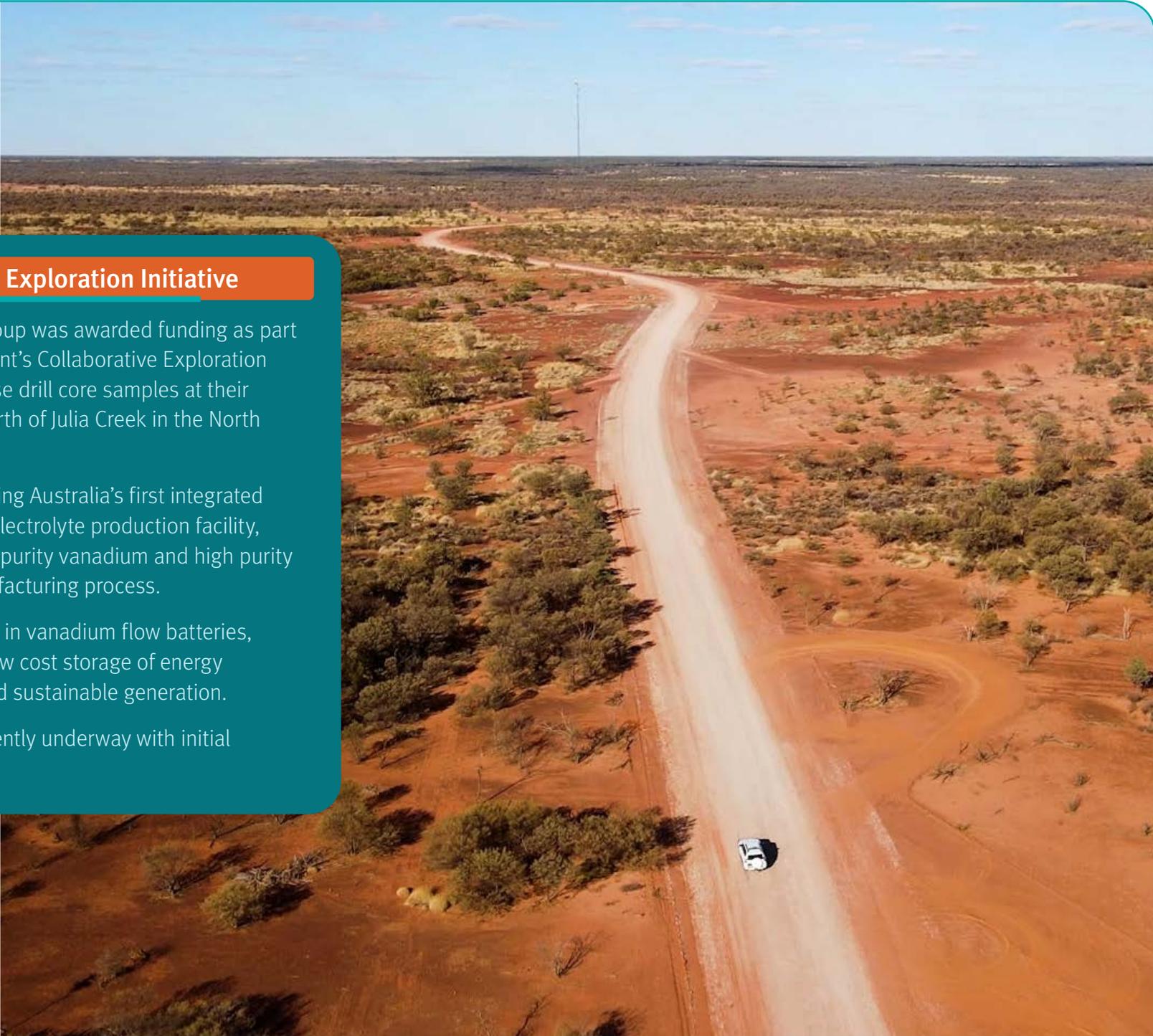
While Queensland's coal and gas sectors will continue to be key strengths of the resources industry over coming decades, they are facing some challenges.

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.

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; however, new basins like the Bowen and Galilee will also be needed to bring gas online.

Another major opportunity for Queensland is to grow our world-leading METS sector, which is worth \$7.2 billion and employs 20,000 Queenslanders. Globally, resources industries are starting to respond to changing demands around productivity, environmental outcomes and extraction of difficult-to-access resources. This enables Queensland's METS businesses and researchers to position themselves as the premier global destination for mining and innovation.





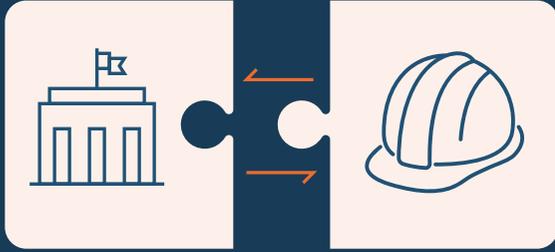
Vecco and Collaborative Exploration Initiative

Queensland-based Vecco Group was awarded funding as part of the Queensland Government's Collaborative Exploration Initiative in 2020, to re-analyse drill core samples at their Debella Vanadium Project north of Julia Creek in the North West Minerals Province.

The company is now developing Australia's first integrated vanadium mine and battery electrolyte production facility, which will produce both high purity vanadium and high purity alumina for the battery manufacturing process.

High purity vanadium is used in vanadium flow batteries, which provide long lasting, low cost storage of energy produced from renewable and sustainable generation.

A pre-feasibility study is currently underway with initial production targeted for 2023.



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 supply chains of new economy minerals.
- » 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 supply chains by actively facilitating and enabling dialogue, and promoting Queensland opportunities, particularly in regional communities and for small and medium-sized businesses.
- » Investigate the feasibility of secondary mining 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 (CCUS) by continuing to release suitably unconstrained land under the *Greenhouse Gas Storage Act 2009* as part of the Queensland Exploration Program, while rigorously assessing potential environmental impacts from CCUS activities.
- » 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, to help create a new wave of industrialisation in Queensland's regions based on new economy mineral mining, processing and manufacturing.
- » Collaborate together and with government to identify opportunities for common user infrastructure and opportunities to maximise and share the benefit of intellectual property to support the ongoing development of the new economy minerals sector.
- » 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: Grow and diversify the industry

1. Deliver Queensland's Collaborative Exploration Initiative

Lead: Government

When: 2021–2024

The Collaborative Exploration Initiative (CEI) supports Queensland's exploration companies to grow and make discoveries that will develop into future mines for the benefit of the state.

The Department of Resources' Geological Survey of Queensland manages the initiative. Data from the CEI rounds is made publicly available after the confidentiality period expires.

Applications for round 6 of the CEI opened in November 2021, with funding secured until 2024.

2. Pilot the re-commercialisation of an abandoned mine

Lead: Government

When: 2022

Queensland has approximately 120 complex abandoned mine sites. Several sites have re-commercialisation potential due to their tailings storages, stockpiles or remaining in-ground resources.

This is a growing area of interest, as investors are increasingly considering mining within a circular economy, and technology used to recover minerals in these sites is improving constantly.

The government will conduct a pilot program to release a high-priority abandoned mine site with re-commercialisation potential through market sounding, followed by a competitive tender process. Learnings from this pilot will help inform future releases.

3. Investigate promotion strategies for Queensland's new economy minerals

Lead: Government

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.



✓ Actions: Grow and diversify the industry (continued)

4. Develop a Queensland Battery Industry Strategy

Lead: Government

When: 2022–23

Queensland has an opportunity to extend the local supply chain for new economy minerals, particularly the development of battery chemicals and possibly battery manufacturing. This could increase economic development and employment in the regions.

While Queensland's battery supply chain is not yet fully established, research is underway nationally to investigate developing commercial-scale, domestically built batteries.

To capitalise on this opportunity, we will develop a Battery Industry Strategy to seize the opportunities that this supply chain offers and integrate Queensland's efforts with work being done nationally.

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

Lead: Government

When: 2016–26

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.¹⁷

Queensland's abundance of new economy minerals provides significant opportunities for Queensland's manufacturing sector to value-add locally. We will continue to implement our Advanced Manufacturing Roadmap and Action Plan.

6. Continue to support regional manufacturing hubs

Lead: Government

When: 2021–22

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 once the program is fully subscribed.¹⁸



✓ Actions: Grow and diversify the industry (continued)

7. Review of rent for new economy minerals projects

Lead: Government

When: 2022

Resource authority holders pay rent for the exclusive right to explore, develop or produce the state's non-renewable resources.

To ensure rent is not a barrier to greenfield new economy minerals projects and enable the industry to redirect funds towards these projects, the government will review rent for new economy minerals projects.

We will consider rent deferrals during development phases and other opportunities for assistance. Any deferred rent would need to be paid in full.

8. Facilitate and investigate common user infrastructure

Lead: Government

When: Ongoing

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. We will 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, it must support more jobs in regional Queensland and provide sustainable public benefits.

9. Complete the Bowen Basin pipeline concept study

Lead: Government

When: 2021

Gas pipelines are essential common user infrastructure that brings gas to the domestic and international markets.

The Queensland and Australian governments have jointly contributed \$10 million for a Bowen Basin pipeline study.

This study will investigate potential pipeline pathways and ways to optimise the Bowen Basin gas resources. It will also investigate opportunities to use fugitive emissions from coal mines to help Queensland transition to a low-carbon economy.

The study will occur in multiple phases, the first being a concept study to be completed by the end of 2021.





Actions: Grow and diversify the industry (continued)

10. Review the Petroleum and Gas (Production and Safety Act) 2004 to enable hydrogen and other clean energy resources

Lead: Government

When: 2022–24

Hydrogen and other 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.

In line with the agreement of Australia's energy ministers, the Queensland Government will review the *Petroleum and Gas (Production and Safety) Act 2004* to bring biomethane, hydrogen blends and other renewable methane gas blends under the Act, and provide an efficient and transparent regulatory framework for these resources.

11. Investigate carbon capture, use and storage

Lead: Government

When: Ongoing

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.

The Queensland Government will include areas for carbon storage feasibility exploration (under the *Greenhouse Gas Storage Act 2009*) 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.





Actions: Grow and diversify the industry (continued)

12. Continue to implement the Queensland METS 10-Year Roadmap and Action Plan

Lead: Government

When: 2017–27

Queensland has a world-leading METS sector, which comprises more than 800 METS companies. This is more than any other Australian state.

In 2017, the Queensland Government launched the Queensland METS 10-Year Roadmap and Action Plan.

The government will provide \$1.4 million in funding over four years to 2024–25 to support the continued growth of the METS sector. This funding will ensure the roadmap continues to respond to emerging challenges and opportunities.

13. Refresh Queensland's approach to innovation

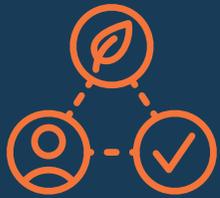
Lead: Government

When: Ongoing

After 6 years of delivering Advance Queensland, the Queensland Government is refreshing its approach to innovation in the context of rapidly advancing technologies and ways of doing business.¹⁹

Entrepreneurs and start-ups supported in the early stages of Advance Queensland are now scaling up, with many attracting major investment, creating high value jobs and entering global markets. Queensland innovators are helping to reimagine sectors like mining, agriculture, manufacturing and logistics.

The Queensland Government has appointed its fourth Chief Entrepreneur, established a new Innovation Advisory Council, and is engaging with industry to transform our traditional industries through innovations such as artificial intelligence, immersive technologies, machine learning, and advanced robotics.



KEY FOCUS AREA 2

Strengthen our ESG credentials and protect the environment

Outcomes for the resources industry in 2050

- » Our industry will be known globally as a leader in ESG. It will have taken decisive action to decarbonise operations and embed strong ESG factors into operations.
- » The industry will be known and respected globally for being safe, high wage, environmentally responsible, well regulated and partnering with Aboriginal and Torres Strait Islander peoples.
- » Queensland's resources companies will have transformed from delivering mainly extraction activities to being leaders in materials handling throughout the circular economy. The industry will be a leader in disassembly technology and recycling.
- » The industry will operate beyond regulatory requirements and be trusted to do the right thing.

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



Strengthening our ESG credentials

The resources industry must prepare for and seize the opportunities that increasingly ESG-conscious investors, customers and global jurisdictions will offer.

Understanding ESG

ESG is an investment term for the **environmental, social and governance** factors that investors and consumers consider when deciding whether to invest in a company or purchase a product.

Factors can include climate change strategy, human rights, ethics, and diversity and inclusion. ESG is becoming increasingly influential to investor and customer decision making.

Organisations that can demonstrate strong ESG credentials will be better able to attract these investors and customers in coming years. Those that cannot risk limiting their investor and consumer bases.

Increasingly, governments—particularly in Europe and the United States—are transitioning to regulatory and trade frameworks that will impose penalties on companies that do not meet their ESG requirements.

For example, the European Union will implement a ‘battery passport’ in 2026. The passport will require companies that sell into the European Union to disclose their ESG performance and prove the provenance of their products (i.e. their origin and authenticity). This will require investments in traceability technologies, such as blockchain.



If a company cannot disclose or meet the battery passport requirements, they will not get access to the market or will suffer a penalty tariff.

While regulation underpins ESG performance, and needs to evolve further, industry must operate beyond regulatory requirements in order to build a reputation for trustworthiness.



Everledger

A Queensland-based company is piloting cutting-edge blockchain technology to help Australian miners prove their environmental and ethical credentials in international markets.

Everledger CEO, Founder and former Queensland Chief Entrepreneur Leanne Kemp, is conducting the world's first digital blockchain pilot for critical minerals.

Everledger are using their blockchain technology to create a 'digital certification' for critical minerals through the entire supply chain from extraction to processing to international export and recycling.

The blockchain pilot will help increase the demand for Australian products in global markets, while also simplifying the process and lowering costs.

Queensland's ESG credentials

Queensland has a long history of policies and regulations that promote best practice in the resources industry. The Queensland Government will continue to maintain a rigorous framework that ensures resource projects are developed in the public interest.

The state's current framework already gives resources companies a strong foundation for demonstrating their ESG credentials. It includes:

- » engagement with First Nations peoples, and implementation of Native Title and cultural heritage requirements
- » a coexistence framework that builds strong relationships between resources companies and landholders
- » an independent Resources Safety and Health Queensland agency, which regulates the sector to ensure the safety and health of all workers
- » robust environmental impact assessments under the *Environmental Protection Act 1994* and *State Development and Public Works Organisation Act 1971*
- » social impact assessment and community protections, including anti-discrimination provisions for local recruitment and prohibition of 100 per cent fly-in fly-out workforces, under the *Strong and Sustainable Resource Communities Act 2017*.

Queensland also has legislated human rights, workplace rights, and anti-discrimination and equality protections, which are all supported by the new Queensland Human Rights Commission (under the *Anti-Discrimination Act 1991* and *Human Rights Act 2019*).

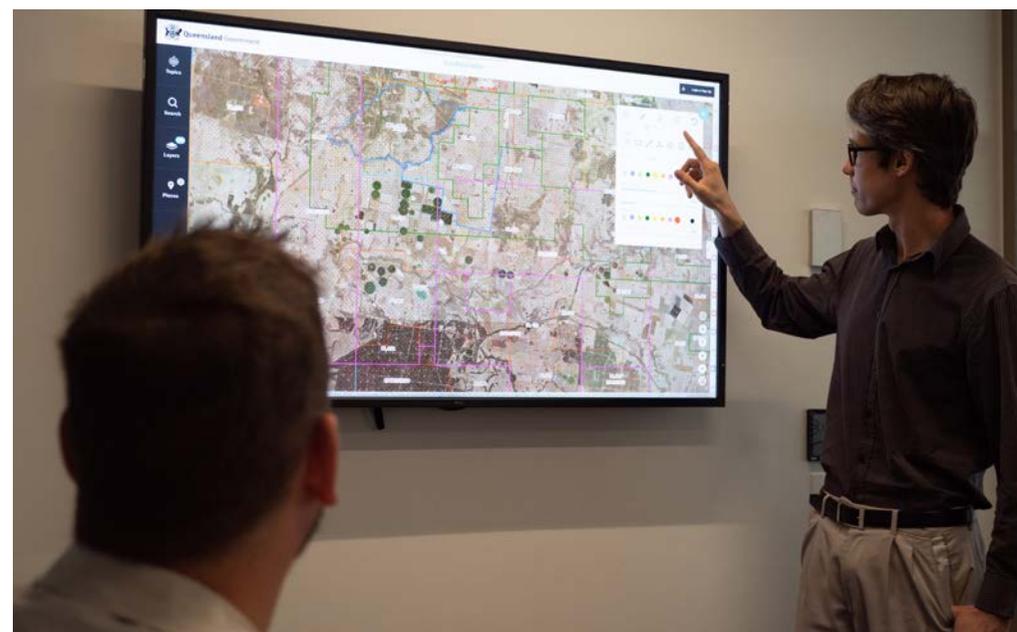
All this robust regulation gives Queensland's resources industry operators a head start in demonstrating their own ESG performance. This will help them attract more investment and satisfy ESG-conscious customers.

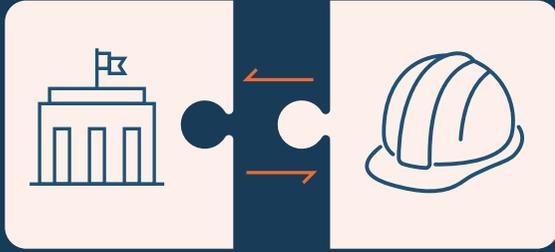
Expanding on regulatory foundation

However, resources companies must do more than just rely on Queensland's regulatory framework; they must commit to continually improving their practices. They should consider not only what they **must do**, but what they **should do**.

To maintain and even expand Queensland's competitive advantage in resource development, it is essential to understand and adapt to the trends that influence investment and market decisions.

For example, investment in ESG-accredited projects and companies has grown at an unprecedented rate in recent years, with trends suggesting that this will only increase. Our local resources industry needs to respond to this trend and adapt appropriately to keep the industry globally competitive.





Government and industry collaboration

Both government and industry have an important role to play in **strengthening our ESG** credentials.

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 meet international ESG standards.
- » Maintain the highest standards of environmental regulation, fair and safe working conditions, and respect for Aboriginal and Torres Strait Islander communities as strong ESG foundations.
- » Identify opportunities to report Queensland's ESG credentials to domestic and international financial institutions.

Expectations of industry

- » Maintain its social licence by being good ESG corporate citizens.
- » Recognise and grow 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.



Protecting our environment

Queensland's environmental regulation provides a strong foundation for resources companies to build their ESG credentials. However, the industry must also take decisive action to decarbonise operations in line with the Queensland Government's commitments to a zero net emissions future.

Protection through regulation

Queensland's environmental regulation protects the environment while allowing for development that improves the total quality of life, both now and into the future, in a way that maintains ecological processes.

For example, under the *Environmental Protection Act 1994*, every major resource project must hold an environmental authority and comply with regulatory requirements. This outlines how an operator must manage any potential environmental risks and impacts that their activities might cause. Larger projects might also require an environmental impact statement process through the Department of Environment and Science or the Office of the Coordinator-General.

While Queensland's environmental regulation provides a strong foundation for the industry to build its ESG credentials, resources companies must also take decisive action to reduce emissions caused by their operations.

Reforms to financial assurance and mine rehabilitation

Since 2016, the Queensland Government has been improving its world-class rehabilitation and financial assurance framework for the resources industry.

These reforms have included:

- » establishing the Financial Provisioning Scheme to
 - better manage the state's financial risk if a resource company fails to comply with its environmental management and rehabilitation obligations
 - provide funds over time to remediate abandoned mines and research into rehabilitation
- » implementing the Mined Land Rehabilitation Policy, which requires mines to prepare and implement progressive rehabilitation and closure plans that outline how site land will be used after mining ceases
- » implementing the Queensland Government's Abandoned Mines Management Policy
- » enhancing the residual risks framework to give industry more clarity and certainty about the rehabilitation and surrender of resources sites
- » establishing and appointing a statutory Rehabilitation Commissioner to advise on best practice for rehabilitation.

Emissions reduction

The Queensland Government is committed to:

- » reducing the state's greenhouse gas emissions by at least 30 per cent by 2030
- » reaching net zero emissions by 2050
- » reaching 50 per cent renewable energy by 2030.

These commitments are being echoed across the globe, with Japan, Korea, the European Union and other jurisdictions committing to net zero targets.²⁰

In 2019, the resources sector was responsible for approximately 20 per cent of Queensland's total emissions.

As the world transitions to a low-carbon economy, investors and consumers are increasingly ensuring that the companies they invest in and resources they purchase have strong ESG credentials. They want to know that resources have been sourced responsibly and in a low-emissions manner. As a result, many companies are now required to report on climate change financial risks.

Given these trends and Queensland's commitment to reducing emissions, the resources industry must do its fair share and develop pathways to decarbonise operations. A number of companies have already developed, and are implementing, decarbonisation plans and more can be done to ensure this practice is adopted consistently across the industry.





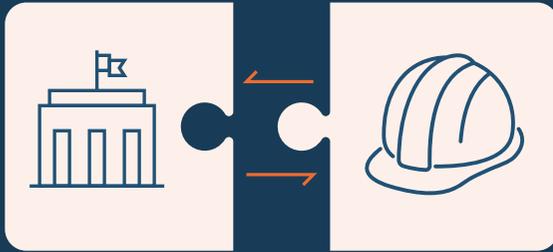
Senex Decarbonisation Plan

Gas producer Senex Energy is the first company in Queensland to produce gas exclusively for the domestic market under an Australian-first Queensland Government initiative.

Senex has a Decarbonisation Action Plan to reach net zero greenhouse gas emissions across its operational footprint by 2040, with interim targets to reduce emissions intensity of 30 per cent by the 2025 financial year and 75 per cent by the 2030 financial year.

Among their key actions to achieve these goals is the elimination of flaring, the electrification of all new processing facilities from renewable sources, linking executive remuneration to climate-related targets and engaging with their customers in the next year to set emission reduction targets.

CEO Ian Davies has said decarbonising the energy system will require sustained and cooperative action across the entire energy sector, and that Senex is proud to be taking these first steps.



Government and industry collaboration

In coming years, both the Queensland Government and the resources industry will play an important role in **safeguarding our environment** and **taking strong action on climate change**.

Government commitments

- » 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.

Expectations of industry

- » 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 mine 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 on-site emissions, including through collaboration with the METS sector.



✓ Actions: Strengthening our ESG credentials

14. Establish a government–industry working group to determine appropriate government action

Lead: Government
When: 2022

To determine the appropriate size of government response to this international trend, the Queensland Government will establish an ESG working group.

The group will comprise representatives from industry, government, investors, the community and academia.

The working group will make recommendations to government on their role in supporting ESG for the resources industry.

15. Investigate support required for industry to build ESG capability

Lead: Government
When: 2022–23

Most—if not all—of Queensland's large resources companies already report against their preferred ESG protocol, such as the:

- » Task Force on Climate-Related Financial Disclosures²¹
- » United Nations' Sustainable Development Goals.²²

However, junior and mid-level explorers and miners may be unsure how to get ESG-ready for their markets.

The Queensland Government will investigate ways to help industry build the capability of junior and mid-level explorers and miners to meet increasing ESG requirements.

16. Investigate research and development support options, particularly for mineral traceability technology

Lead: Government
When: 2022–23

As the global shift to a decarbonised economy gains momentum, Queensland developers can differentiate their new economy minerals by proving their ESG credentials through traceability and provenance technology, such as blockchain.

Mineral traceability is a growing research and development industry locally, nationally and internationally.

The Queensland Government will investigate what research and development support is needed to help resources companies demonstrate the provenance of their minerals and metals. This includes support for traceability technology.





Actions: Protecting our environment

17. Continue to implement financial assurance and mine rehabilitation reforms

Lead: Government

When: Ongoing

The Queensland Government will continue to embed the rehabilitation and financial assurance reforms.

One of the final actions in the financial assurance and mine rehabilitation program relates to the Queensland Government's residual risk reforms, which commenced on 20 August 2020. These reforms give industry more clarity and certainty about the surrender of resources sites.

The government has been doing consultation to finalise the Residual Risk Assessment Guideline and its associated calculator. The guideline and calculator is expected to be finalised by the end of 2021.

18. Require industry to develop plans to decarbonise operations

Lead: Government

When: 2022–23

The Queensland Government expects the resources industry to develop and implement plans that provide a pathway to net zero emissions operations. The government will consider:

- » establishing an operational policy that requires applicants to reduce Scope 1 and Scope 2 emissions for new and amended environmental authorities, as well as a reporting and monitoring framework to demonstrate progress
- » updating the generic terms of reference for environmental impact statements to require applicants to prepare a greenhouse gas abatement plan to demonstrate how they can move towards net zero emissions
- » establishing model conditions that require authority holders to implement greenhouse gas abatement plans, and report on progress regularly and publicly
- » providing transition options for existing resources environmental authorities.

19. Investigate innovative options to support junior and mid-level companies to decarbonise operations

Lead: Government

When: 2022–23

While many major resources companies have already adopted net zero emissions targets and developed plans to decarbonise their operations, small and mid-level operators may need more support.

The Queensland Government will investigate innovative options to support industry in building the capability of junior and mid-level resources companies to decarbonise operations.

The government will engage closely with industry and consider what it needs in terms of additional training and capacity building around decarbonisation options, technology and reporting.





Actions: Protecting our environment (continued)

20. Investigate establishment of an independent Environmental Protection Agency

Lead: Government

When: 2022–23

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.

21. Continue Kati Thanda–Lake Eyre Basin consultation

Lead: Government

When: 2022–23

The Queensland Government has committed to establishing a stakeholder advisory group to consult on how an appropriate balance of environmental and economic considerations can be achieved in Kati Thanda–Lake Eyre Basin.

It is expected that a consultation regulatory impact statement will be released in 2022 outlining proposals to achieve these objectives.

The final proposals are intended to provide regulatory certainty for activities within the Basin, including resource activities, by clarifying and simplifying:

- » the approvals that are required
- » what activities can occur
- » the restrictions that will apply to activities from a planning perspective.





KEY FOCUS AREA 3

Foster coexistence and sustainable communities

Outcomes for the resources industry in 2050

- » Queensland's local communities will have benefited from years of coexistence with resources companies operating in their region.
- » Projects in host communities throughout regional Queensland will have left and continue to leave a positive legacy.
- » Mine rehabilitation and post operations will be providing local benefit, as sites will 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.



Fostering coexistence

To ensure the growth of Queensland's resources sector, the industry must work with landholders, communities and other industries in a spirit of sustainable coexistence founded on mutual benefit.

Sustainable coexistence requires resources companies, First Nations peoples, landholders and communities to go beyond tolerance to form long-standing relationships that mutually benefit everyone involved.

For the resources industry to continue to thrive in Queensland, resource projects must coexist effectively with landholders, communities and other industries in the areas where they operate. While most resources companies are doing this well, there is always room for improvement.

To support coexistence, the Queensland Government has established several institutions to assist resources companies and landholders.

GasFields Commission Queensland

An independent body that supports balanced and respectful relationships among landholders, government, regional communities, and the petroleum and gas industry.

This includes educating the community, companies and landholders about the land access framework.

Land Access Ombudsman

A dispute resolution service for resources companies and landholders in dispute about alleged breaches of conduct and compensation agreements, or make-good agreements.

The Ombudsman cannot help parties negotiate these agreements.

Land Court of Queensland

A court that resolves disputes about the negotiation, or alleged breaches, of conduct and compensation agreements.

Office of Groundwater Impact Assessment

An independent office that assesses cumulative groundwater impact, and manages and monitors impacts on water supply bores.

It is also responsible for subsidence assessment, not including management.

The role of regional planning

At a regional level, the government manages the coexistence of resource activities with other significant land uses primarily through regional plans under the *Planning Act 2016* (and their implementation via the *Regional Planning Interests Act 2014*).

Regional plans outline how Queensland's regions will grow and respond to change over time, and support their economic growth, development and community planning. These plans also consider where resource activities need to show they can coexist with other land uses, such as agriculture, urban development and environmentally sensitive land uses, in the context of the overall long-term direction for the region.

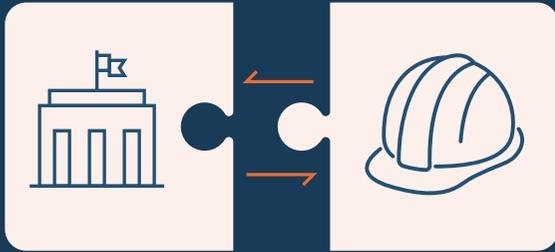
Some regional plans pre-date emerging industry activities, such as the growth of the renewables sector (and the land required to support this sector), and do not fully consider coexistence requirements with these industries. Therefore, as regional plans are updated over time, they must capture the changing and competing demands for land use.



Review of the *Regional Planning Interests Act 2014*

The GasFields Commission Queensland (GFCQ) has reviewed the assessment processes in the *Regional Planning Interests Act 2014* in the context of CSG activities and agricultural interests. The review considered how effectively the assessment processes manage the coexistence of these activities.

The Queensland Government will consider the review's findings and recommendations, and consult stakeholders on whether the regional planning framework needs improvements.



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 encourages the resources industry to build and maintain strong and mutually beneficial relationships with landholders and other land uses, such as agriculture and renewable energy.
- » Ensure regional plans are developed with coexistence principles at their core.

Expectations of industry

- » Work with other industries, communities and landholders to honour 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.



A man wearing a white hard hat, safety glasses, and large green earmuffs stands in front of industrial equipment. He is wearing a blue long-sleeved button-down shirt and dark pants. The background shows a clear blue sky and industrial structures with pipes and a tall light pole.

Santos CSG water partnerships

Australian gas producer Santos is building stronger relationships with South West Queensland landholders through its treated CSG water partnerships. By providing landholders with free treated CSG water and a state-of-the-art pivot irrigation system, Santos is showing how a strong working relationship with landholders can provide great outcomes for all parties.

“These irrigation projects with private landholders, and on our own land, are providing significant benefits that boost productivity and assist with agricultural resilience through times of drought.”

—Andrew Snars, Santos Ltd.

“Santos installed irrigation pivots on our land a few years ago which has allowed us to drought proof part of our property, improve our carrying capacity and ensures our business continues to be productive during all seasons.”

—Scott Wason, local landholder.

Sustainable communities

The resources industry must leave a positive legacy in regional communities beyond the life of resource projects.

Queensland's resources industry has supported and helped grow Queensland's regional communities for many decades and will continue to do so.

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—and that communities are better off for having hosted the projects.

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. Every resource project has a limited life and planning to leave a positive legacy after a project is completed is vital.

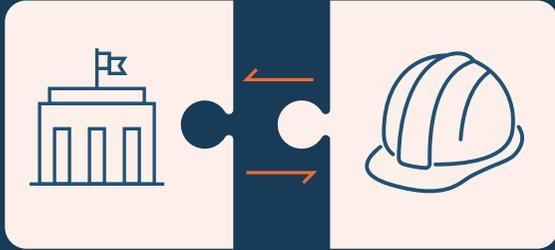
Resources companies must consider what the rehabilitation outcomes required for the site are—whether that be for future economic development, regional biodiversity, agriculture or other land uses. They must put in place plans early to realise these outcomes and regularly report to government and community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

Ensuring strong and sustainable resource communities

The *Strong and Sustainable Resource Communities Act 2017* (SSRC Act) is the first legislation of its kind in Australia. The SSRC Act aims to ensure that communities close to large resource projects benefit from their construction and operation by:

- » prohibiting 100 per cent fly-in fly-out operational workforces
- » providing anti-discrimination protections for local residents who apply for jobs
- » mandating social impact assessments for projects assessed under the *State Development and Public Works Organisation Act 1971* and *Environmental Protection Act 1994*.

In 2021, the Queensland Government reviewed the SSRC Act's effectiveness²³ and found overwhelming support for the Act, as it benefits regional communities and provides a clear legislative framework for managing social impacts.



Government and industry collaboration

Both the Queensland Government and the resources industry have a part to play in **building sustainable communities** in Queensland.

Government commitments

- » Ensure that regulatory frameworks support communities and that resource 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* on regional communities.
- » Continue to implement the *Strong and Sustainable Resource Communities Act 2017* and findings from the post-implementation review.
- » Contribute to and deliver the Resources Community Infrastructure Fund to deliver community infrastructure that enables access to services that meet resource community needs and maximise and enhance community wellbeing.

Expectations of industry

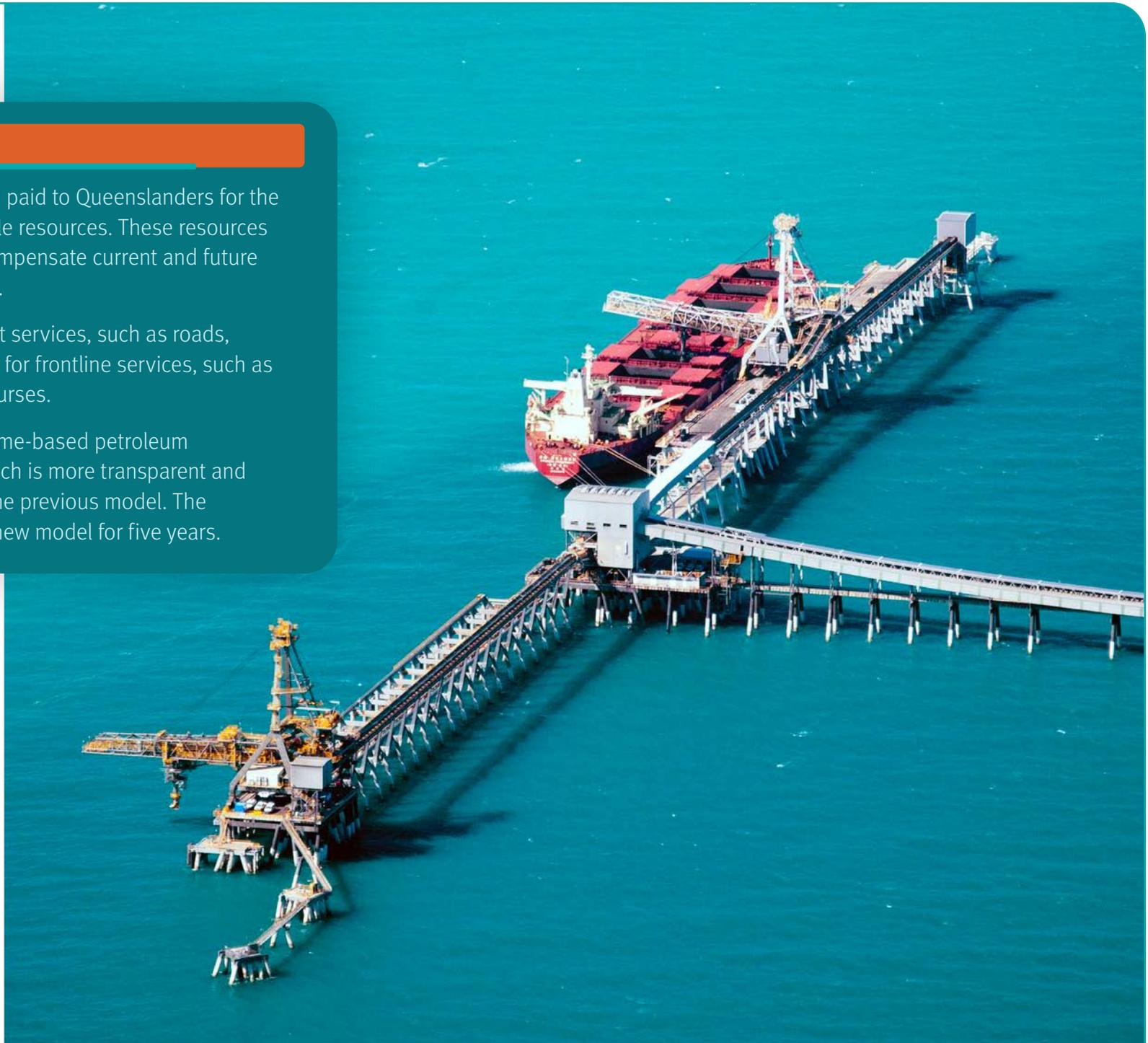
- » Ensure that projects leave a positive legacy in the community.
- » Pay royalties, rent and other charges to ensure Queenslanders receive their fair share from the extraction of their resources.
- » Work with local governments and social service providers in regional communities throughout projects.
- » Integrate projects and workforces with the community.
- » Contribute to the Resources Community Infrastructure Fund to provide additional funding for community infrastructure.

Royalties

A resource royalty is a dividend paid to Queenslanders for the use of the state's non-renewable resources. These resources are finite, and royalties help compensate current and future generations for their extraction.

Royalties help fund government services, such as roads, hospitals and schools, and pay for frontline services, such as police, teachers, doctors and nurses.

On 1 October 2020, a new volume-based petroleum royalty model commenced, which is more transparent and administratively simpler than the previous model. The government has locked in the new model for five years.





Actions: Fostering coexistence

22. Develop principles for strong landholder relationships

Lead: Government

When: 2022

Positive working relationships between landholders and resources companies are essential for sustainable development.

The Queensland Government has developed a draft set of principles for strong landholder relationships, which are included in the draft plan for consultation. These principles outline expectations of behaviour for resources companies around coexistence issues.

The government will consider all feedback and publish the final version on the Department of Resources website.

23. Review land access and coexistence institutions

Lead: Government

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.

24. Capture emerging coexistence issues in updated regional plans

Lead: Government

When: Ongoing

Some regional plans—set under the *Planning Act 2016*—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.





Actions: Sustainable communities

25. Implement findings of Strong and Sustainable Resource Communities Act review

Lead: Government

When: Ongoing

In 2021, the Queensland Government reviewed the effectiveness of the *Strong and Sustainable Resource Communities Act 2017* (SSRC). The final report recommends that the government:

- » retain the SSRC Act
- » review the Act further, particularly the effectiveness of the social impact assessment provisions and enhanced Social Impact Assessment Guideline (2018)
- » implement collaborative data collection for the Act
- » improve the awareness and understanding of the anti-discrimination provisions among resource communities.

We 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.

26. Deliver the Resources Community Infrastructure Fund

Lead: Government

When: 2022

The Queensland Government has partnered with resources companies through the Queensland Resources Council to deliver the \$100 million Resource Community Infrastructure Fund.²⁴

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.

Round 1 of the fund opened in July 2021, with up to \$50 million of funding available. The government is considering these applications and will announce successful projects from November 2021.

Applications for Round 2 of the fund will be announced soon.





Draft for consultation

Action item 22—Principles for strong relationships between resources companies and landholders

Understanding

Get to know and understand a community's culture, socioeconomic drivers, future focus, values, and perceptions of the impacts and benefits of your proposed activity. Also seek to understand a landholder's business activities, succession dynamics and future aspirations. When you know what is important to them, you can effectively engage on subjects that matter to them.

Early engagement

Engage with communities as early as possible in the development cycle, and listen and respond to their questions. Engage strategically in new and emerging basins and deposits to help communities understand the implications of the relevant resources industry, and the opportunities and challenges that come with it. Consistent and relevant representatives from your company should deliver the engagement.

Up-to-date information and science

Provide information and scientific knowledge about the impacts of industry as early as possible. Give the community and landholders up-to-date science, data and information to bust myths about and clearly explain the industry, and allow stakeholders to make informed decisions. Provide this information in appropriate formats and language.

Communication

Communicate early, often, clearly and honestly to develop mutual trust and respect. Don't withhold vital details. Be clear on what you expect to do and include things you might do. Listen to landholders' questions and concerns often, even on repeated occasions. Meet with landholders to discuss what your proposal is well before any formal notification or activities. After you meet, write to them in plain English to confirm what you discussed.

Negotiation and decision making

Landholders accept resource development more easily if they trust the fairness of the negotiation and decision-making processes. Clearly outline what decisions landholders can make from the start, and be open and transparent. Negotiate in good faith and, where possible, ensure that decision-makers are available to support timely actions.

Compassion

Take time to understand the landholder's future plans. Your relationship is likely to be long term, so both parties need to understand each other. Be respectful in all dealings and recognise that, generally, you are working on not just their business, but their home. Behave like an invited guest or future business partner rather than exercising your regulatory right.



Consistency

Trust is built on reliability and integrity. The other party needs to know that you will do what you say consistently, regardless of outside factors. To reinforce this trust, make sure that everything you know and have done is known and shared across your business.

Competency

Resource activities are often complex and have layers of regulation and operational aspects. Industry must be competent in their activities, manage the associated risks and comply with all legislated frameworks. Operating this way can be the critical difference between success and failure.

Transparency

Meet with landholders early to hear their questions and concerns. When a landholder requests information, provide it as quickly as possible, even if it isn't a regulatory requirement. Make the information you provide easy to understand and relevant for their situation.

Community engagement

Engage with all relevant parts of a community, including landholders and their representative bodies, state government agencies, local councils, chambers of commerce, resource authority holders, employment and training bodies, community and social service organisations, and other relevant peak body organisations.

Community mindedness

Analyse stakeholder feedback and operational learnings to find opportunities to go beyond compliance to meet community expectations. Regulation tells a company what it can and cannot do, but not what it should do. Remember that little things can bring big outcomes, both positive and negative.

Positive legacy

Ensure that resources development leaves a positive and enduring community legacy when your activity is completed.



KEY FOCUS AREA 4

Ensure strong and genuine First Nations partnerships

Outcomes for the resources industry in 2050

- » Aboriginal and Torres Strait Islander peoples will be true partners in any resource project taking place on Country.
- » Aboriginal and Torres Strait Islander peoples will be realising economic benefits as equity partners, owners and operators of resources development occurring on Country.
- » The resources industry will be continuing 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 have continuing rights and responsibilities as the First Peoples of Queensland, including traditional ownership and safeguarding the sustainable management of land and waters for future generations.

The resources industry must find, develop and maintain genuine commercial partnerships with First Nations peoples that are consistent with, and advance, local economic, social and cultural aspirations.

The principles for strong landholder relationships (outlined in focus area 3) provide a positive starting point for industry to develop genuine partnerships with First Nations 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.

While many resources companies already genuinely engage with Aboriginal and Torres Strait Islander peoples, leaders, companies and communities, there is scope for the industry to do even more.

Queensland's First Nations peoples have a strong and enduring knowledge of, and connection to, Country, and the industry needs to embrace the opportunities that this brings, including a local workforce, knowledge, investors, contractors and suppliers.

Their partnership in resource projects will also enhance the ESG credentials of individual resources companies and Queensland's reputation as well.

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 new development in ways that are consistent with their appetite, ambitions, capital settings and obligations.

More First Nations peoples will invest in ventures, acquire equity at market rates and develop projects.

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.

The Queensland Government is committed to providing procurement opportunities to Aboriginal and Torres Strait Islander peoples.

The government's Queensland Indigenous (Aboriginal and Torres Strait Islander) Procurement Policy²⁵ provides a whole-of-government framework to increase procurement of Aboriginal and Torres Strait Islander businesses to 3 per cent of the value of government procurement contracts by 2022.

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.

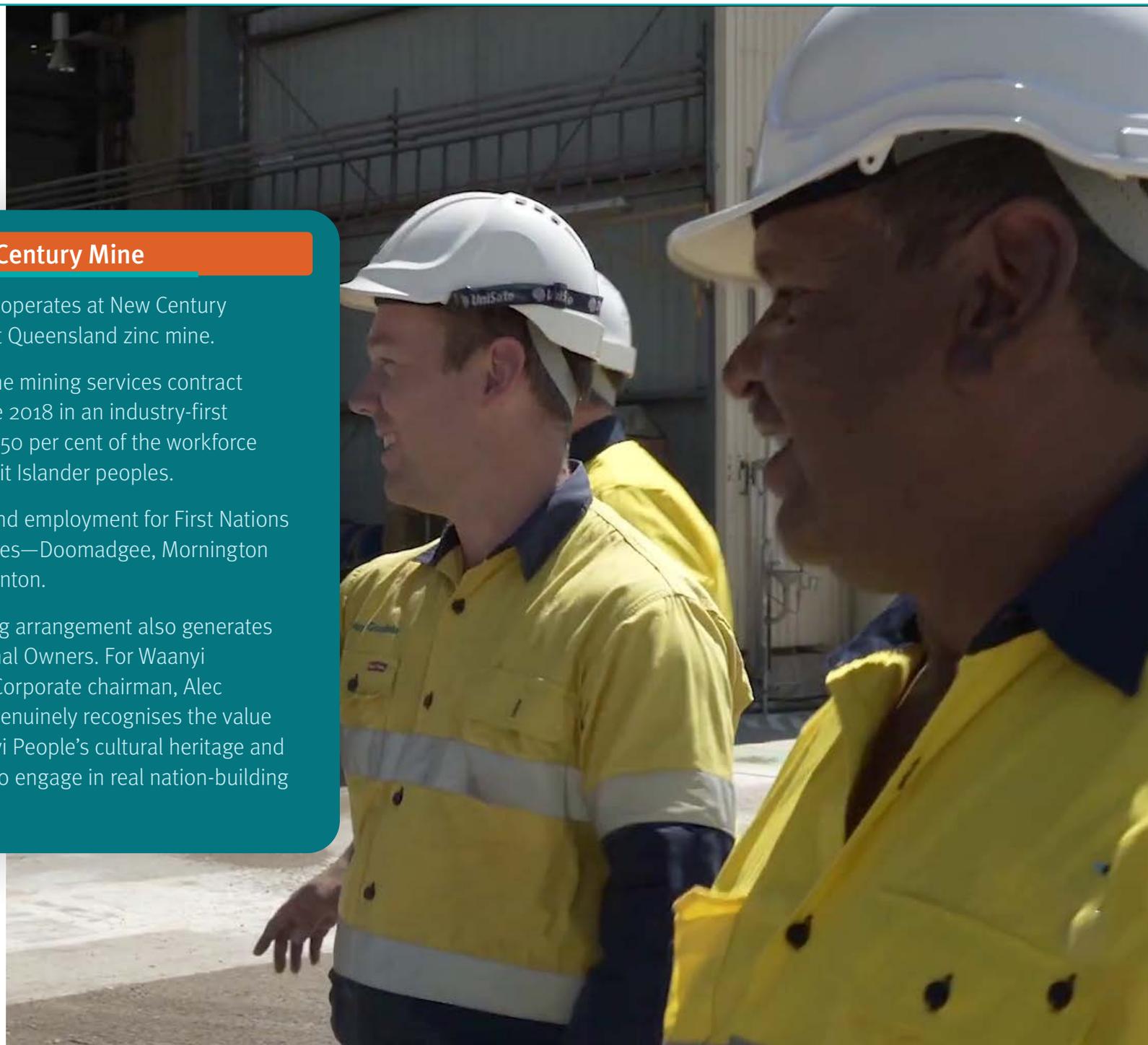
Waanyi Joint Venture at Century Mine

The Waanyi Joint Venture (JV) operates at New Century Resources' remote north-west Queensland zinc mine.

The JV has held the life-of-mine mining services contract for in-situ developments since 2018 in an industry-first arrangement that guarantees 50 per cent of the workforce are Aboriginal and Torres Strait Islander peoples.

The contract drives training and employment for First Nations people in four Gulf communities—Doomadgee, Mornington Island, Burketown and Normanton.

The joint venture profit-sharing arrangement also generates funds for the Waanyi Traditional Owners. For Waanyi Registered Native Title Body Corporate chairman, Alec Doomadgee, the agreement genuinely recognises the value and significance of the Waanyi People's cultural heritage and birth rights and allows them to engage in real nation-building commercial development.



People

The people assets of every industry and company are critically important to success. Aboriginal and Torres Strait Islander peoples will become valuable contributors in the boardroom, in management, as professionals, as people leaders, and in employment and training.

The resources industry is a major employer of Aboriginal and Torres Strait Islander peoples, who represent more than 4 per cent of the industry in Queensland.²⁶

The Queensland Government expects the resources industry to continue to engage with First Nations 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.

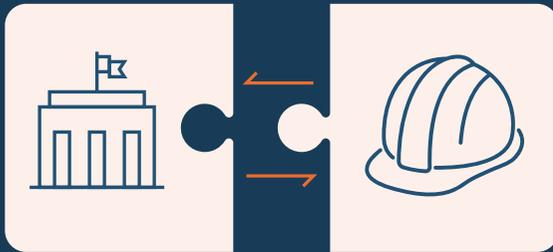
Tracks to Treaty

In 2019, the Queensland Government launched Tracks to Treaty²⁷, which included a Statement of Commitment to reframe the relationship with Aboriginal and Torres Strait Islander peoples. This included the next steps towards Local Thriving Communities and a pathway to negotiated treaties with Aboriginal and Torres Strait Islander Queenslanders.

In February 2021, the Queensland Government established the Treaty Advancement Committee to lead engagement and advise on the next steps in the Path to Treaty journey.

The committee is led by Dr Jackie Huggins AM (Co-Chair) and Mr Michael Gooda (Co-Chair), and includes Dr Josephine Bourne, Professor the Hon. Michael Lavarch AO and Dr Sallyanne Atkinson AO.

The Queensland Government has included a \$300 million Path to Treaty Fund in the 2021–22 State Budget as part of its commitment to support the Path to Treaty. Returns from the fund will be used to provide more support and a strong foundation for the treaty-making process in Queensland.



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

- » Deliver on its Statement of Commitment²⁸ 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.²⁹
- » Continuously 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 Aboriginal and Torres Strait Islander communities.
- » Negotiate all Indigenous land use agreements, right to negotiate, cultural heritage agreements and other agreements in good faith.
- » Embrace existing community leadership structures to enable local decision making and ensure investment makes these communities stronger, which will help industry build strong, respectful and enduring relationships with First Nations communities.
- » Partner with Reconciliation Australia to develop and implement reconciliation action plans.



Actions: Building strong and genuine First Nations partnerships

27. Continue the Local Thriving Communities reform

Lead: Government

When: Ongoing

Local Thriving Communities (LTC)³⁰ is a significant and long-term government reform that changes the way we work with Aboriginal and Torres Strait Islander communities to give communities a greater voice in shaping their future.

The reform is based on the principles of self-determination, mutual respect and high-expectations relationships.

We will continue this reform over coming years.

28. Review, strengthen and improve Cultural Heritage Acts

Lead: Government

When: Ongoing

In 2019, the Queensland Government commenced a review of the two Cultural Heritage Acts to establish how to improve and strengthen them. Stakeholder consultation began, but the review was placed on hold due to COVID-19.

We are 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.

29. Develop reconciliation action plans

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 Queensland Government Reconciliation Action Plan 2018–2022.³¹

The government expects that resources companies will commit to a similar vision. Many companies have already developed reconciliation action plans, and other industry operators are encouraged to do the same.

These plans are developed in consultation with Reconciliation Australia.

30. Assist in Closing the Gap through economic development opportunities

Lead: Government

When: Ongoing

Resource development provides vast economic development opportunities for First Nations peoples and communities, and the resources industry has an important role to play in Closing the Gap.

Under the National Agreement on Closing the Gap³², the Queensland Government has committed to:

- » changing how government works with Aboriginal and Torres Strait Islander peoples
- » meeting a range of economic targets.

To meet the national agreement commitments and targets, the Queensland Government has developed, and is implementing, Queensland's 2021 Closing the Gap Implementation Plan.³³



KEY FOCUS AREA 5

Build a safe and resilient future workforce

Outcomes for the resources industry in 2050

- » Queensland's resources industry will employ more Queenslanders, providing high-wage, highly skilled, safe and fulfilling careers.
- » The resources industry will be diverse and inclusive, representing host communities and providing careers that young people want to pursue.
- » While the workforce, mechanisms and methods used to mine 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

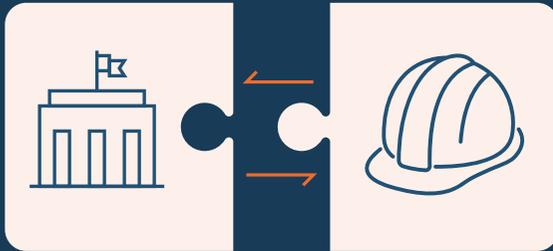
The Queensland Government expects worker safety and health to characterise all aspects of the resources industry. Government and industry must work together to protect resources industry workers.

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.

In 2020, the Queensland Government established Resources Safety and Health Queensland³⁴, a fully independent regulator to protect worker safety and health in Queensland's mining, quarrying, petroleum, gas and explosives sectors.

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.



Government and industry collaboration

There is a role for both government and the resources industry in **protecting Queensland's resources industry workers.**

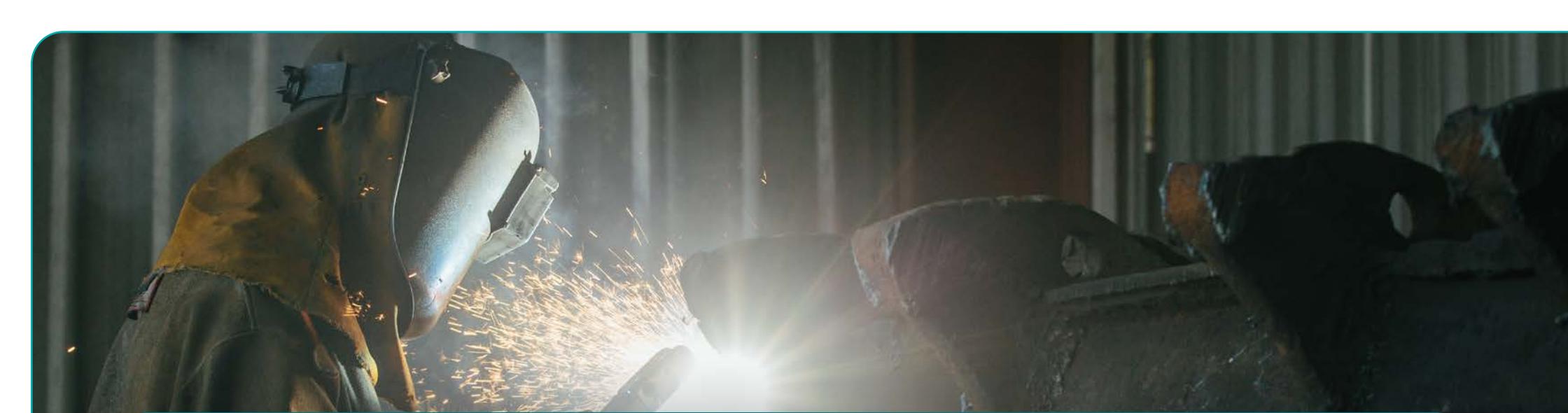
Government commitments

- » Promote and maintain a strong safety and health regulatory framework for the resources industry.

Expectations of industry

- » Define its operations by practices that protect workers from safety and health harms.





Resources Safety and Health Queensland

In 2020, the Queensland Parliament passed the *Resources Safety and Health Act 2020*, which established Resources Safety and Health Queensland (RSHQ) as an independent statutory body with a chief executive officer reporting directly to the Minister for Resources.

RSHQ regulates, educates and assists industry to meet its obligation to protect and promote the safety and health of resources industry 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.

In 2021–22, RSHQ will strengthen its position as a data-driven, risk-based regulator working to eliminate serious harms through focusing on the following key priorities:

- » Continue analysis of safety health risks across the resources industry to identify invisible and emerging harms, and prioritise regulatory efforts.

- » Continue implementing recommendations from the Brady Review and Board of Inquiry aimed at improving the quality of high potential incident reporting, investigation and control effectiveness (mining and quarrying); and support the industry's implementation of the characteristics of high reliability organisations.
- » Improve guidance for industry by developing a code of practice for hydrogen fuel safety (petroleum and gas industry); a good practice guideline for eliminating misfires in blasting (explosives); and revisions to the Clinical Pathways Guideline and spirometry standards.
- » Continue to deliver a range of testing, engineering, scientific and training services to enhance industry safety and health outcomes; and implement a Practising Certificate Scheme for the mining industry, including continuing professional development.

RSHQ will continue to engage with stakeholders to progress the shared commitment to zero serious harm throughout 2021–22 and beyond.

Building a resilient future workforce

Queensland's resources industry employs around 80,000 people, making it one of the largest contributors to employment in the state. The Queensland Government will work with the industry to invest in skills and training to ensure Queenslanders can seize job opportunities presented by technological innovations and the shift towards low-emissions technology.

Impact of automation on skill requirements

The resources industry is undergoing rapid and large-scale shifts in skill requirements due to changing technologies, such as automation, and data and digital innovation in traditionally manual roles.

The move to automation will benefit the resources industry by improving safety and health outcomes onsite and optimising operations. For workers, automation will change the nature of their jobs. However, while automation is likely to change the nature of work at resources sites, the Queensland Government expects all this work to remain locally based.

Investment in workforce development must encourage engagement and re-engagement with learning, upskilling and reskilling. For this reason, the Queensland Government will support workers and communities through skills and training development, including upskilling existing workers, so Queenslanders can take full advantage of new opportunities and remain resilient to any disruption from automation.

However, the resources industry must take the lead in helping existing workers prepare for this disruption. When companies implement automation onsite—such as driverless trucks—they must develop a training plan that outlines the available training for affected workers. This will enable workers to retrain and reskill, and take on other jobs in the industry.

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 government has already established Industry Skills Advisors to provide advice on industry training needs. These advisors help inform our:

- » skills priorities
- » training products
- » program design
- » investment decisions.

There are many local and state-wide examples where industry and government are already working together to prepare, train and upskill current and future workforces. These actions include:

- » monitoring the Skills Assure supplier system—a register of pre-approved training organisations that deliver training and assessment services subsidised by the Queensland Government—to instill confidence that this training will develop valued skills and lead to employment
- » engaging with stakeholders through the Industry Skills Advisor and national networks to ensure that training products developed at the national level consider the needs of Queensland industry
- » providing school-to-work pathway programs, such as the Vocational Education and Training in Schools (VETiS), where students gain nationally accredited qualifications in high school
- » invest in vocation and Vocational Education and Training (VET) programs and initiatives, such as the Queensland Future Skills Partnership, to provide access to subsidised training in various industries, including resources.

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, we are 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 for the resources industry.

The Queensland Government also works with the Australian Government to ensure the skilled migration program provides a vital additional avenue for the resources industry to meet its need that the existing domestic labour supply cannot. Appropriately applied, the program can help address short-term, critical skills shortages, boost business and industry productivity, and help upskill the local labour force. This creates positive flow-on effects for regional economies and complements the government's other investments to support timely labour supply and prepare, train and skill the workforce.

The Queensland Government is also committed to 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.





QMEA

The Queensland Minerals and Energy Academy (QMEA) is a partnership between the Queensland Government and the Queensland Resources Council.

QMEA has operated for 16 years, and offers programs for teachers and students from Years 7 to 12 in more than 80 schools. This includes experiential learning, curriculum and teaching resources and trade and professional programs that focus on science, technology, engineering and mathematics (STEM)-related areas.

It aims to broaden students' and teachers' knowledge of the resources industry and provides encouragement to consider a career in the industry and other supporting STEM sectors.

In 2021, of QMEA students seeking a study pathway, 24.6 per cent entered into engineering and related technologies compared to 15 per cent of students from non-QMEA schools.

Investing in and attracting future workers

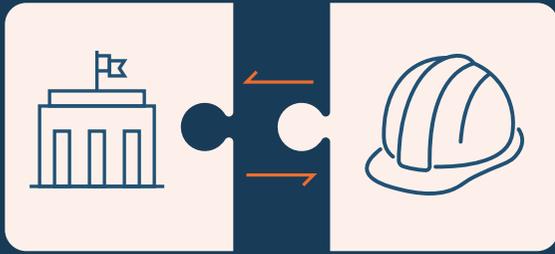
The resources industry has been a profession of choice for Queenslanders for decades and will continue to offer fulfilling careers as it transforms.

Whether Queenslanders are leaving school, already working in the industry or looking for a career change, the resources industry offers many opportunities for highly paid, highly skilled and diverse work. When Queenslanders choose a career in the resources industry, they are helping to deliver the resources the world needs—not just to keep the lights on, but to explore and produce the new economy minerals that the world will use to decarbonise the planet.

However, to realise this vision, the resources industry must invest in attracting Queenslanders to its workplaces. Today's workers want more than a high-wage career. They want a workplace that is flexible, purposeful, inclusive, and values diversity.

Inclusive and diverse workforces provide significant benefits to the companies that employ them due to increased participation by women, Aboriginal and Torres Strait Islander peoples, defence force veterans and people with a disability. This diversity of perspective brings new and innovative ways of doing things into workplaces.





Government and industry collaboration

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

Government commitments

- » 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 VET and appropriate VET pathways.
- » Work with the resources industry to explore opportunities to attract 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

- » 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, First Nations 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: Building a safe and resilient future workforce

31. Establish a working group to develop a Queensland resources industry workforce plan

Lead: Government

When: 2022–23

The skills that the resources industry needs are changing, which will require effective workforce planning at state and regional levels.

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 for existing and new workers.

The working group will comprise industry, training providers, worker representatives and government.

This group will build on the work that industry has already started, such as the More to Mining Careers Guide developed by the Minerals Council of Australia.

The group will also examine ways to make the workforce more diverse and inclusive by attracting and retaining women, former defence personnel, First Nations peoples and people with a disability.

32. 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.

Programs like the government's Gateway to Industry Schools Program—which funds the QMEA—expose high school students to the resources industry, helping them decide whether to pursue a career in the industry.

The Queensland Government will continue to support the QMEA program and investigate whether industry needs more support to attract workers.

33. Develop a diverse and inclusive workforce

Lead: Industry

When: Ongoing

A diverse and inclusive workforce has tangible benefits and is critical for the resource industry's future success.

Resources companies need to develop new policies and procedures, and evaluate the effectiveness of current ones, to make their workforces more representative and inclusive.

Potential initiatives include:

- » providing more opportunities for women to perform non-traditional roles
- » creating pathways for Aboriginal and Torres Strait Islander workers to fill positions at all levels
- » providing more opportunities for people with a disability to have fulfilling careers
- » providing opportunities for defence force veterans to transition into the industry.



Actions: Building a safe and resilient future workforce (continued)

34. Support the training needs of existing and future workers

Lead: Government

When: Ongoing

Training and training providers need to work closely with industry and evolve continuously, as occupations in the resources industry change rapidly due to changing technologies.

The Queensland Government will work with industry to ensure resources workers get the skills they need to remain highly capable and adaptable.

To do this, government will:

- » explore non-traditional skilling pathways in partnership with training providers and industry
- » work with industry through innovative partnerships, such as the Queensland Future Skills Partnership (led by BHP Mitsubishi Alliance).

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

Lead: Government

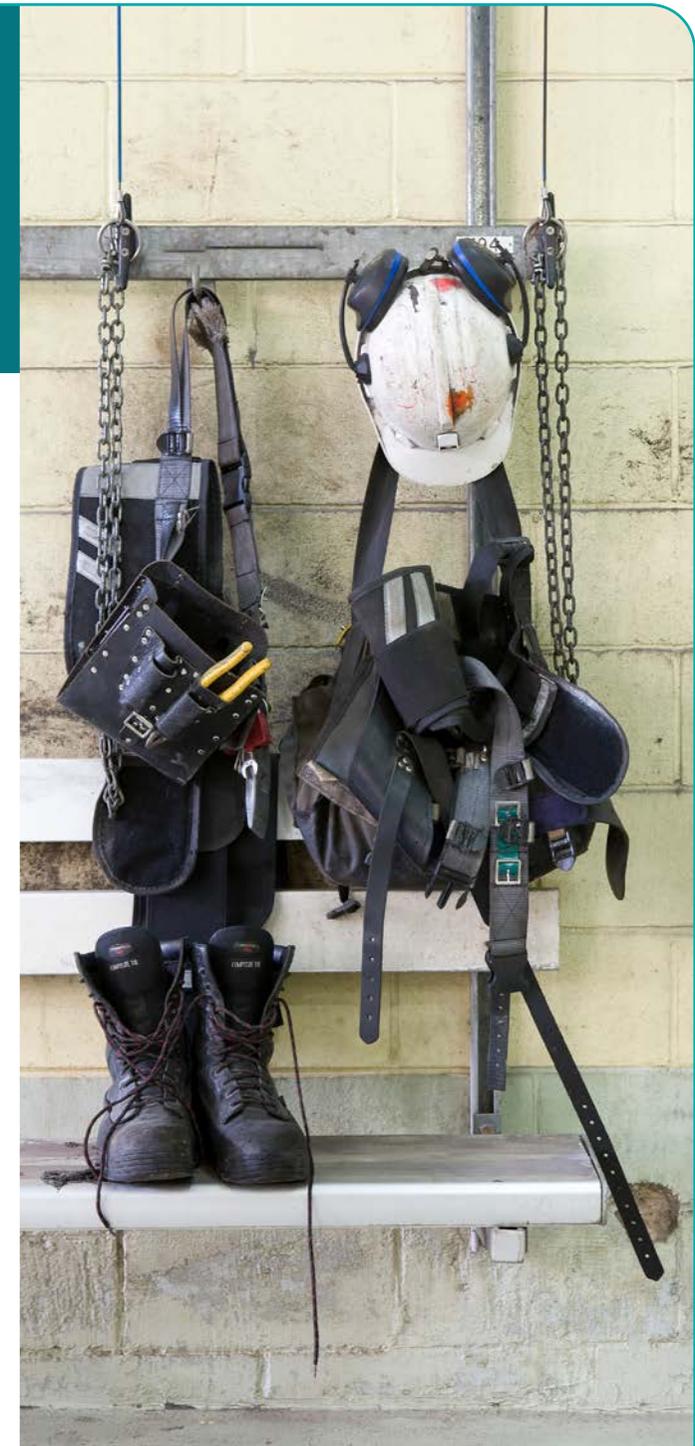
When: 2020–2024

The Digital Professional Workforce Action Plan 2020–2024³⁵ 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 government 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 in 2050

- » Queensland will be benefiting from risk-based, efficient, effective and transparent regulation that ensures the state's resources are explored and developed in the public interest.
- » Regulation will be contemporary, insights-driven and the community will be 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

The Queensland Government is committed to ensuring that its regulatory framework is risk-based and transparent, reflects the community's expectations, and protects the public interest.

An efficient and effective regulatory framework is fundamental to attracting investment in Queensland's resources industry and providing a strong foundation for the industry's ESG credentials. This gives industry certainty about when and how regulatory decisions will be made.

Growing and transforming the resources industry in the ways described in this plan is a major undertaking. Mitigating the risks and seizing the opportunities presented by global trends will require a high level of government and industry collaboration.

While regulation that serves and protects the public interest and underpins ESG credentials cannot be compromised, much can be done to create a more efficient regulatory regime and assessment processes.

The Queensland Government is committed to working with industry and other stakeholders to reform its processes to ensure they are not a hinderance to appropriate capital investment and sustainable development.

This will involve a significant investment over coming years as outlined in the actions. These actions and a commitment to continuous improvement will be necessary to ensure the industry is able to grow and diversify.

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 acknowledges that many of the current processes related to objections to mining leases do not create certainty for industry, communities and other stakeholders. These processes may get in the way of the rapid transformation that is needed to create a more sustainable resources industry which contributes to tackling climate change.

These are complex issues and any reform needs to take into account human rights while also maintaining an environment conducive to investment. The Queensland Government will refer this issue to the Queensland Law Reform Commission to review. The review will not remove or reduce the community's participation or standing in these processes, and will allow for a considered process of developing legal solutions.

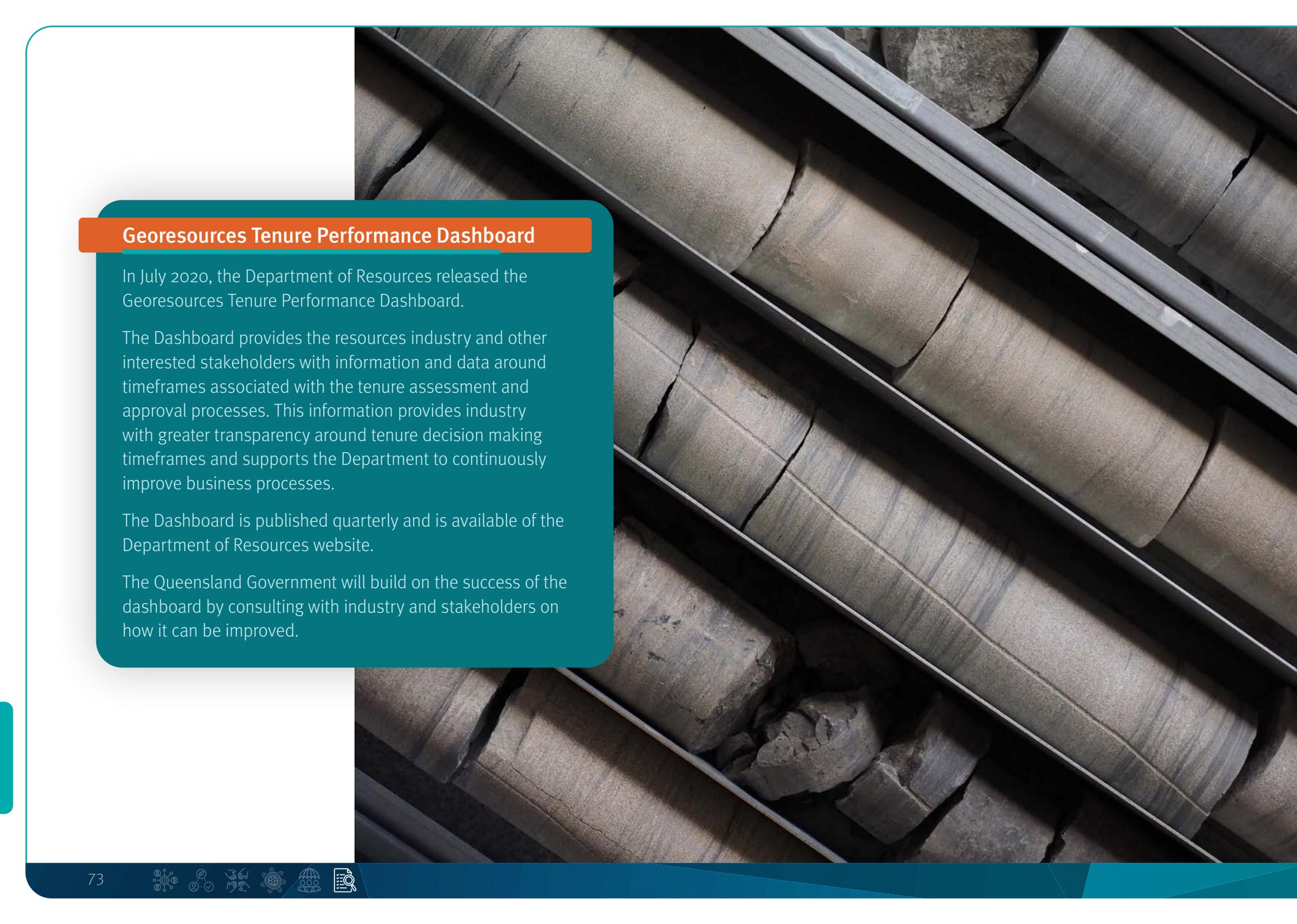
The terms of reference for the review will be developed in consultation with the Commission and key stakeholders. Timing for the review, including when it commences, will be confirmed in the final plan.

Government will consult with stakeholders on any regulatory change that has a material impact, and ensure that it is subject to a 12-week consultation process consistent with the Queensland Government's Guide to Better Regulation.³⁶

Active tenure management

The Queensland Government will ensure it remains a modern regulator by using active tenure management to ensure that companies optimise their development and use of state resources by meeting their work program and development plan obligations.

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



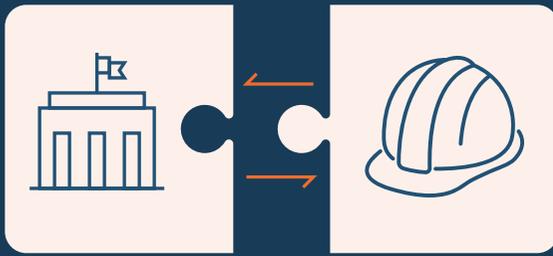
Georesources Tenure Performance Dashboard

In July 2020, the Department of Resources released the Georesources Tenure Performance Dashboard.

The Dashboard provides the resources industry and other interested stakeholders with information and data around timeframes associated with the tenure assessment and approval processes. This information provides industry with greater transparency around tenure decision making timeframes and supports the Department to continuously improve business processes.

The Dashboard is published quarterly and is available on the Department of Resources website.

The Queensland Government will build on the success of the dashboard by consulting with industry and stakeholders on how it can be improved.



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.
- » 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 with a material impact is subject to a 12-week consultation process, consistent with the Queensland Government's Guide to Better Regulation.
- » Ensure that the resources industry complies with all regulatory requirements.

Expectations of industry

- » Work with government to fully understand all regulatory frameworks to ensure industry compliance with all 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: Process improvements

36. Improve resource project assessment processes

Lead: Government

When: 2022–23

A credible, transparent and efficient assessment system, which is easily understood and respected by industry and the community, is an essential element of responsible government.

In Queensland, several agencies are involved in processing resource applications. The Queensland Government will make the following improvements to these processes to speed up the process and find efficiencies:

- » Improve coordination and communication among relevant departments and governments
- » Improve the capability of industry and assessing agencies
- » Increase transparency for applicants and the community.

The government will work further with stakeholders to implement business process improvements.

For more information on improvements to assessment processes, refer to “Expanding on our action to improve resource project assessment processes” on page 79.

37. Develop a data resources development plan

Lead: Government

When: 2022

Quality data is essential for making evidence-based decisions and supporting industry innovation for economic prosperity.

Through our open data portals, 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 data resources development plan to ensure the quality and value of this data. This plan will implement efficient data collection processes for the resources industry.

This will also support the government’s improvements to resource project assessment processes.

38. Improve land release process

Lead: Government

When: 2022

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 implement three initiatives to address these issues:

- » Review the land release model, tender timing and frequency
- » Streamline decision making and reduce timeframes
- » Include highly prospective minerals exploration areas in the Queensland Exploration Program.



Actions: Regulatory reforms

39. Implement reforms for objections, review and notification processes for project approvals

Lead: Government

When: 2022–24

There are inconsistencies in approaches to objection and review mechanisms for administrative decisions across the Resource Acts.³⁷ These can cause delays and create inequities for stakeholders.

The government intends to refer to the Queensland Law Reform Commission a review of the objections processes for mining leases under the *Mineral Resources Act 1989*, including the role of the Land Court in this process, and whether a consistent process should be applied to petroleum leases.

The review will also include the associated review processes with environmental authorities under the *Environmental Protection Act 1994*. The terms of reference for the review will be developed in consultation with key stakeholders. Timing for the review will be confirmed in the final plan.

While the Commission undertakes this work, the government will investigate opportunities to harmonise broader review mechanisms for other decisions across the Resources Acts to provide more transparency, consistency and equity for stakeholders. We will also investigate targeted legislative amendments to streamline public notification processes.

All reforms will maintain environmental protections and the opportunity for the community to participate.

40. Implement reforms for small-scale mining

Lead: Government

When: 2021–23

The state's return from the regulatory and administrative effort it expends on regulating small scale mining is limited due to small production amounts which provide limited economic returns to the state.

Additionally, a recent cost-benefit analysis found that the sector had only a marginal benefit on the Queensland economy and surrounding communities.³⁸

As a result, the Queensland Government proposes to remove mining claims from the *Mineral Resources Act 1989*. It will implement an immediate moratorium on accepting new mining claim applications while consultation on this proposal occurs through this draft.

The government will announce its decision about progressing this reform in the final plan. It will also consult with stakeholders to develop transitional arrangements to grandfather existing tenement holders. In working through these transition arrangements, requirements under the *Environmental Protection Act 1994* will be considered and streamlined.

Importantly, small-scale miners will still be able to gain tenure through a mining lease, and recreational miners will still get access to designated fossicking areas in the state.

41. Implement reforms for use of steel casing

Lead: Government

When: 2022–23

The Petroleum and Gas (Safety) Regulation 2018 and Coal Mining Safety and Health Regulation 2017 prohibit the use of steel casing in horizontal wells unless the operator receives an exemption from RSHQ.

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. The well's exact location and type will be reported and made publicly available through the Department of Resources' Open Data Portal.

The government will also consult with stakeholders about the merits of additional regulatory reform. One option could be to allow steel casing in horizontal wells if the relevant tenure holders have included the use of steel casing in their joint interaction management plans and/or joint development plans.



Actions: Regulatory reforms (continued)

42. Develop a fit-for-purpose framework for extractive industry assessment

Lead: Government

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.

43. Improve cost recovery for government services provided to industry and ensure tenures are actively developed

Lead: Government

When: 2022–23

The package of process and regulatory reforms discussed in this section will improve the efficiency of the services and functions that the government provides to the resources industry.

However, the Department of Resources recovers only around 15 per cent of the total cost of administering the regulatory framework that applies to the resources industry.

The fees and charges that industry pays should better reflect the costs of the services being provided, in line with the government's Principles for Fees and Charges.

The Queensland Government will develop a regulatory impact statement to consult with stakeholders on ways to more fully recover the department's administrative costs.

As part of this work, the Queensland Government will also undertake a review of rent to ensure that rent charged to resource authority holders is appropriate and that it encourages active exploration and development.



Expanding on action 36—Improve resource project assessment processes

The Queensland Government has identified improvements to resource project assessment processes to:

- » improve coordination and communication among relevant departments and governments
- » improve the capability of industry and assessing agencies
- » increase transparency for applicants and the community.

These improvements are explained further below.

Improve coordination and communication among relevant departments and governments

More effective pre-lodgement meetings

Currently, the departments that assess production authorities for proposed resource projects all offer pre-lodgement meetings for proponents. However, joint meetings involving the proponent and all the relevant agencies are not standard practice.

Going forward, assessing agencies—Department of Resources, Department of Environment and Science, Office of the Coordinator-General, and other relevant Queensland Government agencies—will offer proponents joint pre-lodgement meetings with all relevant agencies (where certain criteria are met).

A proponent can then discuss their application with all the relevant assessing agencies at one time. Better documentation and checklists for pre-lodgement will support this improved process.

Case management for projects

While department officers communicate regularly about the status of applications, a formalised process of coordinated assessment is used only for ‘coordinated projects’ under the *State Development and Public Works Organisation Act 1971*. In some situations, the Investment Facilitation Unit in Queensland Treasury may provide cross-agency coordination services.

The Queensland Government will implement a case management approach for projects that meet certain criteria. This will help integrate the various processes and facilitate engagement with proponents about the status of each project assessment.

It will also allow the development of mechanisms that enable proponents to get status updates, find support, escalate concerns and provide feedback on the assessment process.

Improved data sharing and repositories

Centralised data aggregation would benefit proponents, enabling them to directly access relevant datasets or modelling outcomes for their applications.

Additionally, industry could provide monitoring and other data to government to increase data sharing across agencies and reduce duplicated data.

With approvals in place, centralised data could also create more efficient post-approval reporting across government.

To improve data sharing and repositories, the Queensland Government will:

- » investigate the development of a repository for submitting and storing resources industry data to better share monitoring and other data more efficiently, and reduce costs and approval timeframes
- » continue working with the Australian Government on the Digital Environmental Assessment Program.

Improve guidance and support materials for industry

Guidance for the resources industry

There is an opportunity to strengthen industry's understanding of information requirements for resource authority applications and processes.

The Queensland Government will provide more guidance, customer journey maps, and training and awareness sessions for the resources industry and consultants. This will increase proponents' awareness and understanding of application requirements and approval processes.

It will also improve application quality and assessment efficiency by reducing information requests, which can delay decision making.

Applicant toolkit

Currently, no public-facing government website provides a single source of truth on assessments. Instead, individual department sites and the Business Queensland site provide a decentralised array of information.

The Queensland Government will develop a single, web-based portal for industry—an applicant toolkit—with guidance material and information on applying for resource approvals. As part of this work, assessing agencies will review the information provided to industry to ensure it is easy to access and understand.

Increase transparency for applicants and the community

Cross-agency application and approval dashboard

Currently, assessing agencies all provide applicants information about the status of their resource authority application assessments. Much of this information could be better presented to reduce confusion and provide certainty about an application status.

The Queensland Government will investigate upgrading and/or integrating existing systems to create a dashboard. This would enable applicants to track an application's progress and clearly identify who is progressing the application at any point.

Consolidated public information on approved resource projects

Assessing agencies all provide information to the public about approved resource projects. For example, all Queenslanders can view an environmental authority for a resource project, including its conditions, or search for approved projects in certain locations.

This useful information is located on various websites, so the public needs to know which website to visit to find what they are looking for.

The Queensland Government will consolidate publicly available information about approved resource projects in one place. Each agency's existing search functionality will be retained, but the public will be able to access all the information in the one place.

Publication of KPIs for resource assessment decisions

In recent years, the Department of Resources has increased transparency and certainty for industry by publishing key performance indicator (KPI) data on assessment and decision timeframes for resource applications.

Additionally, the Department of Environment and Science has recently published performance information on its website around environment impact statements and timeframes for assessing environmental authority applications.

Assessing agencies will investigate further reporting improvements, including how to make more data about assessment processes and timeframes available.

Monitoring and reporting

The Queensland Government will monitor the progress of this plan towards realising our shared vision.

The final plan will outline how government will report progress on actions.





Draft action plan

The final plan will confirm actions and timings

Action	Lead	When
Key focus area 1: Grow and diversify the industry		
1. Deliver Queensland's Collaborative Exploration Initiative The Queensland Government will continue to deliver the Collaborative Exploration Initiative, which provides grants of up to \$200,000 to support exploration of new economy minerals to 2024.	Department of Resources	2021–24
2. Pilot the re-commercialisation of an abandoned mine The re-commercialisation of an abandoned mine will be piloted through a market sounding and competitive tender process. Learnings from the pilot will inform future releases.	Department of Resources	2022
3. Investigate promotion strategies for Queensland's new economy minerals The Queensland Government will investigate the promotion strategies required to help attract investment and market the development of the state's new economy minerals.	Trade and Investment Queensland	Ongoing
4. Develop a Queensland Battery Industry Strategy Responsible agencies will develop a Queensland Battery Industry Strategy to establish a local battery supply chain from mine to value-add, and potentially manufacturing.	Department of State Development, Infrastructure, Local Government and Planning; Department of Regional Development, Manufacturing and Water; Department of Energy and Public Works; Department of Resources	2022–23
5. Continue to implement the Queensland Government's Advanced Manufacturing 10-Year Roadmap and Action Plan The Queensland Government will continue to implement the Advanced Manufacturing Roadmap and Action Plan, which will support additional value-adding to Queensland's resources.	Department of Regional Development, Manufacturing and Water	2016–26
6. Continue to support regional manufacturing hubs The Queensland Government will continue to support regional manufacturing hubs and administer the \$13.5 million Manufacturing Hubs Grants Program.	Department of Regional Development, Manufacturing and Water	2021–22

Action	Lead	When
<p>7. Review of rent for new economy minerals projects</p> <p>The Queensland Government will explore options to incentivise new economy minerals development. This includes the possibility for rent deferrals during a development phase.</p>	Department of Resources; Queensland Treasury	2022
<p>8. Facilitate and investigate common user infrastructure</p> <p>The Queensland Government will investigate the feasibility of new common user infrastructure opportunities in partnership with industry.</p>	Department of State Development, Infrastructure, Local Government and Planning; Queensland Treasury	Ongoing
<p>9. Complete the Bowen Basin pipeline concept study</p> <p>The first phase of this work is a concept study, which is expected to be completed by the end of 2021.</p>	Department of Resources	2021
<p>10. Review the <i>Petroleum and Gas (Production and Safety) Act 2004</i> to enable hydrogen and other clean energy resources</p> <p>The Queensland Government will review the <i>Petroleum and Gas (Production and Safety) Act 2004</i> to ensure an efficient and transparent regulatory framework for hydrogen and other clean energy resources.</p>	Department of Resources	2022–24
<p>11. Investigate carbon capture, use and storage</p> <p>The Queensland Government will include exploration tenures under the <i>Greenhouse Gas Storage Act 2009</i> on an ongoing basis as part of the Queensland Exploration Program.</p>	Department of Resources	Ongoing
<p>12. Continue to implement the Queensland METS 10-Year Roadmap and Action Plan</p> <p>The Queensland Government will continue to deliver the Queensland Mining Equipment, Technology and Services 10-Year Roadmap and Action Plan, providing \$1.4 million in funding over the next four years to 2024–25.</p>	Department of State Development, Infrastructure, Local Government and Planning	2017–27
<p>13. Refresh Queensland’s approach to innovation</p> <p>The Queensland Government will continue to refresh its approach to innovation in the context of rapidly advancing technologies and ways of doing business.</p>	Department of Tourism, Innovation and Sport	Ongoing

Action	Lead	When
Key focus area 2: Strengthen our ESG credentials and protect the environment		
<p>14. Establish a government–industry working group to determine appropriate government action</p> <p>A working group comprising government, industry and other stakeholders will be established. The group will guide the appropriate level of government response required to support industry to seize the opportunities of ESG.</p>	Department of Resources	2022
<p>15. Investigate support required for industry to build ESG capability</p> <p>The Queensland Government will investigate ways to help industry build the capability of junior and mid-level explorers and miners to meet increasing ESG requirements.</p>	Department of Resources	2022–23
<p>16. Investigate research and development support options, particularly for mineral traceability technology</p> <p>The Queensland Government will investigate what support for research and development is needed to help resources companies prove the provenance of their minerals and base metals (i.e. blockchain and traceability).</p>	Department of Resources	2022–23
<p>17. Continue to implement financial assurance and mine rehabilitation reforms</p> <p>The Queensland Government will continue to implement its financial assurance and mine rehabilitation reforms.</p>	Department of Environment and Science; Department of Resources; Queensland Treasury	Ongoing
<p>18. Require industry to develop plans to decarbonise operations</p> <p>The Queensland Government will consider an operational policy that requires applicants to reduce Scope 1 and Scope 2 emissions for new and amended environmental authorities by requiring the development of a greenhouse gas abatement plan. It will also consider transitioning existing resource operators.</p>	Department of Environment and Science	2022–23
<p>19. Investigate innovative options to support junior and mid-level companies to decarbonise operations</p> <p>The Queensland Government will investigate innovative ways to support industry in building the capability of junior and mid-level resources companies to decarbonise operations.</p>	Department of Environment and Science; Department of Resources	2022–23

Action	Lead	When
<p>20. Investigate establishment of an independent Environmental Protection Agency</p> <p>The Department of Environment and Science has started work on the feasibility of an independent Environmental Protection Agency. Public consultation will occur as part of this process.</p>	Department of Environment and Science	2022–23
<p>21. Continue Kati Thanda–Lake Eyre Basin consultation</p> <p>The government will establish a stakeholder advisory group to consult on options to achieve an appropriate balance of environmental and economic considerations in Kati Thanda–Lake Eyre Basin. A consultation regulatory impact statement outlining proposals to achieve these objectives will be released in 2022.</p>	Department of Environment and Science	2022–23
Key focus area 3: Foster coexistence and sustainable communities		
<p>22. Develop principles for strong landholder relationships</p> <p>The Queensland Government will publish the ‘Principles for strong landholder relationships’ for the resources industry on Department of Resources website, subject to consultation.</p>	Department of Resources	2022
<p>23. Review land access and coexistence institutions</p> <p>The Queensland Government will review the land access institutions, with a primary focus on the GasFields Commission Queensland and Land Access Ombudsman.</p>	Department of Resources	2022–23
<p>24. Capture emerging coexistence issues in updated regional plans</p> <p>The Queensland Government will ensure that, as regional plans are updated over time, they capture the changing and competing demands for land use.</p>	Department of State Development, Infrastructure, Local Government and Planning	Ongoing
<p>25. Implement findings of Strong and Sustainable Communities Act review</p> <p>The Queensland Government will continue to implement the requirements of the <i>Strong and Sustainable Resource Communities Act 2017</i> and the recommendations arising from the post-implementation review.</p>	Office of the Coordinator-General	Ongoing
<p>26. Deliver the Resources Community Infrastructure Fund</p> <p>The Queensland Government will continue to deliver the Resources Community Infrastructure Fund. Applications for round 2 will open soon.</p>	Department of State Development, Infrastructure, Local Government and Planning	2021–22

Action	Lead	When
Key focus area 4: Ensure strong and genuine First Nations partnerships		
<p>27. Continue the Local Thriving Communities reform</p> <p>The Queensland Government is committed to long-term reform that changes the way we work with Aboriginal and Torres Strait Islander communities. This reform is based on the principles of self-determination and mutual high expectations relationships. The government will continue this reform, including through the Tracks to Treaty.</p>	Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships	Ongoing
<p>28. Review, strengthen and improve Cultural Heritage Acts</p> <p>The Queensland Government will continue to implement its cultural heritage frameworks to ensure cultural heritage is recognised, protected and conserved. A review of the Cultural Heritage Acts commenced in 2019, but is on hold due to COVID-19. The Queensland Government will finalise this review once consultation can recommence.</p>	Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships	Ongoing
<p>29. Develop reconciliation action plans</p> <p>The Queensland Government encourages all operators in the resources industry to develop a reconciliation action plan in consultation with Reconciliation Australia.</p>	Industry	Ongoing
<p>30. Assist in Closing the Gap through economic development opportunities</p> <p>The Queensland Government will deliver on its commitments in Queensland's 2021 Closing the Gap Implementation Plan. The resources industry has an important role in assisting government to close the gap through economic development opportunities.</p>	Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships	Ongoing
Key focus area 5: Build a safe and resilient future workforce		
<p>31. Establish a working group to develop a Queensland resources industry workforce plan</p> <p>The Queensland Government will establish a working group, comprising industry, training providers, worker representatives and government, to develop a workforce plan for the Queensland resources industry.</p>	Department of Employment, Small Business and Training	2022–23

Action	Lead	When
<p>32. Support industry to attract a skilled workforce</p> <p>The Queensland Government will continue to support the Queensland Minerals and Energy Academy by investing in their future programs, and will investigate whether further support is needed.</p>	Industry, with support from Department of Employment, Small Business and Training	Ongoing
<p>33. Develop a diverse and inclusive workforce</p> <p>All Queensland resources companies should commit to developing and embedding policies and procedures to build a diverse and inclusive workforce that reflects the community they operate in. The government will support industry to build this workforce.</p>	Industry	Ongoing
<p>34. Support the training needs of existing and future workers</p> <p>The Queensland Government will work with the resources industry to meet the sector's skills and workforce development needs through innovative partnerships, such as the Queensland Future Skills Partnership.</p>	Department of Employment, Small Business and Training	Ongoing
<p>35. Continue to implement the Digital Professional Workforce Action Plan 2020–2024</p> <p>The Queensland Government will continue to implement the Digital Professional Workforce Action Plan 2020–2024 to support the estimated 10,000 additional digital professionals that Queensland will need by 2024.</p>	Department of Communities, Housing and Digital Economy	2020–24
Focus area 6: Improve regulatory efficiency		
<p>36. Improve resource project assessment processes</p> <p>The Queensland Government will work further with stakeholders to implement a suite of business process improvements identified through a business process mapping exercise.</p>	Department of Resources; Department of Environment and Science; Office of the Coordinator-General	2022–24
<p>37. Develop a data resources development plan</p> <p>The Department of Resources will develop a Data Resources Development Plan to ensure that data is collected efficiently and its value realised.</p>	Department of Resources	2022
<p>38. Improve land release process</p> <p>The Queensland Government will deliver three key initiatives to improve the operational efficiency of its land release and competitive tendering process.</p>	Department of Resources	2022

Action	Lead	When
<p>39. Implement reforms for objections, review and notification processes for project approvals</p> <p>The Queensland Government will reform the objections process, broader review mechanisms and public notification requirements. The Queensland Law Reform Commission will undertake a review of the objections process.</p>	Department of Resources	2022–23
<p>40. Implement reforms for small-scale mining</p> <p>The Queensland Government proposes to remove mining claims from the <i>Mineral Resources Act 1989</i>, while continuing to provide legitimate pathways for small-scale miners to gain tenure through a mining lease. Appropriate transitional arrangements to grandfather existing tenement holders will be developed in consultation with stakeholders.</p>	Department of Resources	2021–23
<p>41. Implement reforms for use of steel casing</p> <p>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. It will also investigate options for regulating steel casing where there is overlapping tenure.</p>	Department of Resources; Resources Safety and Health Queensland	2022–23
<p>42. Develop a fit-for-purpose framework for extractive industry assessment</p> <p>The Queensland Government will consult stakeholders, including local governments and the extractive industry, on a fit-for-purpose extractive framework.</p>	Department of Resources; Department of State Development, Infrastructure, Local Government and Planning	2022–23
<p>43. Improve cost recovery for government services provided to industry and ensure tenures are actively developed</p> <p>The Queensland Government will develop a regulatory impact statement to consult stakeholders on ways to more fully recover the Department of Resources' administrative costs and a review of rent to ensure it encourages active exploration and development.</p>	Department of Resources	2022–23

References and further reading

- 1 Read the Queensland Resources Industry Development Plan Consultation Report at <https://www.resources.qld.gov.au/mining-exploration/initiatives/qridp/supporting-documents>
- 2 Read an end-to-end business mapping exercise of Queensland's resources framework to identify streamlining opportunities, undertaken by PwC at <https://www.resources.qld.gov.au/mining-exploration/initiatives/qridp/supporting-documents>
- 3 Read an evaluation of the effectiveness of government support to the resources sector, particularly the Collaborative Exploration Initiative, undertaken by KPMG at <https://www.resources.qld.gov.au/mining-exploration/initiatives/qridp/supporting-documents>
- 4 Read more about these objectives at www.qld.gov.au/about/how-government-works/objectives-for-the-community
- 5 Read about Queensland's Economic Recovery Plan at www.covid19.qld.gov.au/government-actions/our-economic-recovery-strategy
- 6 Read about the Sixth Assessment Report at <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>
- 7 De Belle, Guy (2021) Climate risk and the Australian financial system, speech to the CFA Australia Investment Conference.
- 8 The International Energy Agency World Energy Outlook 2021 presents three different scenarios for future global demand for coal. These scenarios outline that total coal demand could remain flat at 2020 levels of demand in 2030 or fall by as much as 65 per cent. <https://www.iea.org/reports/world-energy-outlook-2021>
- 9 In its World Energy Outlook 2021, the International Energy Agency notes that under their most aggressive decarbonisation scenario in which the world achieves net zero emissions by 2050, thermal coal demand may decline by 65 per cent out to 2030 but that demand for coal in industrial processes, including steelmaking, will decline by only 20 per cent. The IEA also noted elsewhere that achieving deep emissions cuts in steelmaking will require significant deployment of a range of new technologies. See the IEA's Iron and Steel Technology Roadmap and Net Zero by 2050 reports for further perspectives on these technology challenges. <https://www.iea.org/>
- 10 International Energy Agency 2020, Iron and steel technology roadmap, <https://www.iea.org/reports/iron-and-steel-technology-roadmap>
- 11 IEA (2021) World energy outlook 2021, pages 226-227. <https://www.iea.org/reports/world-energy-outlook-2021>
- 12 Read more about Queensland's hydrogen industry development - <https://www.statedevelopment.qld.gov.au/industry/priority-industries/hydrogen-industry-development>
- 13 IEA (2021) World Energy Outlook 2021, page 271. <https://www.iea.org/reports/world-energy-outlook-2021>
- 14 Read about the ERAs at <https://environment.des.qld.gov.au/management/activities>
- 15 Read about the Strategic Resources Exploration Program at <https://www.resources.qld.gov.au/mining-resources/initiatives/strategic-resources-exploration-program>
- 16 Read more about some of the initiatives funded under the New Economy Minerals Initiative at <https://www.resources.qld.gov.au/mining-resources/initiatives/new-economy-minerals/searching-for-nem>
- 17 Read more about the roadmap at www.rdmw.qld.gov.au/manufacturing/strategy/advanced-manufacturing-roadmap-action-plan
- 18 Read more about the regional manufacturing hubs program and grants program at www.rdmw.qld.gov.au/regional-development/manufacturing-hubs
- 19 Read about the Queensland Government's support for innovation at advance.qld.gov.au/
- 20 Read more about international net zero targets at www.un.org/en/climatechange/net-zero-coalition
- 21 Read about the Task Force on Climate-Related Financial Disclosure at www.fsb-tcfd.org/
- 22 Read about the Sustainable Development Goals at <https://sdgs.un.org/goals>
- 23 Read about the Strong and Sustainable Resource Communities Act review at www.statedevelopment.qld.gov.au/coordinator-general/strong-and-sustainable-resource-communities/post-implementation-review
- 24 Read about the fund at www.statedevelopment.qld.gov.au/industry/resource-sector/resources-community-infrastructure-fund

- 25 Read the procurement policy at www.dsdsatsip.qld.gov.au/our-work/aboriginal-torres-strait-islander-partnerships/business-economic-development/queensland-indigenous-procurement-policy
- 26 Read more on the Queensland Resources Council website at www.qrc.org.au/policies/indigenous/
- 27 Read about Tracks to Treaty at www.dsdsatsip.qld.gov.au/our-work/aboriginal-torres-strait-islander-partnerships/reconciliation-tracks-treaty/tracks-treaty
- 28 Read about the Statement of Commitment at www.dsdsatsip.qld.gov.au/our-work/aboriginal-torres-strait-islander-partnerships/reconciliation-tracks-treaty/tracks-treaty/statement-commitment
- 29 Read about the Path to Treaty at www.dsdsatsip.qld.gov.au/our-work/aboriginal-torres-strait-islander-partnerships/reconciliation-tracks-treaty/tracks-treaty/path-treaty
- 30 Read about the Local Thriving Communities at www.dsdsatsip.qld.gov.au/our-work/aboriginal-torres-strait-islander-partnerships/reconciliation-tracks-treaty/tracks-treaty/local-thriving-communities
- 31 Due to the pandemic, we have extended this plan until December 2022. Read more at www.dsdsatsip.qld.gov.au/resources/dsdsatsip/work/atsip/reform-tracks-treaty/rap/rap-2018-2022-addendum.pdf
- 32 Read about the national agreement at www.closingthegap.gov.au/national-agreement
- 33 Read more at www.dsdsatsip.qld.gov.au/our-work/aboriginal-torres-strait-islander-partnerships/reform-tracks-treaty/closing-gap
- 34 Read more about the RSHQ at www.rshq.qld.gov.au/
- 35 Read about the Digital Professional Workforce Action Plan at www.chde.qld.gov.au/about/initiatives/digital-workforce-plan/about and read about the Future Skills Fund at desbt.qld.gov.au/training/future-skills-fund
- 36 Read about the Queensland Government's Guide to Better Regulation at <https://qpc.blob.core.windows.net/wordpress/2019/06/Queensland-Government-Guide-to-Better-Regulation-May-2019.pdf>
- 37 Resource Acts include the *Mineral Resources Act 1989*, *Petroleum and Gas (Production and Safety) Act 2004*, *Petroleum Act 1923*, *Mineral and Energy Resources (Common Provisions) Act 2014*, *Greenhouse Gas Storage Act 2009* and *Geothermal Act 2010*.
- 38 Read a cost benefit analysis of small scale mining in Queensland here https://www.resources.qld.gov.au/__data/assets/pdf_file/0010/1588375/Small-scale-mining-cost-benefit-analysis.pdf.



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