

ADVANCING QUEENSLAND EXPLORATION

KEY INITIATIVES FOR INDUSTRY DEVELOPMENT



2024-25 QEC Exploration Industry
Budget Submission to the
Queensland Government

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Introduction

ABOUT THE QEC

The Queensland Exploration Council (QEC) is an initiative of the peak representative body for Queensland's minerals and energy developers – the Queensland Resources Council (QRC). With endorsement from the Queensland Government, minerals and energy explorers, service providers, business and academic research communities, the QEC aims to:

- attract more exploration investment to Queensland; and
- promote the role of the exploration industry, and in particular, its importance to regional, state and national economies.

The QEC's vision is to support Queensland explorers on their pathway to production. Today the not-for-profit QEC has 95 members and three proactive Working Groups reflecting the diversity of the exploration community in Queensland.

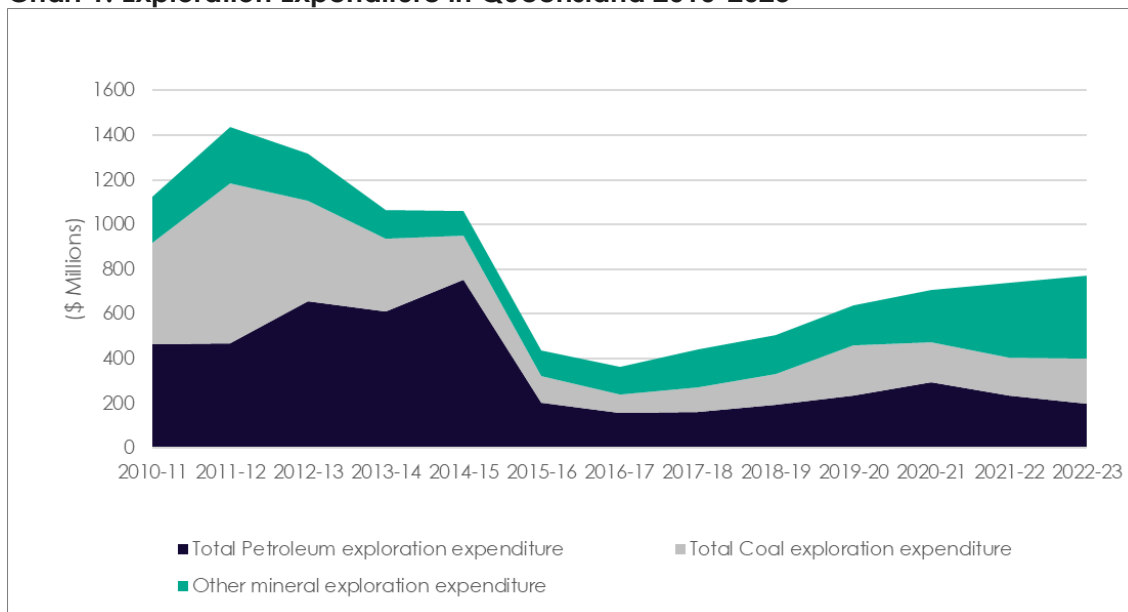
THE ROLE OF EXPLORATION

Typically, exploration activity is a leading indicator of the outlook for the broader resources sector. For analysts, exploration is a bellwether industry because when the broader economic outlook is positive, exploration activity flourishes.

For Queensland, exploration sustains a pipeline of new resource developments, and in turn the jobs, economic activity and royalty streams that underpin the state's economy. Last year, resources royalties alone contributed \$18.1 billion in revenues for the 2022-23 Queensland State Budget.

Chart 1 below, from the QEC's 2023 Exploration Scorecard shows a marginal uptick of 4.3% for Queensland's total exploration expenditure in 2022-23 compared to the prior year. The year brought an increase in exploration for minerals and coal, with exploration for petroleum tapering off. For the second time in the 13-year history of the Exploration Scorecard, minerals exploration expenditure surpassed that of petroleum exploration. In total, exploration spending is the highest it has been in eight years.

Chart 1: Exploration Expenditure in Queensland 2010-2023



OPPORTUNITY FOR QUEENSLAND

Exploration is the lifeblood of Queensland's resources sector, driven by optimism that fuels investment and new activities. However, persistent negative sentiment, especially concerning policy uncertainty, royalty tax rates, land access and Cultural Heritage, challenges established norms. Despite significant initiatives for industry like the Queensland Critical Mineral Strategy, sentiment remains negative, prompting a call for a renewed industry-government partnership to reset expectations and foster practical collaboration. While the QEC's 2023 Exploration Scorecard indicates a positive outlook for exploration fundamentals, the report urges that collaboration is essential to address underlying issues. Despite spending fluctuations, the industry shows resilience, with a promising future led by increased mineral exploration. As we navigate challenges, embracing innovation while preserving core expertise is crucial for the sector's continued progress. Together, industry and government can shape a thriving exploration landscape in Queensland.



[View the QEC's 2023 Exploration Scorecard](#)

About this submission

Advancing Queensland Exploration – Key initiatives for industry development, is a Queensland exploration industry budget submission developed by the QEC which advocates for the growth and development of Queensland's exploration industry to ensure the long-term success of the resources sector. The recommendations are geared towards enhancing critical operational categories that exhibited notably negative rankings in QEC's 2023 Exploration Scorecard, unveiling:

3 of the 18 operating factors showed a net positive sentiment in Queensland:

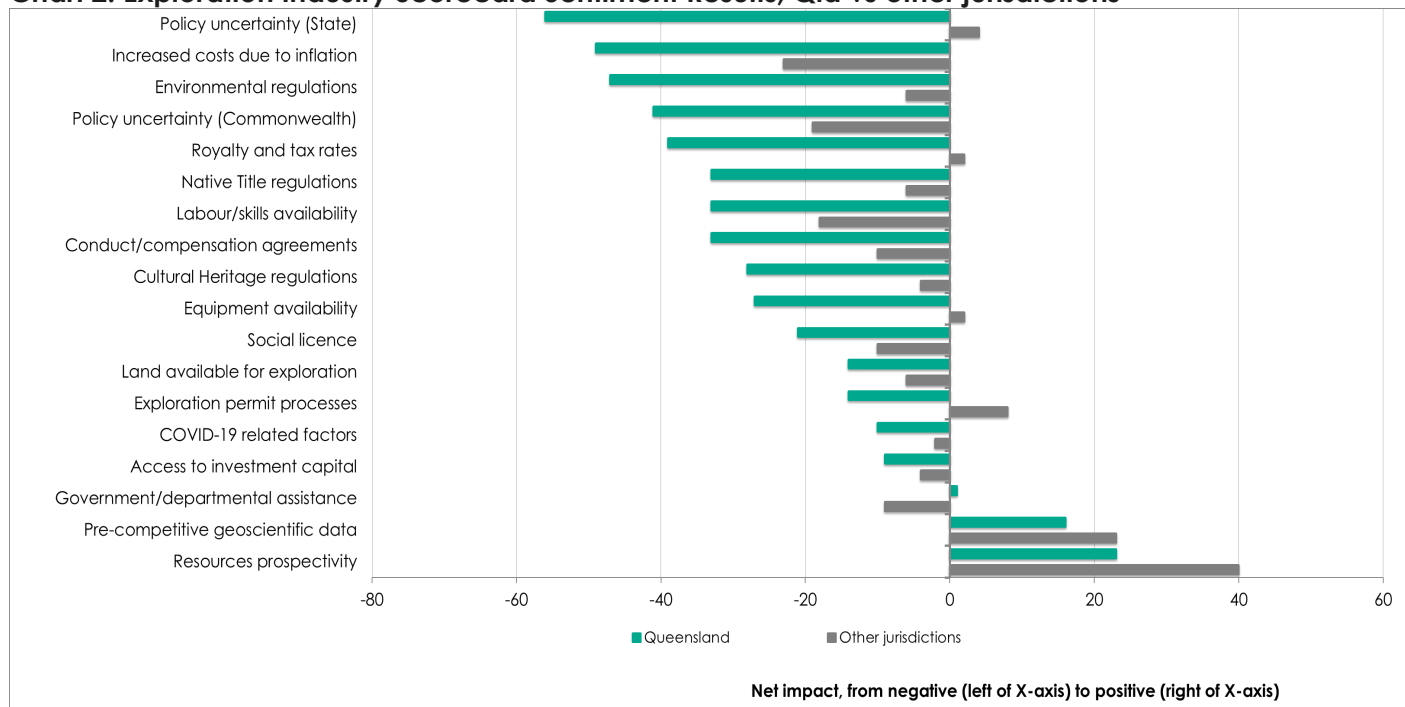
- ✓ Resource prospectivity and endowment
- ✓ Pre-competitive geoscience data
- ✓ Government/departmental assistance

15 of the 18 operating factors showed net negative sentiment in Queensland, with 11 of those being strongly negative:

- × Policy uncertainty (State)
- × Increased costs due to inflation
- × Environmental regulations
- × Policy uncertainty (Commonwealth)
- × Royalty and tax rates
- × Native Title regulations
- × Labour/skills availability
- × Conduct & compensation agreements
- × Cultural Heritage regulations
- × Equipment availability
- × Social licence to operate

Chart 2 below lists the sentiment responses from the least positive to the most positive.

Chart 2: Exploration Industry Scorecard Sentiment Results, Qld vs other jurisdictions



For comparison, the results for “other jurisdictions” are shown. This year’s Scorecard shows that Policy uncertainty (state) had the most negative impacts on explorers, followed closely by increased costs due to inflation and environmental regulations.

It is anticipated that the recommendations put forth in this year’s submission will actively contribute to solutions targeted at enhancing the overall experience of Queensland explorers regarding these specific operating categories. The overarching goal is to effect positive change, thereby improving sentiment among exploration stakeholders. By strategically addressing key areas, the recommendations aim to cultivate an environment that not only resolves existing challenges, but also uplifts the overall sentiment, creating a more positive and supportive landscape for Queensland’s exploration community.

QEC is seeking financial support and action from the Queensland Government in partnership with QEC and industry. The QEC seeks to bring these initiatives to the attention of the Department of Resources and urges the Queensland Government to consider the recommendations in its upcoming budgetary decisions for the 2024-25 financial year and forward estimates.

The QEC estimates that the four key initiatives for exploration industry development require total Queensland Government funding of \$4.75 million.

The anticipated return on this investment is significant, translating into:

- ❖ **increased investment into Queensland;**
- ❖ **infrastructure and manufacturing solutions for the burgeoning critical minerals industry;**
- ❖ **more job creation in the North West Minerals Province and across Queensland; and**
- ❖ **increased State revenue from royalties and land rent as a result of successful exploration.**

The *Advancing Queensland Exploration - Key initiatives for exploration industry development* budget submission aligns with both the Minister for Resources, Scott Stewart MP’s key delivery priorities as outlined in his [Charter Letter](#); and the key focus area actions outlined in the [Queensland Resources Industry Development Plan](#). The recommendations of this QEC budget submission are summarised in Table 1 outlining, at a glance, the relevance of each initiative to key Queensland Government priorities such as Minister Scott Stewart’s Charter Letter and the QRIDP, its alignment to the QEC’s 2023 Exploration Scorecard findings and the recommended funding amount per initiative.

QEC SUPPORT OF ONGOING QUEENSLAND GOVERNMENT INITIATIVES:

The QEC supports enduring budget commitments by the Queensland Government that support the development of the Queensland exploration industry. Through its successive Industry Budget Submissions, the QEC has consistently advocated for increased funding for crucial initiatives within the Department of Resources and Geological Survey of Queensland portfolios. In 2024-25, the QEC continues to strongly advocates for the continuous allocation of funds to support:

- The Collaborative Exploration Initiative
- Base funding for the Geological Survey of Queensland

PAST SUCCESS OF QEC INDUSTRY BUDGET SUBMISSIONS

Previous Industry Budget Submissions made by QEC on behalf of the exploration industry have achieved success through the introduction of various government-supported initiatives and announcements. Noteworthy achievements include:

Table 1: Successful past submission recommendations

QEC Recommendation	Outcome
(2023-24) Transforming the QUREX Gateway to QE-Connect	The launch of QEC's exploration industry promotional website, QE-Connect in 2023
(2023-24) Data-Driven GSQ – increased GSQ base funding over 4 years	Increased base funding for Geological Survey of Queensland in 2023-24
(2023-24) Funding towards a NWMP Deputy Coordinator-General position and establishing a small support team	Critical Minerals Queensland office announced via Critical Minerals Strategy in 2023
(2022-23) ESG deliverable for Explorers - publishing & promoting QEC's ESG framework and toolbox	The launch of QEC's ESG Toolbox for Explorers in 2023
(2022-23) Queensland Explorer Awards – new funding to promote and run the new Queensland Explorer Awards event	Annual ESG Excellence in Mining Awards announced via Critical Minerals Strategy in 2023 (funding not yet allocated)
(2022-23) Increased CEI funding over 4 years	Increased CEI funding announced via QRIDP in 2022 until 2027
(2020-21) Queensland Vanadium Consortium advocated for funding towards a common-use vanadium processing facility	\$10M funding towards Queensland Resources Common User Facility, increasing to \$75 million funding in 2023.
(2021-2023) Sustainable research for gas. Transition, and energy security	Raising the issue and indirectly influencing the 2023 announced \$21M Frontier Gas Exploration Grants Program to support on-ground gas exploration activities in the Bowen and Galilee Basins



Launch of the QEC's [ESG Toolbox for Explorers](#)

Table 2: QEC Industry Budget Submission Summary 2024-25

QEC Recommendation	Minister Stewart Charter Letter - Portfolio Key Delivery Priorities:	Queensland Resources Industry Development Plan - Actions:	QEC Initiative	Funding and term recommended	Aims to improve 2023 Scorecard negatively ranked categories:
<p>1) Fostering collaboration to champion Queensland exploration</p>	<p>Continue to support the development of the resources sector including coal, gas and new economy minerals.</p> <p>Provide clear pathways for investment in new economy minerals exploration and production.</p>	<p>- Investigate promotion strategies for Queensland's new economy minerals</p> <p>- Embed Queensland's ESG competitive advantage</p>	<p>A: Queensland Exploration Industry Promotional Video Campaign to attract global investment to Queensland's exploration industry.</p>	<p>A: \$300,000 in 2024-25 towards QEC resourcing and video production for promotional campaign. Plus support and partnership with TIQ.</p>	<p>-Social licence to operate</p> <p>-Access to investment capital</p>
			<p>B: Collaborative support from TIQ towards the new QEC Pitch-Perfect Program</p>	<p>B: QEC seeks collaborative support and commitment of time and resources from TIQ, through participation in the QEC Pitch-Ready Program Working Group.</p>	<p>-Access to investment capital</p>
			<p>C: New collaborative initiative: Qld Explorer Excellence Awards. With categories including: success in Tech/Innovation, Investment Attraction, ESG Initiatives.</p>	<p>C: QEC estimates annual cost to be approximately \$200,000 towards QEC resourcing and event running costs.</p>	<p>-Social licence to operate</p> <p>-Access to investment capital</p> <p>-Resources prospectivity</p>
<p>2) Streamlining the exploration permit process via the "Advancing to Mine Exploration Hub"</p>	<p>Continue to support the development of the resources sector including coal, gas and new economy minerals.</p>	<p>-Critical Minerals regulatory sandbox</p>	<p>New working group to scope and develop specialised software, inspired by industry best practices, to expedite exploration permits and minimise associated risks.</p>	<p>QEC estimates the associated costs, including the portal implementation to be valued at approximately \$1M.</p>	<p>-Exploration permit processes</p> <p>-Land access</p> <p>-Cultural heritage regulations</p> <p>-Native title regulations</p> <p>-Environmental regulations</p>
<p>3) Supporting Qld Government's Pit-to-Product strategy to deliver infrastructure solutions for industry</p>	<p>Continue to support the development of the resources sector including coal, gas and new economy minerals.</p> <p>Provide clear pathways for investment in new economy minerals exploration and production.</p>	<p>- \$5 million to develop a Queensland Battery Industry Strategy</p> <p>- Investigate promotion strategies for Qld's new economy minerals</p> <p>- Facilitate & investigate common-user infrastructure</p> <p>- Embed Qld's ESG competitive advantage</p>	<p>Targeted investment in supply chain research for sustained success in the North West Minerals Province, aligning with the Qld Critical Minerals Strategy.</p>	<p>QEC projects the essential research cost for pit-to-product supply chain solutions to be approx. \$500,000.</p>	<p>-Equipment availability</p> <p>-Increased costs due to inflation</p> <p>-Social licence to operate</p>

4) Research for an effective energy transition & emissions reduction.	Maximise Queensland's opportunities from the Commonwealth's gas-led COVID recovery.	- Embed Queensland's ESG competitive advantage - Complete the Bowen Basin pipeline study - Investigate carbon capture, use and storage	Funding for four researchers at the UQ Centre for Natural Gas, emphasising co-existence, ESG, and fugitive emission mapping and quantification.	4x researchers approx. \$915k per year for three years, with a total cost of \$2.75M.	-Social licence to operate -Resources prospectivity
TOTAL					\$4.75M

Key initiatives for exploration industry development

1. FOSTERING COLLABORATION TO CHAMPION QUEENSLAND EXPLORATION

The QEC is committed to advancing Queensland's exploration industry through an ambitious work program in 2024 and beyond. Having secured additional funding support from the Department of Resources in 2022-23 and 2023-24, the QEC successfully launched the [QE-Connect](#) industry promotion website in August 2023. This platform aims to amplify awareness of Queensland's diverse exploration industry, highlighting its successes and supporting Queensland Government initiatives such as the Queensland Resources Industry Development Plan (QRIDP), Critical Minerals Strategy and the Collaborative Exploration Initiative. Additionally, the website serves as a vital resource, offering essential information about the Queensland exploration industry. In the upcoming year (2024-25), the QEC plans to complement QE-Connect by focusing on key projects that align with its mission and objectives. These include:

A. Queensland Exploration Industry Promotional Video

The QEC plans to develop a compelling promotional video to be featured on QE-Connect, aiming to enhance awareness and support for the Queensland exploration industry and QEC, and drive increased investment to exploration projects in Queensland. Inspired by the successful QMEA "Shape Your Future, Innovate our World" campaign, this concept seeks to elevate the profile of Queensland's exploration industry with a cutting-edge video that can be pushed to target audiences domestically and even globally via multiple channels, including You Tube and social media.

The video will serve as a dynamic tool to showcase the QEC's vision of supporting explorers on their pathway to production, key government initiatives for industry, and the critical role of exploration in Queensland's resource sector and its economic contribution. This will foster greater awareness and support for both QEC and the Department of Resources' endeavours, such as the QRIDP and Queensland Critical Minerals Strategy.

This video campaign has the potential to leave a lasting impact on Queensland's economic landscape and position the state as a leading destination for resource exploration. A collaboration with Trade and Investment Queensland (TIQ) would further strengthen the reach and influence of the campaign.

RECOMMENDATION:

The development of a cutting-edge promotional video campaign to be hosted on QE-Connect to enhance awareness and support for the Queensland exploration industry and attract global investment to Queensland's exploration projects.

COST:

QEC is seeking \$300,000 from the Department of Resources for professional video production costs, campaign expenses and additional QEC resourcing to support the project. Additionally, it suggests collaborating with TIQ to enhance reach, leveraging TIQ's proficiency in promoting the state's economic opportunities globally.

OUTCOMES:

- A high-quality promotional video showcasing the Queensland exploration industry's significance and potential.
- Attraction of new investment to Queensland exploration projects.
- Increased awareness and support for QEC and DoR initiatives.

QRIDP Actions –

- ✓ Investigate promotion strategies for Queensland's new economy minerals.
- ✓ Embed Queensland's ESG competitive advantage

B. QEC Pitch-Ready Program with collaborative support from Trade & Investment Queensland

The QEC's flagship project for 2024, the "QEC Pitch-Ready Program," is an initiative designed to support the continued growth and development of the exploration industry in Queensland. Following the success of the ESG Toolbox for Explorers, this program focuses on assisting resource exploration companies in attracting investment, promoting innovation, and fostering sectoral growth. The key objectives of the QEC Pitch-Ready Program Working Group include organising member briefing events on investment, offering practical resources for small explorer members, and contributing valuable content to enhance the QE-Connect website's focus on attracting investment. This project aligns with the QEC's commitment to advancing and strengthening the exploration sector in Queensland.

The QEC Pitch-Ready Program Working Group aligns with Trade & Investment Queensland's (TIQ) strategic interests in fostering economic growth and promoting investment opportunities. By actively engaging in this Working Group, Trade & Investment Queensland can play a pivotal role in shaping the industry's future, supporting member briefing events, providing resources for small explorer members, and contributing valuable content. This collaborative effort would reflect Trade & Investment Queensland's commitment to economic development and showcase its dedication to advancing Queensland's exploration sector.

RECOMMENDATION:

The QEC seeks to secure collaborative support from the Queensland Government via Trade & Investment Queensland by actively participating in the QEC's newly established QEC Pitch-Ready Program Working Group in 2024.

COST:

Participation in the QEC Pitch-Ready Program Working Group in 2024 from TIQ and relevant government representatives is a voluntary commitment with no associated costs. It primarily serves as a symbolic demonstration of collaborative support, active involvement, and a valuable contribution of time towards advancing the goals of the initiative.

OUTCOMES:

- Successful establishment and functionality of the QEC Pitch-Ready Program Working Group.
- Execution of a series of impactful member briefing events.
- Development and dissemination of practical guides and resources for small explorer companies
- Enrichment of QE-Connect website with relevant content, enhancing its role as a valuable industry resource.

QRIDP Actions –

- ✓ Investigate promotion strategies for Queensland's new economy minerals
- ✓ Embed Queensland's ESG competitive advantage

C. Showcasing Queensland's ESG advantage via the Qld Explorer Excellence Awards

In March 2023, QEC unveiled the ESG Toolbox for Explorers, the culmination of an 18-month endeavour by a dedicated working group to develop a suite of invaluable tools specifically designed for small to mid-cap explorers. The primary objective of the ESG Toolbox is to assist explorers in navigating the evolving landscape of Environmental, Social, and Governance (ESG) expectations. It aims to facilitate explorers in comprehending, enhancing, and communicating their ESG credentials effectively.

Boasting a comprehensive set of resources, the ESG Toolbox includes an overview of existing standards and frameworks, an ESG Factsheet clarifies the significance of reporting, and a user-friendly, voluntary guidance framework specifically designed for exploration activities. These materials are readily accessible to the exploration community through the QE-Connect website.

In line with fostering recognition for noteworthy discoveries and exemplary practices in Queensland, the QEC proposes the establishment of the new Queensland Explorer Excellence Awards. This initiative will showcase Queensland's ESG competitive advantage and best practices across industry. It is intended to complement the QEC's ESG Toolbox for Explorers and will be promoted through the QE-Connect website.

Through a new collaboration between the QEC and the Queensland Government, a new working group will identify award categories, establish criteria, and define the judging process for the Queensland Explorer Excellence Awards. The awards ceremony is envisioned to be an annual event, with the Minister for Resources presenting the awards each year. The strategic intent behind this initiative is to attract exploration investment to Queensland.

RECOMMENDATION:

A new partnership between QEC and the Queensland Government introducing the Queensland Explorer Excellence Awards initiative.

COST:

The QEC estimates the cost to be approximately \$200,000 towards additional QEC resourcing to support the project, and annual event running costs. The QEC would also seek private industry sponsorship for the event.

OUTCOMES:

- A Queensland-first initiative for the exploration industry which will celebrate, promote and encourage exploration success, raising the profile of explorers in Queensland
- Increased awareness of ESG best practice across industry in multiple action areas of the QRIDP such as environmental management, community engagement, safety, diversity and innovation.
- Increased investment into Queensland's exploration industry, especially in areas of technology and innovation

QRIDP Actions –

- ✓ Investigate promotion strategies for Queensland's new economy minerals
- ✓ Embed Queensland's ESG competitive advantage

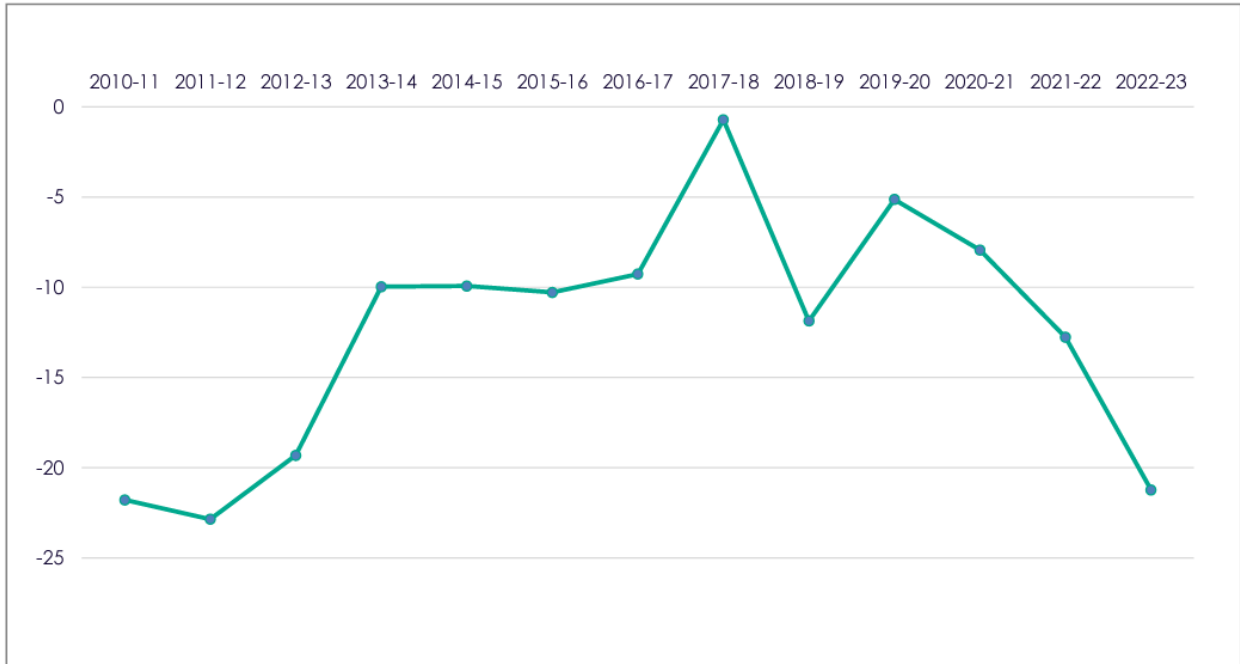
2. STREAMLINING THE EXPLORATION PERMIT PROCESS VIA THE “ADVANCING TO MINE EXPLORATION HUB”

In the 13-year history of the QEC's annual Exploration Scorecard, a noteworthy shift emerged in 2023, marking a departure from the positive trends observed in previous years. The sentiment survey results for 2023 stand out as they reveal a troubling increase in negative sentiments across key operating categories, including:

- Exploration permit processes
- Land available for exploration
- Cultural heritage regulations
- Native title regulations
- Environmental regulations
- Industry perception of social licence to operate

This year's surge in negative sentiments signifies a significant setback, eroding many hard-won advancements made in recent years within these categories. Consequently, the average sentiment across the Scorecard's operating categories for 2022-23 plummeted to its lowest point since 2011-12, as illustrated in Chart 3 below.

Chart 3: Average Scorecard sentiment across all operating categories



The data underscores the imperative to address industry sentiment collaboratively. Increased partnership between industry and government becomes essential to recalibrate expectations and initiate practical collaboration between explorers and regulators.

Issues such as hurdles in land access and permit processes contribute to increased project timelines and increased budgets, which ultimately hinder Queensland's perceived attractiveness for exploration investment. Immediate steps toward regulatory efficiency are crucial to reestablish Queensland as a favourable destination for investment.

The QEC proposes an innovative solution to expedite the exploration permit process. A collaborative working group would be established to spearhead the creation of a specialised software or online portal. This tool will systematically track the exploration permit journey. By incorporating timelines and reminders, the tool will facilitate seamless communication among government departments, ultimately reducing lead times. The overarching objective is to expedite the entire process, from the application for exploration permits to the commencement of on-site exploration, while ensuring a decrease in associated risks.

The working group's approach involves a comprehensive scoping exercise. This will entail identifying common delays encountered by explorers during the exploration permit and application process. Drawing inspiration from best practices in other exploration jurisdictions like Western Australia and Canada, the group aims to meticulously research and benchmark against successful models. Subsequently, the focus will shift towards the development and implementation of an innovative software or technological solution that aligns with industry best practices, the "Advancing to Mine Exploration Hub".

RECOMMENDATION:

QEC recommends establishing a collaborative working group to develop a specialised software for tracking the exploration permit process. This innovative tool, inspired by best practices in leading jurisdictions, aims to reduce lead times for explorers, from permit application to on-site exploration, while minimising associated risks.

COST:

QEC estimates the associated costs of this recommendation including the portal implementation to be valued at approx. \$1M (to be confirmed through a business case).

OUTCOMES:

- Accelerate approvals: Reduce lead times for exploration permits, expediting the entire process from application to on-site exploration.
- Enhance communication: Improve coordination among government departments through a specialised tracking software, fostering smoother permit approvals.
- Ensure safety: Implement risk reduction measures to guarantee a streamlined process without compromising safety and regulatory compliance.
- Innovate technology: Introduce a purpose-built software, showcasing technological innovation in exploration permit management.
- Boost confidence: Increase industry confidence through a transparent, efficient process, potentially attracting more investment and participation in exploration activities.

QRIDP Actions –

- ✓ **Critical minerals regulatory sandbox**

3. SUPPORTING QLD GOVERNMENT'S PIT-TO-PRODUCT STRATEGY TO DELIVER INFRASTRUCTURE SOLUTIONS FOR INDUSTRY

The exploration industry's potential is often hampered by the lack of access to infrastructure once a discovery is made. Some explorers face operational halts due to the inability to connect with supply chain opportunities for processing, manufacturing, or common user infrastructure, hindering the development of resources for market readiness. To address this challenge and unlock new opportunities for emerging critical minerals, QEC proposes a research-focused initiative to explore supply chain solutions from pit-to-product.

QEC recommends a targeted investment by the Queensland Government towards research regarding Queensland's next common-user infrastructure, as a solution for successful discoveries lacking essential infrastructure and supply chain capabilities. This initiative encompasses research into freight, infrastructure manufacturing, and common user processing facilities, with a focus on up-and-coming resource regions across Queensland, particularly the North West Minerals Province (NWMP).

The NWMP, centered on Mount Isa, is a core focus for the QEC and its members, holding historical significance dating back to John Campbell Miles' 1923 discovery that led to the establishment of Mount Isa Mines Limited. Despite past reviews and industry taskforces, substantial outcomes for the exploration industry have not materialised since 2007.

Recognising the region's geological complexity, QEC acknowledges the ongoing efforts of GSQ and the Department of Resources, collaborating with universities on abandoned sites for secondary prospectivity. Furthermore, the success of the vanadium consortium and the

Queensland Government's initial announcement of \$10 million in funding towards a common-user vanadium processing facility in Townsville, which recently extended to \$75 million funding for expanded processing across all critical minerals, signifies evidence the common-user model is best practice towards further development of Queensland's critical minerals industry.

A comprehensive strategic response is imperative to address challenges in minerals regions, including supply chain gaps, infrastructure deficits, and transportation system limitations. This initiative aligns seamlessly with the new Queensland Government Critical Minerals Strategy, emphasising the need for an integrated framework to ensure the sustained success and prosperity of the North West Minerals Province. This targeted investment will pave the way for the creation of new industries, driving economic growth and securing Queensland's position as a key player in the global critical minerals landscape.

RECOMMENDATION:

QEC recommends the Queensland Government strategically invest in researching infrastructure solutions, specifically the development of further common user processing and manufacturing facilities for Queensland. This targeted investment aims to bridge infrastructure gaps and facilitate prosperous future discoveries, particularly in the North West Minerals Province.

COST:

QEC estimates the cost of vital research towards Queensland's Pit-to-Product strategy to deliver infrastructure solutions for industry to be approximately \$500,000 in 2024-25. An investment into an additional common-user processing facility in Queensland, in the North West Minerals Province is approximately \$10M.

OUTCOMES:

- Enhanced infrastructure: Improved facilities addressing existing gaps for more efficient mineral processing.
- Discovery support: Provision of state-of-the-art infrastructure to support successful future mineral discoveries, fostering economic growth.
- Regional economic boost: Contribution to sustained success in the North West Minerals Province, attracting investments, creating jobs, and promoting economic growth.
- Global competitiveness: Strengthening Queensland's minerals industry competitiveness globally, attracting more mining and processing activities.
- Strategic alignment: Adherence to the Critical Minerals Strategy for responsible and sustainable development of critical minerals resources in Queensland.
- Increased investment attraction: Improved infrastructure attracting additional investments for further development and economic expansion in the minerals sector.

QRIDP Actions –

- ✓ **\$5 million to develop a Queensland Battery Industry Strategy**
- ✓ **Investigate promotion strategies for Qld's new economy minerals**
- ✓ **Facilitate & investigate common user infrastructure**
- ✓ **\$5 million for circular economy in mining**
- ✓ **Embed Qld's ESG competitive advantage**

4. RESEARCH FOR AN EFFECTIVE ENERGY TRANSITION & EMISSIONS REDUCTION

The University of Queensland Centre for Natural Gas (UQ CNG or the Centre) a specialist, energy-focused research centre with over 10 years of hard-won expertise. The Centre is uniquely placed to provide long-term and ongoing research and policy support to:

- government agencies and regulators,
- existing high-value industries such as gas production and export, and
- growth industries such as large-scale renewable energy developments, hydrogen production and transport infrastructure, carbon capture and storage, and an increase in exploration and production of critical minerals.

Two specific areas of Centre research that are critical to Queensland's energy transition objectives, are:

Social acceptance, competing land uses and cumulative impacts –

- Queensland's energy transition and emission reduction goals require landholder and community acceptance of new energy projects, particularly renewables and electricity transmission projects as well as for the anticipated increase in minerals exploration and development. The Centre has been conducting longitudinal research on the cumulative socioeconomic effects of resources development in Queensland's regional communities for over a decade, with this work subsequently being adopted by other Australian governments. There are key lessons to be learned from this ongoing body of work in terms of stakeholder engagement, land access, social license and community benefits that can help ensure Queensland meets its decarbonisation objectives.
- Feedback in 2023 from Surat Basin landholders reveals that competition for land and water resources is intensifying with the rollout of large-scale renewable energy projects. This competition is causing friction and perceived or actual inequities, and leading to legal challenges and project delays. Centre researchers are skilled in participatory and deliberative research methods that involve multiple stakeholders to understand and negotiate co-existence and conflict in land-use values, grounded in the lessons learned from Queensland's CSG to LNG experience.
- The need to address cumulative impacts of the numerous new energy projects required to reach emission reduction goals is a growing legal as well as moral imperative. Cumulative impacts fall outside the responsibility of any single project and their management requires strong leadership and potentially regulatory intervention. The Centre has developed a participatory, multi-stakeholder method for identifying and monitoring cumulative social and economic impacts of CSG development which can be translated to other resource and energy developments. The Centre has long-established relationships with local participants in this research, and has acquired detailed local and contextual understanding of the complex interactions between energy projects and local communities, which can be leveraged to maximise benefits and minimise negative impacts. Government funding of specific researchers keeps this valuable and leading knowledge in Queensland, strengthens multi-stakeholder collaborations and existing relationships, and serves to ensure hard-won lessons and best practices regarding land access engagement, First Nations engagement, and broader community engagement are shared across growing industries is entirely appropriate and in the best interest of all Queenslanders.

Fugitive emissions –

- The Queensland and Australian governments have made significant commitments to reduce fugitive methane emissions.
- The Centre is mapping methane emissions from all sectors across parts of Queensland and is focused on strengthening data quality to help ensure focused abatement measures deliver results.
- Expanded research in this field will provide the highest quality data to drive the right investments to future-proof Queensland government commitments regarding fugitives and provide an opportunity to our coal, gas and mineral resources and agriculture sectors to be best-in-class for emissions intensity.
- Government funding of independent, peer reviewed research in this area is also entirely appropriate and in the best interest of all Queenslanders.

Supporting these research streams is critical to enabling an ongoing secure and affordable gas supply, to support the high penetration of renewable energy that is necessary to reach net zero. Moreover, funding will provide additional jobs to Queenslanders and have substantial real-world application across a broad range of high-priority areas of regional economic growth.

RECOMMENDATION:

QEC recommends the Queensland Government invest funding towards the resourcing costs of four researchers at the UQ Centre for Natural Gas, with a focus on co-existence, ESG and fugitive emission mapping and quantification.

COST:

QEC estimates four researchers to be approximately \$915k per year for three years, with a total cost of \$2.75M.

OUTCOMES:

- Key learnings from Queensland's gas industry and world-scale developments are transferred effectively between all stakeholder groups to help drive coexistence for renewables developments, transmission, and critical minerals projects.
- Best in class data and research to drive abatement decisions and make Queensland resources and sector gas industry and exports be best-in-class for GHG emissions intensity.

QRIDP Actions –

- ✓ **Embed Qld's ESG competitive advantage**
- ✓ **Complete the Bowen Basin pipeline concept study**
- ✓ **Investigate carbon capture, use and storage (CCUS)**