



queensland
exploration
council

ADVANCING QUEENSLAND MINERAL EXPLORATION INITIATIVE

2020-21 QEC Budget Submission
to the Queensland Government

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1 Introduction

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).

The Queensland Exploration Council was formed by the QRC in 2010 with endorsement from the Queensland Government, minerals and energy explorers, service providers, business and academic research communities 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.

In 2019, the QEC updated its strategic plan under a new vision:

The Queensland Exploration Council is recognised as the go-to member organisation in Queensland for bringing exploration and opportunity together.

Today the not-for-profit QEC has more than 100 members and four proactive Working Groups reflecting the diversity of the exploration community in Queensland – from explorers and drillers to lawyers and earth scientists.

2 Background

2.1 THE ROLE OF EXPLORATION

Typically, exploration activity is a leading indicator of the outlook for the broader resources sector.

For analysts, it 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. Resources royalties alone contributed \$5.4 billion in revenues for the 2019-20 Queensland State Budget.

While Queensland exploration activity remains well below the peak achieved in 2011-12, recent results are encouraging. In the 12 months to June 2019, Queensland coal exploration expenditure increased by 25%, petroleum exploration expenditure was up by 19% and gold and copper both lifted by 10%.¹

¹ABS, 8412.0 - Mineral and Petroleum Exploration, Australia, Jun 2019

2.2 THE RETURN ON EXPLORATION

By their nature, Queensland explorers are nimble and innovative. Their continuing presence and persistence testify to the level of investment encouraged by the state's global reputation for strong resources prospectivity and the Geological Survey of Queensland's (GSQ) focus on customer service.

Significantly for Queensland, successful exploration proves up the resource base underpinning investment and local job creation in mining and resource extraction operations.

Exploration's ability to attract global investment is consistent with the Palaszczuk Government's Trade and Investment Strategy 2017-2022... "to increase the number of investment outcomes facilitated by the Queensland Government by 20% by 2022."

Latest data show Queensland posted a record \$84 billion in the value of its exports for the year ending August 2019. The QRC estimates 82% of this record amount was generated from global sales of minerals and energy commodities.

3 Uncovering greater value – six exploration incentives

The North West Minerals Province (NWMP) centred on Mount Isa is a major focus for the QEC and its members, just as it has been for successive governments and generations of Australians since John Campbell Miles' discovery in 1923 that led to creation of the iconic Mount Isa Mines Limited.

The funding proposals in this submission come together under what QEC calls the *Advancing Queensland Mineral Exploration Initiative*.

We believe implementation of this initiative will add further impetus to the North West Minerals Province Strategic Blueprint also developed by the government in partnership with industry.

The initiative responds positively to Premier Palaszczuk's observation at a Townsville Enterprise business event on 2 September 2019: "There are huge opportunities in the North West Minerals Province and the amazing minerals that you have can actually foster new industries, such as the battery industry which we have been talking about at length in this town."

QEC's *Advancing Queensland Mineral Exploration Initiative* also complements the state government's 2019-20 Budget commitment to boosting mineral freight exports on the Great Northern Rail Line (Mount Isa-Townsville).

"Our state's economy is stronger when we have a reliable supply of minerals for export. Queensland's North West Mineral Province contains about 75 per cent of the state's base metal and minerals, including copper, lead, zinc, silver, gold and phosphate deposits. The Port of Townsville is Australia's largest exporter of zinc, copper, lead and fertiliser." Queensland Treasurer, Hon. Jackie Trad MP.²

QEC's Advancing Queensland Mineral Exploration Initiative comprises six (6) components requiring funding totalling \$4 million.

- A strong and sustainable QEC
- One vision for the North West
- Vision 2020 Queensland Explorer Challenge
- Partnering to de-risk risky business
- Critical minerals – understanding a new supply chain
- Working with local Government to stimulate exploration in the Wide Bay Burnett region

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

- more job creation in the North West Minerals Province and beyond
- life extension for existing projects and infrastructure
- a global focus on resolving geological challenges associated with the North West Minerals Province.

4 Advancing Queensland Mineral Exploration Initiative

4.1 A STRONG AND SUSTAINABLE QEC

The issue

One of the key challenges that explorers and investors face is knowing where to find exploration investment information and resources for Queensland. The Queensland Resources and Exploration Gateway (QUREX) helps businesses discover the advantages of investing in Queensland's thriving resources exploration industry and provides them with opportunities for their future growth and prosperity.

QUREX plays an important role in connecting investors with the resources sector, the right areas of government, industry associations and business partners by providing information, tools, resources and support.

The QUREX Gateway was launched in 2017 by the QEC and is supported by the Queensland Government, through the Department of Natural Resource, Mines and Energy, and Trade and Investment Queensland.

² JOINT STATEMENT by Deputy Premier, Treasurer and Minister for Aboriginal and Torres Strait Islander Partnerships The Honourable Jackie Trad; Minister for Transport and Main Roads, The Honourable Mark Bailey: [Mount Isa Line plan puts North West minerals freight on fast track](#) (Sunday, June 09, 2019)

The QUREX Gateway has become an additional channel that is a user-friendly “one-stop-shop” for businesses looking to invest and/or explore in Queensland resources. The Gateway makes it easier to find essential information which has been difficult to access in the past. This has been proven through the increasing traffic to QUREX pages such as explorer company listings, exploration industry events, Queensland Government mapping systems and incentives, and listings of companies servicing the sector.

To continue to build on this success for QUREX and further develop its functionality, the QEC, as a not-for-profit initiative, must rely on partnerships from its generous supporters within the Queensland resources sector.

QEC seeks a three-year commitment to partnering with the QEC to enable a longer-term strategy for Queensland exploration and investment promotion.

THE RECOMMENDATION

THAT as the largest financial contributor to QUREX, QEC seeks continued Queensland Government investment to the initiative.

Cost: The QEC is seeking investment of \$150,000 over the next three years, commencing in the 2020-21 financial year.

This funding will be used to provide resources for additional functionality, search engine optimisation, maintenance of the website and the back-end hosting of the Vision 2020 Explorer Challenge on the QUREX Gateway website.

4.2 ONE VISION FOR THE NORTH WEST

The issue

Successive Queensland Governments have undertaken reviews and assigned industry taskforces to help unlock a self-sustaining cycle of prosperity for the North West Minerals Province.

To date, copious analysis has not translated into significant outcomes for the exploration industry or potential investors.

The recent lineage of NWMP inquiries includes:

2007-2012 Northern Economic Triangle

<http://www.dlgrma.qld.gov.au/resources/plan/cg/net-infrastructure-plan-full-version.pdf>

2008-2009 Blueprint for Powering the North-West

<http://statements.qld.gov.au/Statement/Id/65982>

2009 North West Queensland Mineral and Energy Province Study

<https://www.business.qld.gov.au/industries/mining-energy-water/resources/geoscience-information/geoscience-projects/mineral-energy>

2015 MITEZ NWQ Strategic Development Study http://www.mitez.com.au/cpt_projects/nwq-strategic-development-study/

2015 North West Minerals Province Taskforce report

<https://statedevelopment.qld.gov.au/resources/plan/nwmp/nwmp-strategic-blueprint.pdf>

2017 A Strategic Blueprint for Queensland's North West Minerals Province

Queensland Department of State Development, Manufacturing, Infrastructure and Planning.

<https://statedevelopment.qld.gov.au/resources/plan/nwmp/nwmp-strategic-blueprint.pdf>

2017-2021 (Geoscience Australia): Exploring for the Future

Four-year study focusing on Tenant Creek to Mount Isa making it the best mapped section of the Earth's crust. <https://www.ga.gov.au/eff/minerals/fis/tenant-creek-mt-isa>

2019 North West Economic Diversification Strategy

Queensland Department of State Development, Manufacturing, Infrastructure and Planning.

<https://www.statedevelopment.qld.gov.au/resources/plan/nw-qld-economic-diversification-strategy.pdf>

2019 Queensland Minerals Research Barriers and Priorities

Neuchatel Report (unpublished)

2019 Australia's Critical Minerals Strategy

Australian Department of Industry, Innovation and Science.

<https://www.industry.gov.au/sites/default/files/2019-03/australias-critical-minerals-strategy-2019.pdf>

2019 Queensland Critical Minerals Strategy

Association of Mining and Exploration Companies (AMEC) (in production)

2019 Research and Development Roadmap for Queensland Minerals

Queensland Department of Natural Resources, Mines and Energy (ongoing)

In published reviews the consistent conclusion is the region's future is critically dependent on exploration success and that despite generating billions of dollars in revenues over the past century, the region's geology is still not well understood.

Given the complexity and multiplicity of issues covered by these reviews and the recurring recommendations arising from them, QEC believes a coordinated and overarching strategic response is needed to address the North West Minerals Province's unique challenges.

THE RECOMMENDATION

THAT the Queensland Government appoint a Deputy Coordinator-General to focus on a coordinated response to major constraints identified in reviews into future development of the North West Minerals Province. The role would involve auditing and updating previous inquiry, report and taskforce recommendations with the objective of defining a clear pathway for resource exploration and development. The Deputy Coordinator-General would have binding oversight and coordination of a North West Strategy including a line of sight on energy issues and transport opportunities via the Ports of Karumba and Townsville.

COST: Approximately \$1,000,000 in the first year to support a Deputy Coordinator-General position and establish a small support team. The QEC recommends this Deputy Coordinator-General role have a minimum tenure of three years.

4.3 VISION 2020 QUEENSLAND EXPLORER CHALLENGE

The issue

If Queensland is to realise the full potential of resources hotspots such as the North West Minerals Province, a new approach is needed to attract the world's best minds and technology to tackle problematic geology.

Traditionally, exploration companies keep themselves to themselves, but mindsets are changing in response to success in other jurisdictions finding new ways to resolve challenges and unlock potential.

QEC's *Vision 2020 Queensland Explorer Challenge* is a value-adding concept designed to promote Queensland's minerals and energy potential and highlight to explorers and producers the benefits of collaborative approaches to resource development.

Using the business start-up concept of 'pitch bids' and the incentive of a major cash prize pool, QEC is looking to partner with a Queensland-based exploration or mining company to facilitate an international competition with the goal of unlocking problematic resource potential.

The model could also be extended to cover related industry issues such as the reprocessing of tailings, abandoned mine rehabilitation or renewable energy development.

The *Vision 2020 Queensland Explorer Challenge* works like this:

1. The partnering company (beneficiary) shares its exploration/project data with qualified industry professionals in a controlled online contest environment.
2. Within a specified timeframe, 'contestants' submit their proposed solutions to the problem(s) identified by the partnering company.
3. Following shortlisting, the finalists present their solutions in the form of a business 'pitch' to an expert panel, which selects the winner.
4. The winner (and placegetters) receives cash prizes provided by the partnering company, which then assumes ownership of the winning intellectual property.

The concept has been successfully demonstrated in the resources sector, first in Canada where it was launched in 2000 and more recently in Australia where Oz Minerals offered a total AU\$1 million prize pool to 'predict mineralisation locations in a project area, using any approach.' This challenge ran for just three months and attracted 1,113 proposals, including one from a three-member team that took out first prize of AU\$500,000.

QEC is excited at the prospect of hosting such a high-profile event for Queensland and will be opening an expressions of interest process to secure a potential industry partner that is active in the North West Minerals Province.

QEC wants to expand on previous challenge models to involve DNRME directly in ways including:

- having DNRME representation on the expert panel
- partnering with DNRME on a key challenge component – the contracting of an experienced facilitator (e.g. *Unearthed*)

QEC sees multiple benefits for the Queensland Government and DNRME in:

- promoting innovative approaches to traditional exploration concepts and processes
- supporting entrepreneurship, start-ups and high-tech jobs across Queensland

- paving the way for the discovery and development in Queensland of critical minerals and rare earths needed to build the technologies of the future.

QEC is also seeking DNRME's view on recognising participation in the *Vision 2020 Queensland Explorer Challenge* as part of a partner company's work program. This would represent an innovative way to meet regulator expectations of exploration work on the tenure for the shared aim of proving up the resource and progressing tenure.

In anticipation of having to secure substantial commitment of challenge prize money from a Queensland explorer/producer, QEC believes DNRME's in-principle involvement would be significant in helping to attract the widest range of corporate partners.

Currently, QEC is working on the following project timeline:

Oct-Nov 2019	Seek DNRME support for exploration offset, project partnering Meet with potential corporate partners (NWMP focus) Consult <i>Unearthed</i> , <i>METS Ignited</i> , <i>NERA</i> and <i>TIQ</i> Update Minister Lynham on project and progress Confirm challenge administration and governance
December 2019	Announcement of the initiative @QEC Breakfast by Minister Lynham and opening of the expression of interest. Industry media and professional organisation engagement
January 2020	Build website, media capacity, promotional materials In consultation with partners and contractor
February 2020	Media launch and announcement of industry partner of <i>Vision 2020 Queensland Explorer Challenge</i> . Industry launch at QEC Technical Forum
Late April 2020	Shortlisting of submissions
May 2020	Finalists announced (01 May) Media finale - pitch bid presentations and winners

QEC is confident that the *Vision 2020 Queensland Explorer Challenge* will spark a new level of interest in minerals and energy exploration activity in Queensland while providing multiple promotional opportunities for raising domestic awareness about the importance of exploration to the state's long-term outlook.

THE RECOMMENDATION

THAT the Queensland Government formally supports the *Vision 2020 Queensland Explorer Challenge* through:

1. the nomination of a DNRME representative for the expert panel and
2. a financial partnership by funding the challenge facilitator (QEC is speaking with experienced provider *Unearthed*).

COST: \$200,000 to contract a challenge facilitator, which among a range of services, will hold and manage all company data and submissions.

4.4 PARTNERING TO DE-RISK RISKY BUSINESS

The issue

Over coming years, a number of mine sites in the North West Minerals Province are scheduled to wind down operations.

Some hold significant value in their tailings and could continue to operate in a different form. There are other similar abandoned sites across Queensland, which present an opportunity to reduce the Queensland Government's environmental liability.

QEC recommends the Queensland Government play a more active role in de-risking projects that are uneconomic on their own yet hold significant potential to contribute to society and the state.

Proposals to re-process mine tailings and re-visit abandoned mine sites offer potential to improve environmental outcomes as an alternative to handing long-term problem back to the state.

New Century's example at MMG's former Century zinc mine in the NWMP is a demonstration of the value that can be realised through minerals re-processing. New Century has a jump on other potential sites with re-processing activities able to start soon after closure of the original mine. This is the optimal time for mineral re-processing activities-when infrastructure is still 'warm' and site rehabilitation has either not commenced or limited.

QEC believes there is genuine value in some of the 'sitting' resources found predominately in the North West Minerals Province. With the right policy settings and government commitment, a new exciting industry could be realised.

THE RECOMMENDATION

THAT as a first step, DNRME publicly release the CORE report on low-grade minerals re-processing.

Secondly, QEC recommends the department package high potential re-processing projects to offer to the market. These would include commercial incentives recognising that successful take-up will reduce taxpayer risk while delivering jobs and related economic benefits to regional Queensland. A taskforce would be established to provide advice on what legislative or policy changes are required to facilitate this new industry.

COST: The cost is in DNRME resourcing and a specialist consultant to provide advice and package up like projects. The estimated cost is \$500,000 for consultant fees per project. It is currently anticipated that there would be two projects per year.

4.5 CRITICAL MINERALS – UNDERSTANDING A NEW SUPPLY CHAIN

The issue

Many are talking about critical minerals and related development strategies but there is also a lack of knowledge and understanding of what is required to bring such a new industry on line in Queensland.

The supply chain for base metals (i.e. copper, zinc, gold) is well understood and constantly changing in response to challenges such as affordable energy for smelting and refining.

QEC recommends a body of work needs to be undertaken to understand the critical minerals supply chain. This would empower the Queensland Government to respond positively to investment movements and be ready to support the industry get off the ground.

QEC is keen to undertake this work in collaboration with the Queensland Resources Council, however seeks in-principle support for such an initiative and the recommendations coming out of it.

THE RECOMMENDATION

THAT Government support critical minerals supply chain work to be undertaken by the QEC. After a report is developed, QEC is looking establish an industry-government working group to work through/respond to matters outlined in the report.

COST: Commissioning report cost of \$150,000

4.6 WORKING WITH LOCAL GOVERNMENT TO STIMULATE EXPLORATION IN THE WIDE BAY BURNETT REGION

The issue

The Wide Bay Burnett Regional Organisation of Councils Inc (WBBROC) have identified the economic opportunity for the region in securing new mineral production. Despite being primarily identified with agriculture, the region boasts a proud history of over 100 years of mining activity. The geology of the region remains very prospective, particularly for new economy minerals like gold, titanium, cobalt and bauxite.

The Regional Organisation of Councils have identified that even a small minerals project provides large regional opportunities in terms of jobs, growth, infrastructure and skills development – particularly through the industry's supply chain. As an example, Evolution's Mount Rawdon mine contributes an annual sale value equivalent to the whole of the Bundaberg region's sugar industry.

QEC understands that WBBROC and QRC will be making a joint budget submission which advocates for the funding of the Collaborative Drilling Initiative (CDI) in the region for \$2 million per annum for the next four years. QEC endorses this proposal.

The regional benefits are not only the acceleration of drilling programs and promoting the update of the Geological Survey of Queensland's (GSQ) geological data but also the investment promotion benefits of having a new story to bring to investors. QEC would be happy to work in partnership with GSQ/QRC and WBBROC in the implementation of this important regional opportunity.

In socio-economic terms, the Wide Bay Burnett region on of the most disadvantaged regions in Queensland, with structural adjustment taking a toll on the agricultural industry. Stimulating resource exploration and production in the region provides an opportunity for economic renewal of local economies and local infrastructure. The region is looking for a point of difference to help promote the regional opportunities.

QEC understands that a WBBROC delegation has already visited Minister Lynham to advocate for establishing the collaborative drilling initiative (CDI). QEC endorses this call for a regional CDI.

THE RECOMMENDATION

QEC supports the joint WBBROC/QRC proposal for the Geological Survey of Queensland to be funded to deliver \$2 million per year for four years in re-establishing the collaborative drilling initiative in the region.

Cost: \$2 million in program costs for four years plus on costs for GSQ's administration of the program.