

Queensland
**EXPLORATION
SCORECARD**

2017

A GROUNDSWELL OF
OPTIMISM



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FOREWORD

WELCOME TO THE SEVENTH ANNUAL EXPLORATION SCORECARD

Queensland continues to be a world-class resources region. While we are often recognised as one of the largest seaborne coal and LNG exporters, we are also Australia's and one of the world's largest producers of zinc, lead and bauxite alongside significant copper and gold production.

The Fraser Institute, a Canadian think tank, recently recognised our resources prospectivity, ranking Queensland as 4th in the world in its Best Practices Mineral Potential Index, which ranks jurisdictions in terms of geological potential. This is a 10 place jump from the previous year's ranking and is Queensland's highest ever score on the Fraser Institute Survey. However, our ranking on the Fraser Institute's Policy Perception Index, which gauges the effects of government policy, slid to 36th in the world—leaving plenty of room for improvement. As a weighted average of the two indexes, the Institute's Investment Attractiveness Index ranks Queensland at 10th in the world—a six place improvement on the previous year.

The Fraser Institute's survey results can be volatile and should be taken with a grain of salt. However, it's clear that policy uncertainty continues to have a chilling effect on the industry. Exploration is already a high risk industry without the added risk of policy uncertainty. At a stage where access to capital and exploration expenditure has continued to decline across the industry, Queensland explorers are very clearly concerned by the increasing, and often unexpected, additional regulatory burden.

Maintaining a social licence to operate also remains a major challenge for the sector in 2016-17. Industry is well aware that adverse community sentiment can drive uncertainty and lead to rapid policy changes - stifling future investment. It is therefore critical that industry continues to spread the positives of the sector and works to build their social licence to reduce the risk of policy uncertainty.

But looking ahead, the Queensland exploration industry has plenty of reasons to be optimistic. Commodity prices for coal have rallied strongly, while prices for copper, zinc and gold have all achieved solid gains.

Furthermore, there is a groundswell of optimism throughout the sector which isn't captured in the 2016-17 expenditure data — with the rise in optimism continuing through the end of 2017. According to this year's sentiment surveys, 51% of explorers expect an increase in expenditure over the coming 12 months, while 60% of those in the drilling industry expected their company's activity to increase. It appears the sector has hit a turning point and even stronger results can be expected in the coming years.



The Hon. Ian Macfarlane
Chief Executive Officer
Queensland Resources Council



Brad John, PSM
Chair
Queensland Exploration Council

PUTTING THE SCORECARD INTO CONTEXT

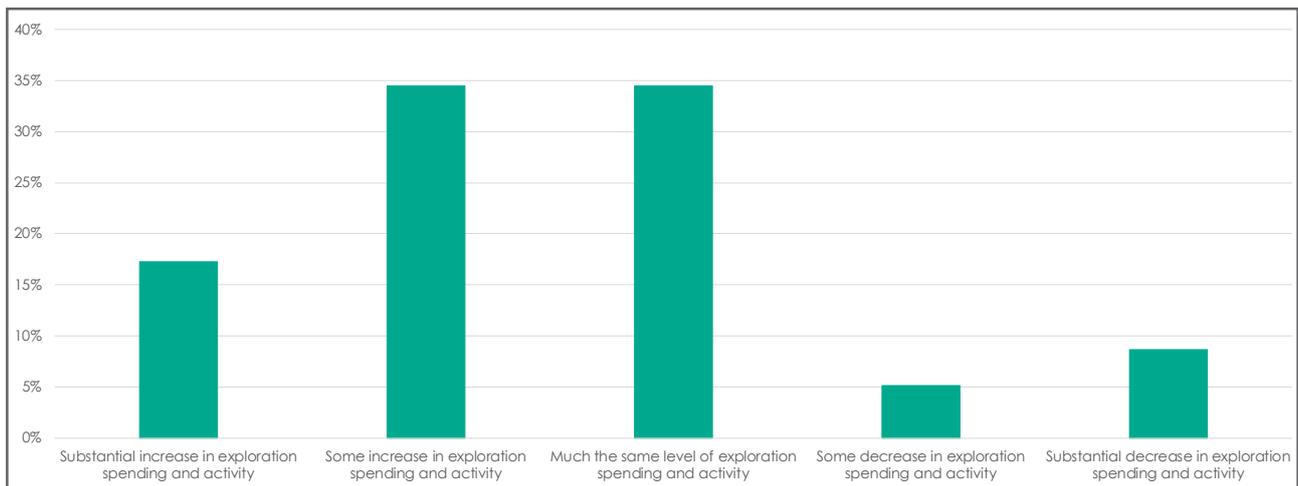
2017 – A GROUNDWELL OF OPTIMISM

Exploration is the lifeblood of future resource development in Queensland – without exploration success, there is no long term growth in the industry. Exploration needs to be recognised as an investment in future prosperity.

The vision of the Queensland Exploration Council (QEC) is to see Queensland acknowledged as a minerals and energy exploration leader by 2020 with Brisbane at its 'heart'. This is the seventh edition following the publication of the inaugural Scorecard in 2011.

The headline from this year's Scorecard is that commodity prices are improving and optimism has returned to the sector. In particular, over the next 12 months, 51% of exploration companies said they expect their exploration expenditure to increase, while only 14% expected a decrease in expenditure and activity.

CHART 1.1: OPTIMISM IS BACK — 12 MONTH OUTLOOK FOR EXPLORATION EXPENDITURE, 2016-17

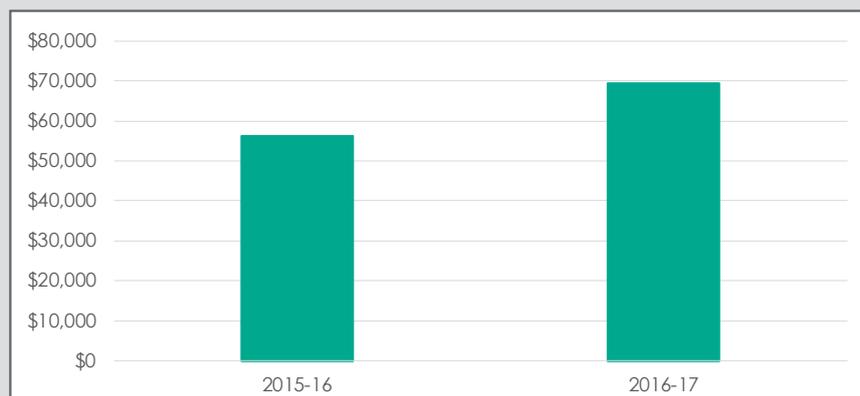


The level of optimism appears to have already arrived for junior exploration companies in Queensland. According to AUSTEX, junior companies' Queensland exploration expenditure increased by 23% in 2016-17 (Chart 1.2 below).

A similar level of optimism is surfacing globally. According to S&P Global¹, exploration budgets improved globally for the first time since 2012, rising 14% in 2017—with global exploration budgets by juniors also increasing by 23% in 2017.

CHART 1.2: AUSTEX JUNIOR COMPANY EXPLORATION EXPENDITURE IN QUEENSLAND (\$'000, ANNUAL)

Source: AUSTEX



¹Major companies increase lead in exploration spending, S&P Global, 14 November 2017.

This year's Scorecard retains the layout of previous years with a focused analysis of key exploration indicators. The Scorecard is developed on the assumption that increasing exploration activity is broadly driven by:

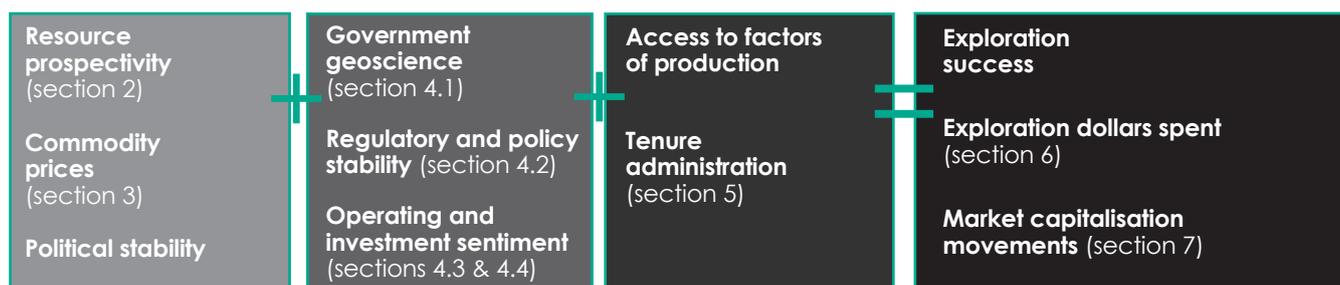
- Queensland's resource prospectivity and endowment;
- the price of key commodities;
- explorer and investor confidence; and
- policy and regulatory stability.

As the market drives commodity prices, the Scorecard concentrates on those lead indicators that can be influenced – namely, explorer and investor confidence and access to the essential factors of production. Outcomes or lag indicators that measure actual exploration success are also included. Figure 1 below shows the Scorecard structure.

FIGURE 1: SCORECARD STRUCTURE

LEAD INDICATORS – FACTORS THAT DRIVE EXPLORATION ACTIVITY AND PERFORMANCE

LAG INDICATORS – MEASURING ACTUAL SUCCESS



Source: QRC

I'd like to thank all the members of the working group, listed below. Without the enthusiasm and expertise of the working group, the Scorecard would never get off the ground. I'm proud to chair such an effective group. In particular, I want to acknowledge the constructive engagement and professionalism with the Department of Natural Resources and Mines as well as the work of the QRC secretariat in preparing the Scorecard.

But most importantly, I'd like to thank the Scorecard survey participants, who have given us their valuable time and insight—making this Scorecard possible.

We have worked hard to present an objective measure of exploration in Queensland in 2016-17. While the Scorecard identifies some real challenges, industry and Government have shown they can work together to deliver enduring reforms.

Euan Morton

Chair, QEC Exploration Scorecard Working Group

MEMBERS OF THE QEC SCORECARD WORKING GROUP 2017

SUPPORT

Euan Morton (Chair)	Synergies Economic Consulting Pty Ltd	Todd Harrington	Resources and Investment Commissioner	Andrew Barger	Queensland Resources Council
Matthew Andrew	Department of Natural Resources and Mines	Dieter Kluger	Department of Natural Resources and Mines	Tom Cunningham	Queensland Resources Council
John Briggs	Ashurst Australia	Tony Knight	Geological Survey of Queensland	Emma Haigh	Queensland Resources Council
Chris Brown	Morgans Financial Limited	Brett O'Donovan	Kronos Gold LLC		
John Bruce	Bruce Resource Consultants	Darren Rutley	Santos Limited		
Peter Hall	Australian Drilling Industry Association	Darren Walker	U&D Mining		

PERFORMANCE SUMMARY

THE QUEENSLAND EXPLORATION SECTOR, 2016-2017

LEGEND

Good

No significant impediment

Cause for concern

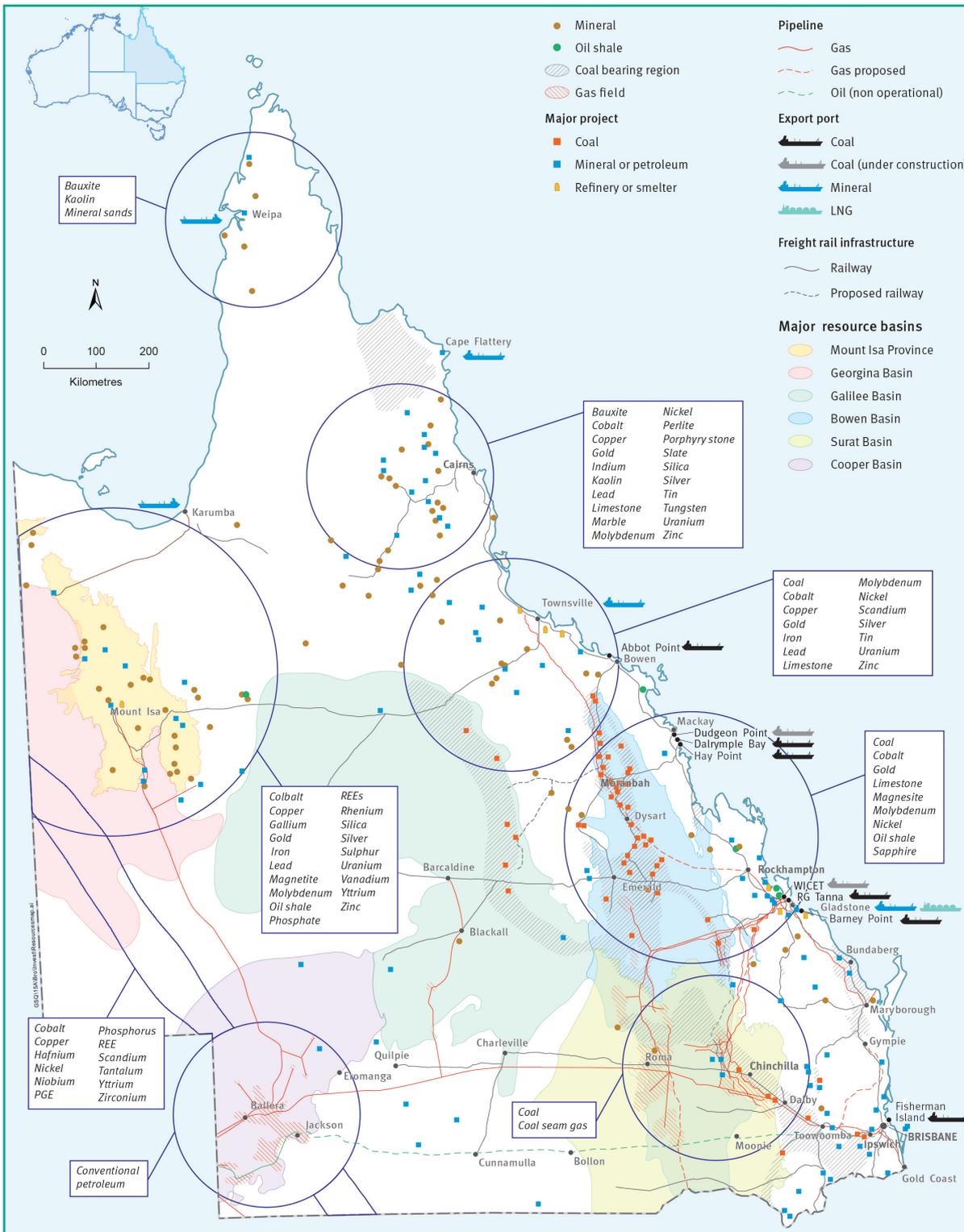
Significant problems



LEAD INDICATORS – DRIVERS OF FUTURE ACTIVITY AND PERFORMANCE	Year to June...						
	2011	2012	2013	2014	2015	2016	2017
Resource prospectivity and endowment (Section 2) <ul style="list-style-type: none"> Queensland remains highly prospective and enjoys significant endowments of coal, minerals and gas. Queensland is now 4th in the world in the Fraser Institute's Best Practices Minerals Potential Index. 	●	●	●	●	●	●	●
Commodity prices (Section 3) <ul style="list-style-type: none"> Global economic growth has remained steady, yet prices for a number of base and precious metals have strengthened 	●	●	○	●	●	●	●
<ul style="list-style-type: none"> Strong outlook for thermal and metallurgical coal prices 	●	●	○	●	●	●	●
<ul style="list-style-type: none"> As the global oil price remains low, so too has the index price for LNG—yet LNG prices appear to have steadied over the 12 months. 	●	●	●	●	●	●	●
State government geoscientific funding and activities (Section 4.1) <ul style="list-style-type: none"> Base expenditure for the Geological Survey of Queensland in 2016-17 was \$8.6 million, with the only program spending the unallocated Future Resources Program funds of \$10 million. 	●	●	●	●	●	●	●
Regulatory and policy stability (Section 4.2) <ul style="list-style-type: none"> Day-to-day service of DNRM and QDEX have improved, with the role of the coal hub particularly acknowledged. MyMinesOnline continues to be recognised as a helpful information resource for industry and the public. Queensland's policy uncertainty continues to hinder new investment — this year's list includes the introduction of associated water licences requirements and significant uncertainty surrounding financial assurance and rehabilitation. Industry raises consistent concerns with the spiralling legal cost and delays associated with land access. 	●	●	●	●	●	●	●
Operating and investment sentiment (Section 4.3 and 4.4) <p>5 of the 14 factors showed a net positive sentiment in Queensland while, 9 of the 14 factors showed net negative sentiment in Queensland.</p>	●	●	●	●	●	●	○

LAG INDICATORS – EXPLORATION SUCCESS	Year to June...						
	2011	2012	2013	2014	2015	2016	2017
<p>Tenure administration (Section 5)</p> <ul style="list-style-type: none"> Reforms to tenure processes has continued to deliver results. Streamlining these tenure processes has slashed the time taken to reach decisions. DNRM has again met its annual customer service target. The goal is 90% of coal and minerals exploration applications processed within 12 months. Industry continues to express frustrations with land releases and particularly the limitations of the tender system. 	●	●	●	●	●	●	●
<p>Mineral exploration (Section 6)</p> <ul style="list-style-type: none"> Queensland in 2016-17 recorded a 7% decrease in mineral exploration compared to 2015-16 (from \$260 million to \$243 million). Queensland's greenfields performance as a percentage of total minerals exploration expenditure increased in 2016-17 to 29%, compared with 27% in 2015-16—yet still down on 35% from 2014-15. 	●	●	●	●	●	●	●
<p>Petroleum exploration (Section 6)</p> <ul style="list-style-type: none"> Petroleum exploration expenditure (which excludes developmental and production activities) in Queensland continued to decrease in 2016-17 (from \$205 million to \$155 million), which raises real concerns about maintaining future production rates. 	●	●	●	●	●	●	●
<p>Market capitalisation movements (Section 7)</p> <ul style="list-style-type: none"> All four of the market capitalisation indices tracked in the Scorecard showed strong increases over the 12 months to 30 June 2017. 	●	●	●	●	●	●	●

2.0 RESOURCE PROSPECTIVITY



Prospectivity is a major driver of exploration activity. Queensland is blessed with a rich endowment of resources – both a diversity of resources and highly prospective deposits right around the state. Indeed, earlier this year the Fraser Institute recognized the State's high prospectivity—ranking Queensland as 4th in the world for minerals potential.

Queensland's rich prospectivity in base and precious metals and significant endowments of coal and gas are presented in the following map. Queensland has a long history of conventional petroleum and gas in the South-West corner of Queensland around Ballera and Jackson with world-class resources of coal seam gas under the Roma to Dalby area in the Darling Downs.

Throughout all seven years of the Scorecard, sentiment towards Queensland's prospectivity has remained unflaggingly positive.

FIGURE 2: QUEENSLAND'S RESOURCE PROSPECTIVITY

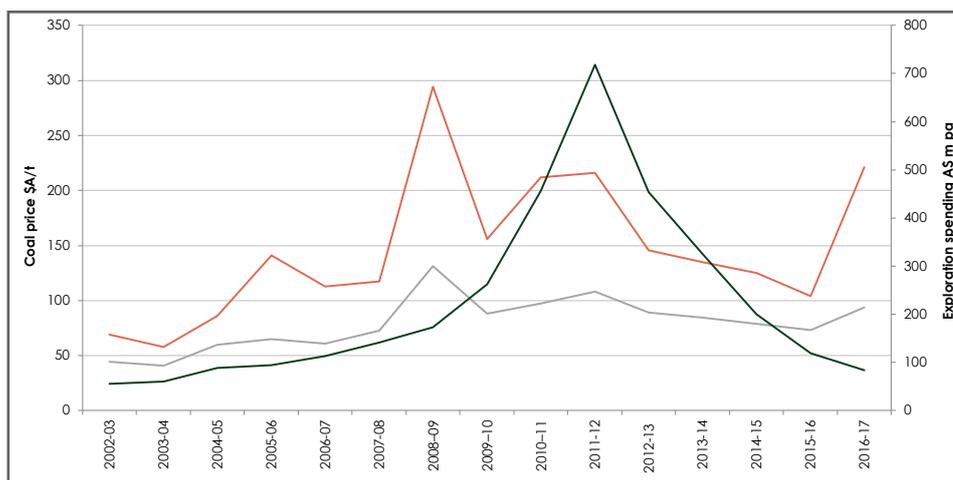
Source: Spatial and Graphic Services, Geological Survey of Queensland 2017

3.0 COMMODITY PRICES

Commodity prices are a significant driver of exploration activity in Queensland. Charts 3.1 - 3.4 show the relationship between average global benchmark prices for coal, gold, copper, and LNG compared with Queensland exploration expenditure for each commodity since 2002.

The exploration sector appears to have reached a turning point in 2016-17. Despite subdued exploration expenditure throughout the year, commodity prices have improved for many Queensland commodities. Anecdotal evidence from industry suggests a renewed sense of confidence has arrived with expenditure expectations pointing to future growth over the coming year.

CHART 3.1: GLOBAL AVERAGE BENCHMARK COAL PRICES AND COAL EXPLORATION SPEND IN QUEENSLAND, 2002-03 TO 2016-17



Key coal benchmarks staged large recoveries in 2016-17, particularly for metallurgical coal with the global average benchmark more than doubling between Scorecards. However, coal exploration activity seems to lag price increases by around three years, perhaps reflecting the inherent inertia of securing tenure, approvals and access.

- Thermal coal price (A\$/t) (LHS)
- Metallurgical coal price (A\$/t) (LHS)
- Queensland coal exploration (A\$m) (RHS)

Source: Office of the Chief Economist, Resources and Energy Quarterly, ABS 8412.0

CHART 3.2: GLOBAL AVERAGE BENCHMARK LNG PRICES AND QUEENSLAND PETROLEUM EXPLORATION SPEND, 2002-03 TO 2016-17



The Queensland gas industry remained in the spotlight in 2016-17, with extensive coverage of the need for new sources of domestic gas supply and the Federal Government's Australian Domestic Gas Security Mechanism.

Despite prices slightly improving, the decline in Queensland gas exploration expenditure continued, reaching levels not seen since 2005-06 —well before the surge in LNG-led exploration expenditure.

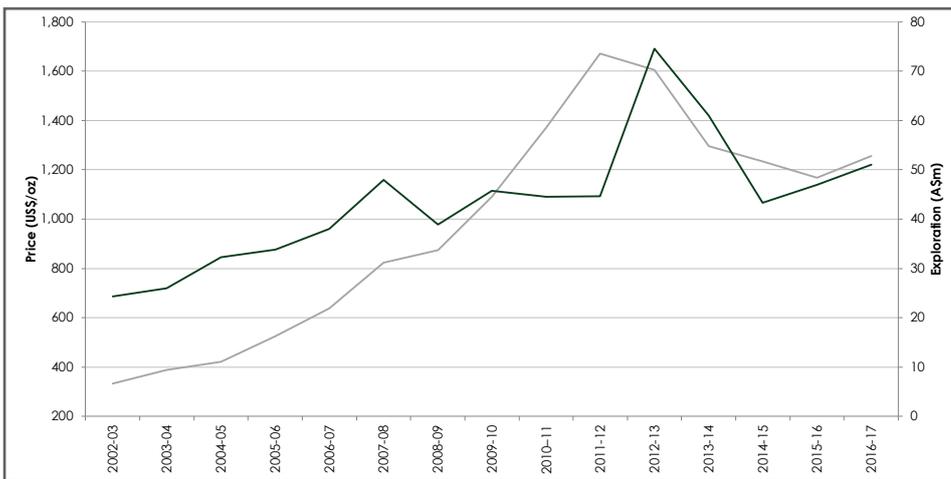
- Japanese LNG price (US\$/MMBTU) (LHS)
- Queensland petroleum exploration (A\$m) (RHS)

Note: Exploration expenditure excludes developmental and production activities.

Source: BP Statistical Review of World Energy, EnergyQuest, METI, ABS 8412.0



CHART 3.3: GLOBAL AVERAGE BENCHMARK GOLD PRICES AND QUEENSLAND EXPLORATION SPEND, 2002-03 TO 2016-17

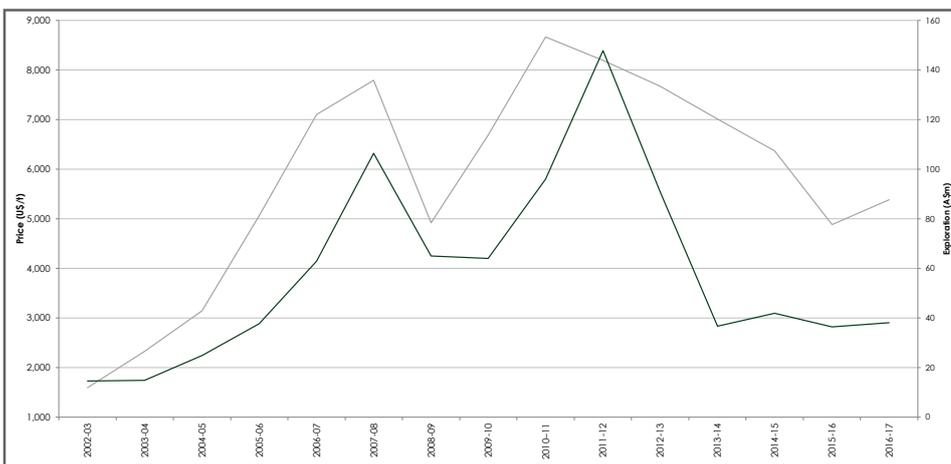


Gold exploration has perhaps the most direct relationship between the prevailing price and exploration spending. As global interest rates remain weak and economic uncertainty remains high, gold will continue to be seen as a hedge against inflation.

— Average global gold price (US\$/oz) (LHS)
 — Queensland gold exploration (A\$m) (RHS)

Source: Office of the Chief Economist, Resources and Energy Quarterly, ABS 8412.0

CHART 3.4: GLOBAL AVERAGE BENCHMARK COPPER PRICES AND QUEENSLAND EXPLORATION SPEND, 2002-03 TO 2016-17



The long term demand for copper is likely to remain strong—driven by growth in industrial production and investment in energy infrastructure. Yet Queensland's supplies face the challenge of finding new discoveries at greater depths and underneath non-mineralised cover material. Furthermore, rising electricity costs is a major risk for energy intensive operations such as copper refineries.

— Average global copper price (US\$/t) (LHS)
 — Queensland copper exploration (A\$m) (RHS)

Source: Office of the Chief Economist, Resources and Energy Quarterly, ABS 8412.0

KEY FINDINGS

- Benchmark coal prices increased by 112% for metallurgical coal and 29% for thermal coal over the year, while Queensland's coal exploration expenditure declined by approximately 30 per cent in 2016-17 (chart 3.1).
- Queensland's petroleum expenditure continued to decrease, declining a further 24% in 2016-17. (chart 3.2).
- Queensland's gold exploration improved by nearly 9% in 2016-17, supported by a 8% increase in the average gold price across the year (chart 3.3).
- Queensland's copper exploration continued to flatline in 2016-17 (chart 3.4).

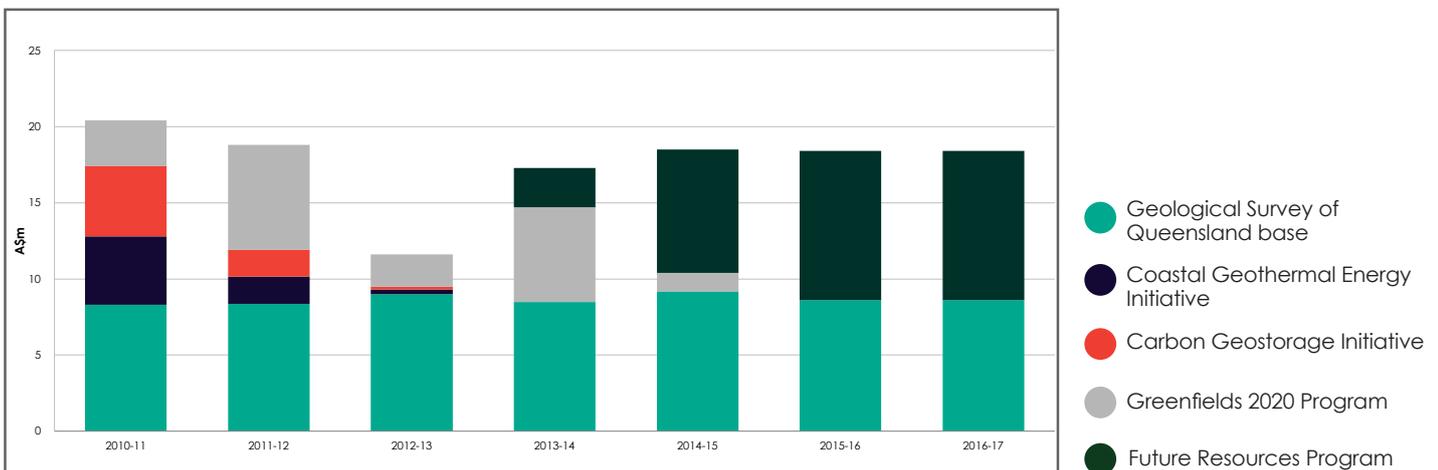
4.0 EXPLORER & INVESTOR CONFIDENCE

4.1 STATE GOVERNMENT GEOSCIENTIFIC FUNDING AND ACTIVITIES

Total state government geoscientific funding and the breakdown of that funding across the various programs is shown in Chart 4.1. Ideally, industry would like to see the Geological Survey of Queensland (GSQ) with a substantial and growing base level of funding, rather than relying on 2-3 year program funding.

In 2017, the GSQ's base expenditure remained the same as the previous year. However, from 2017-2018, the GSQ will undertake the four-year Strategic Resources Exploration Program (SREP) valued at over \$27 million. The SREP will fund programs to support north-west Queensland, and development of new gas resources in frontier basins. It will also include targeted support towards drilling and non-drilling activities under the Collaborative Exploration Initiative.

CHART 4.1: TOTAL GEOLOGICAL SURVEY OF QUEENSLAND EXPENDITURES (A\$M) 2010-11 TO 2016-17



Source: Department of Natural Resources and Mines

KEY FINDINGS

- In 2017, GSQ completed its four-year Future Resources Program of geoscience and exploration activities, which successfully expanded geological knowledge and identified new mineral resources in Queensland.
- Collaboration between GSQ, Queensland's world-class geological researchers and industry has indicated the potential for a belt of highly mineralised and valuable geological pipe structures extending across the south-west of the state, identified as the Diamantina Minerals Province.
- In March 2017, the GSQ approved eight grants to industry under the Collaborative Drilling Initiative in north-west Queensland. The exploration grants demonstrate the GSQ's continued support towards making new discoveries and testing new concepts and technologies in collaboration with industry.

4.2 REGULATORY AND POLICY STABILITY

This section provides an annual snapshot of the year-to-year regulatory changes from 2011 (representing the baseline) as they relate to exploration activities in Queensland.

LEGEND

- Favourable reduction in regulatory control occurred in that year
- No change in regulatory control occurred in that year
- Unfavourable increase in regulatory control occurred in that year

Types of exploration controls in Queensland	Changes between 2011 and 2012	Changes between 2012 and 2013	Changes between 2013 and 2014	Changes between 2014 and 2015	Changes between 2015 and 2016	Changes between 2016 and 2017
A. Foundation requirements for exploration - processes that most holders of exploration permits must meet on application and continuously through the life of the tenure:						
• Cultural heritage (Aboriginal and non-Aboriginal)	○	○	○	○	○	○
• Application for environmental authority (this requirement removed in 2013 in some circumstances)	○	●	○	○	○	○
• Application for exploration tenure (applications for coal subject to tender process in 2012 - minerals applications are unchanged)	○	○	○	○	○	○
• Application for exploration tenure (petroleum and gas rights subject to tender process)	○	○	●	○	○	○
• Landowner compensation	○	○	○	○	○	○
• Native Title considerations	○	○	○	○	○	○
• Rehabilitation / remediation obligations	○	○	○	○	○	○
• Renewal of exploration rights	○	○	○	●	○	○
• Administrative improvements in processing applications	○	○	○	○	●	○
B. Gateway controls on exploration – policies that present barriers to tenure in some areas:						
• Land regulated as 'Restricted Area'	○	○	○	○	○	○
• Land otherwise off limits for environmental reasons (e.g. National Parks and strategic environmental areas)	○	○	●	○	○	○
• Restrictions on exploration activity in other areas of regional interest (e.g. priority agricultural areas, including strategic cropping areas)				●	○	○
• Land subject to other third party interests (e.g. new overlapping tenure regime commences for coal and gas (includes exploration))	○	○	○	○	○	●
C. Conditioning controls on exploration - policies that impose additional conditions:						
• Applications and approvals to disturb native vegetation	○	○	○	○	○	○
• Applications and approvals to work in waterways	○	○	○	○	○	○
• Transfer duty – became payable in 2012 – farm-in agreements exempted in 2013	●	●	○	○	○	○
• In 2016, work programs halved					●	○
D. Impacts on production (but indirectly relevant to exploration):						
• Policies which limit production, specifically associated water licences (Dec 2016)						●
E. Year-specific issues:						
• Commonwealth Junior Mining Exploration Incentive (announced, but Bill not passed)						●
• Uncertainties created in 2016-17 around future policy decisions – specifically Financial Assurance, Rehabilitation, SEQ Regional Plan (PAAs) and at the Commonwealth level 457 visa changes and Native Title						●

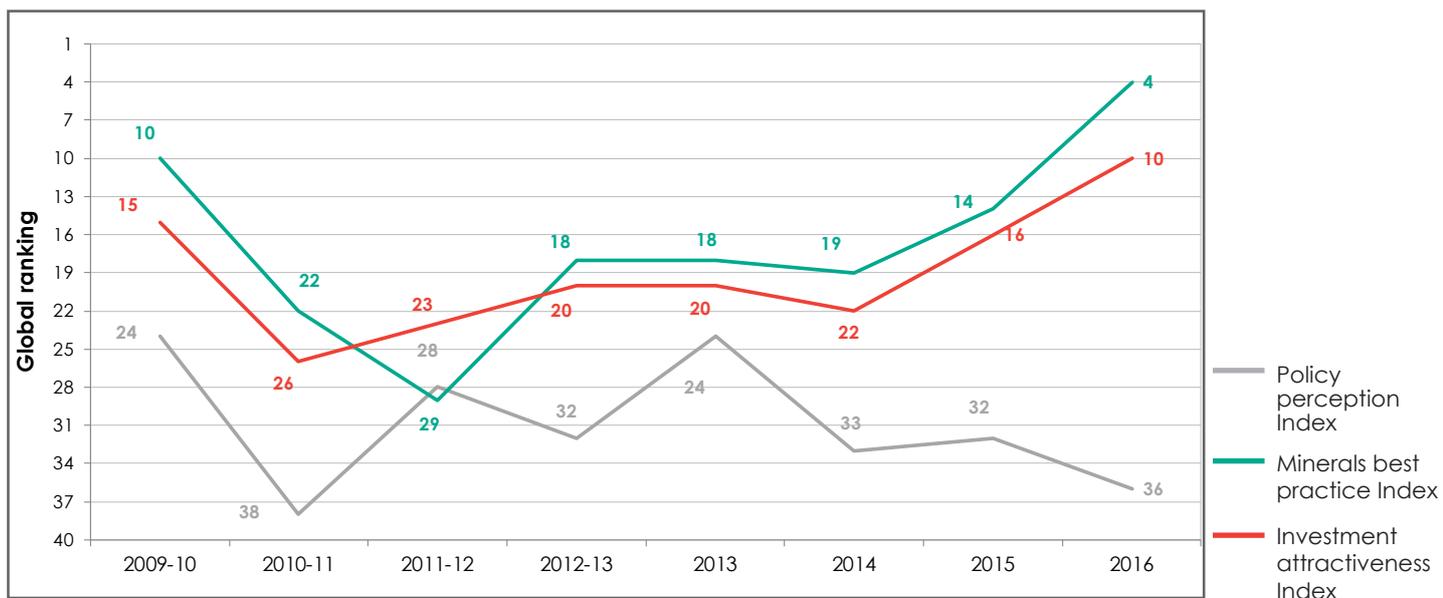
4.3 FRASER INSTITUTE'S ANNUAL SURVEY OF MINING COMPANIES 2016

The Fraser Institute's *Annual Survey of Mining Companies 2016* was released on 28 February 2017. It ranks jurisdictions based on an *Investment Attractiveness Index*, which is a weighted average of both mineral and policy perception. In 2016, Queensland was ranked 10th, which was up 6 places from 16th last year.

The overall *Investment Attractiveness Index* is constructed by combining the *Best Practices Mineral Potential Index*, which rates regions based on their geologic attractiveness, and the *Policy Perception Index*, a composite index that measures the effects of government policy on attitudes toward exploration investment. Queensland's ranking in these indexes is presented below.

The Fraser Institute survey, while a useful benchmark, reflects global perceptions of jurisdictions and its volatility can make drawing strong conclusions from year to year difficult. However, it is clear that Queensland's geology is highly prospective and Queensland's major challenge is creating a regulatory environment which is conducive in attracting further investment.

CHART 4.3: FRASER INSTITUTE – QUEENSLAND'S GLOBAL RANK 2009-10 TO 2016



Source: Fraser Institute Annual Survey of mining companies

The report's *minerals best practice potential index* rates a jurisdiction's attractiveness based on perceptions of the geology. Survey respondents are asked to rate the pure mineral potential, assuming that their policies are based on 'best practice', i.e. independent of any policy settings. In 2016, Queensland improved 10 places, from 14th to 4th—its highest ever ranking on the index. Western Australia again topped the index and was followed by the Canadian provinces of Manitoba and Saskatchewan.

The report's *policy perception index* is a composite index that measures the overall policy attractiveness of the 104 jurisdictions in the survey. The index is composed of survey responses to policy factors that affect investment decisions.

Despite Queensland's minerals best practice potential, Queensland's policy perception dropped four places, from 32nd to 36th — with Tasmania leapfrogging Queensland to claim 32nd position.

The Fraser Institute's collection was done in August to November 2016 for a February 2017 report. This Scorecard's sentiment survey is conducted in October 2017 for a November 2017 report. As a result, the sentiment in the Fraser Institute reflects sentiment from an earlier period than in this Scorecard.

4.4 OPERATING SENTIMENT

Companies were asked to indicate to what degree individual factors positively or negatively impacted the commercial objectives of their Queensland operations during 2016-17. Companies were also asked to respond to the same questions for the other Australian jurisdiction they are most active in outside of Queensland. The 12 core factors have remained constant since the 2011 Scorecard.

The survey received 48 'Queensland' and 18 'Rest of Australia' responses. Across the 2016-17 survey, the most common primary exploration target of respondents was base and/or precious metals (38%), followed by coal (22%), gas (8%)—while 18% were service providers.

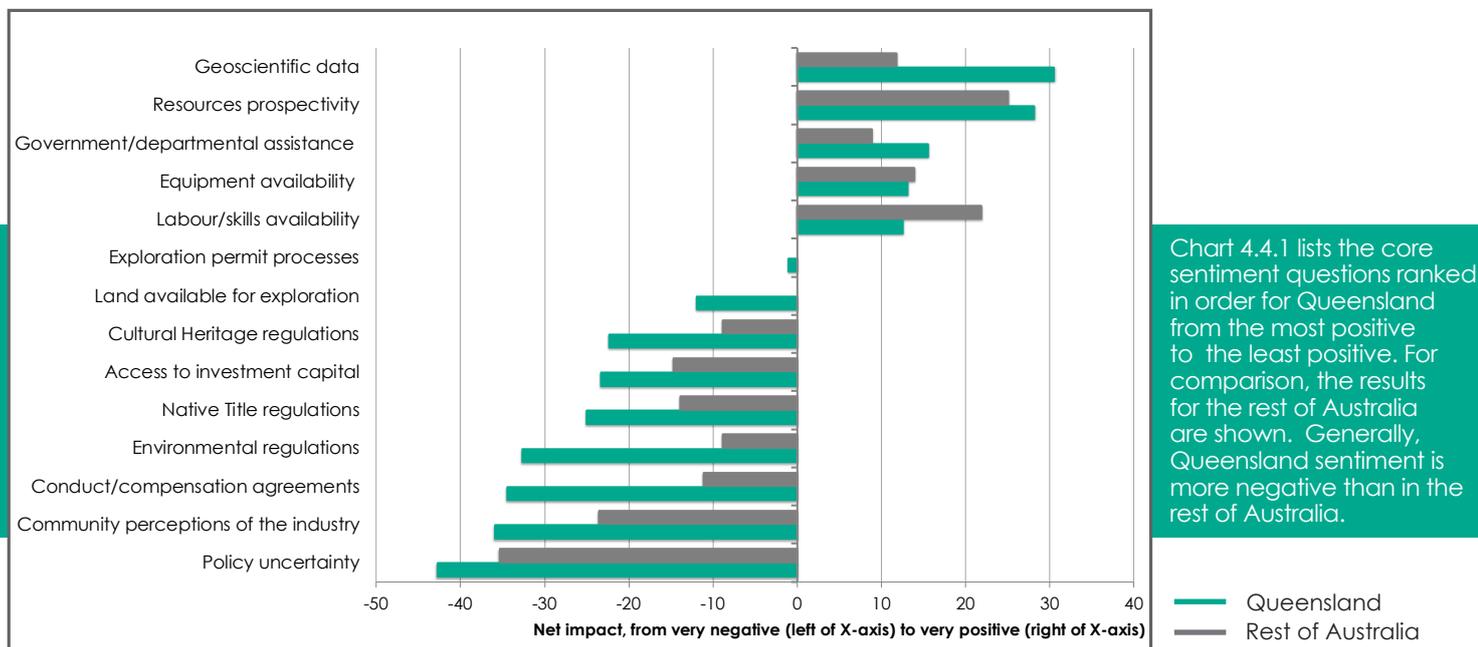
The responses were combined into a single value by weighting each response. 'Strongly positive' (negative) responses were given a weighting of 1 (-1), 'positive' (negative) responses were given a weighting of 0.5 (-0.5) and 'not at all' responses were given a weighting of 0. For more details and a worked example, please see section 4.3, page 21 of the [2015 Scorecard](#).

INDUSTRY SENTIMENT SURVEY

The full results for 2017 shows the range of issues encompassed in the sentiment survey (Chart 4.4.1).

- **Five of the 14 factors** showed a net positive sentiment in Queensland. Two of the seven were strongly positive:
 - ✓ resource prospectivity; and
 - ✓ pre-competitive geoscientific data.
- **The seven-year trends** for Queensland show a marked improvement in:
 - ✓ exploration permit processes
 - ✓ departmental assistance (clearly, the coal hub is working well); and
 - ✓ pre-competitive geoscientific data.
- **Nine of the 14 factors** showed net negative sentiment in Queensland. Seven of the 10 were strongly negative:
 - ✗ policy uncertainty
 - ✗ community perceptions of the industry
 - ✗ conduct and compensation agreements
 - ✗ environmental regulations
 - ✗ Native Title regulations
 - ✗ access to investment capital
 - ✗ cultural heritage regulations.

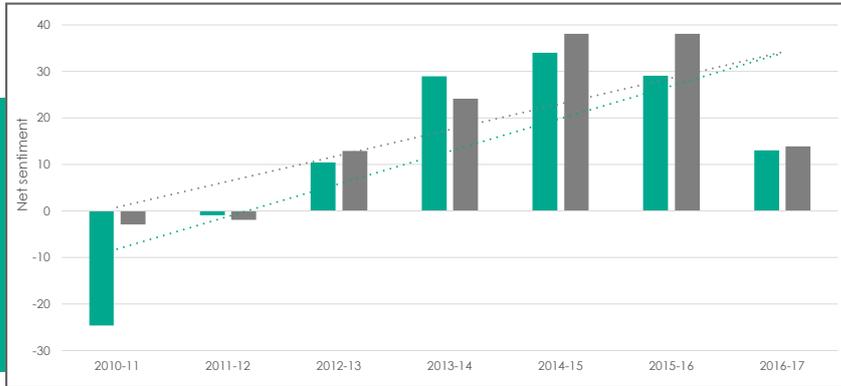
CHART 4.4.1: COMPARING QUEENSLAND TO THE REST OF AUSTRALIA 2016-17



LEGEND

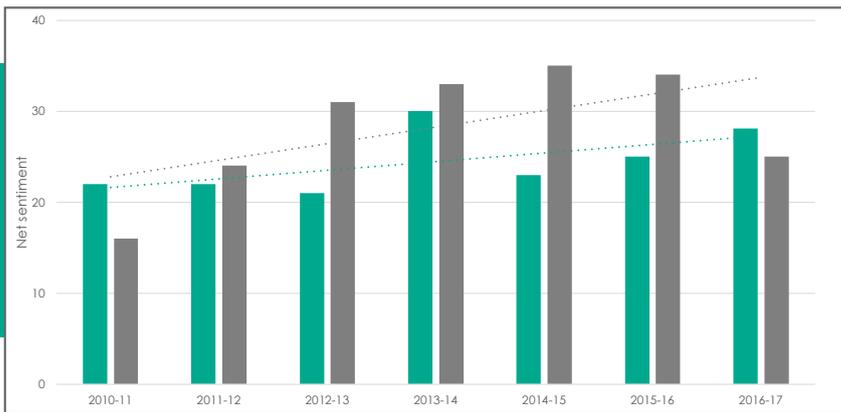
- Queensland
- Rest of Australia
- Trend (QLD)
- Trend (Rest of Australia)

CHART 4.4.2: EQUIPMENT AVAILABILITY 2010-11 TO 2016-17



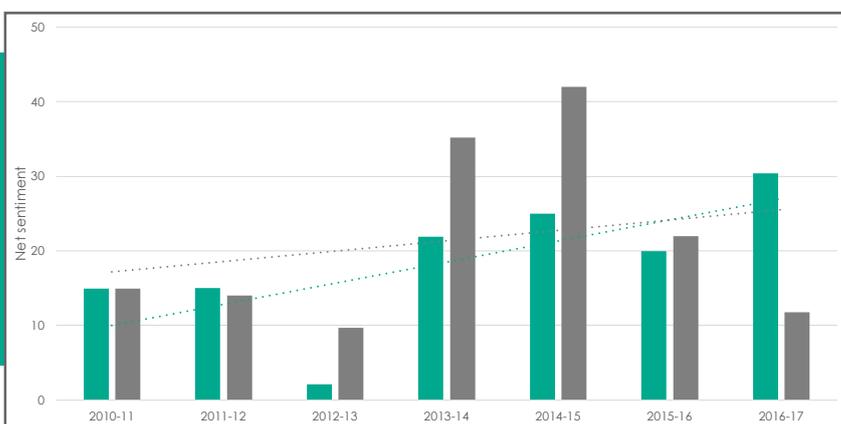
The previously highly positive sentiment for the availability of equipment has decreased in Queensland and the Rest of Australia — reflecting improving demand for drilling services across Australia and a shortage of skilled drillers.

CHART 4.4.3: RESOURCE PROSPECTIVITY/ENDOWMENT 2010-11 TO 2016-17



Queensland's world-class prospectivity continues to be a net positive — having steadily increased over the previous three years. This is the first year since 2010-11 that Queensland sentiment is higher than the rest of Australia average.

CHART 4.4.4: PRE-COMPETITIVE GEOSCIENCE DATA 2010-11 TO 2016-17

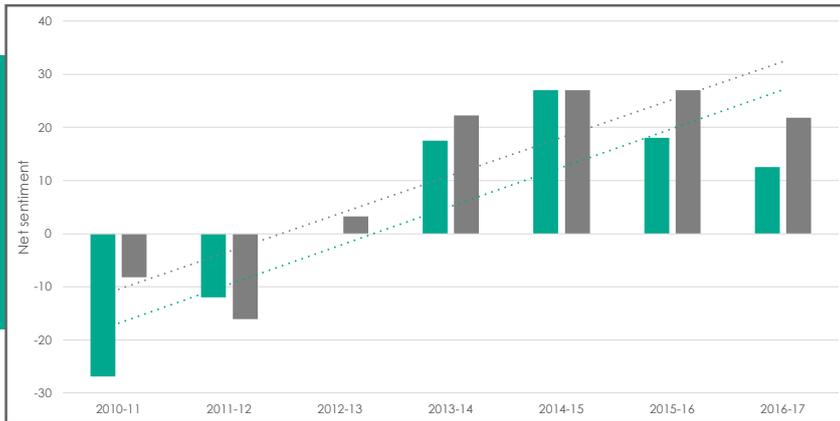


Providing high quality geoscience data is necessary for attracting explorers and investors to Queensland. While the Geological Survey of Queensland is praised on the quality and accessibility of their data, in times of leaner exploration expenditure, Queensland needs to continue to build its competitive edge.

LEGEND

- Queensland
- Rest of Australia
- Trend (QLD)
- Trend (Rest of Australia)

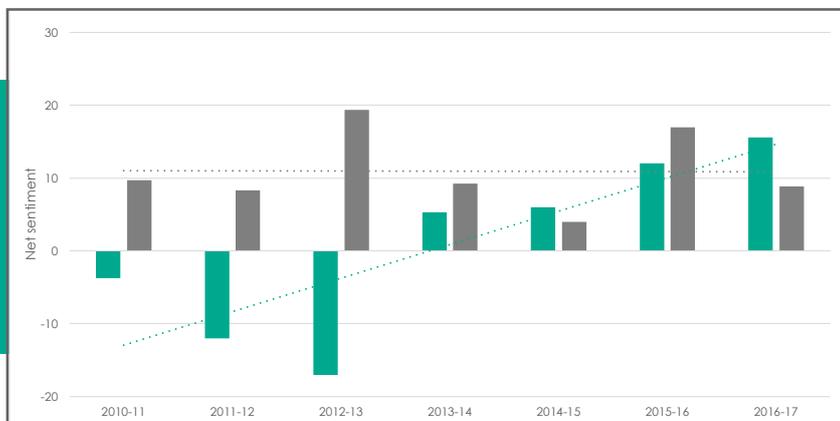
CHART 4.4.5: LABOUR/SKILLS AVAILABILITY 2010-11 TO 2016-17



The availability of skills and labour has improved dramatically since when the survey first began. However, similar to equipment availability, the positive sentiment has moderated, perhaps suggesting increased Queensland exploration activity in the future.

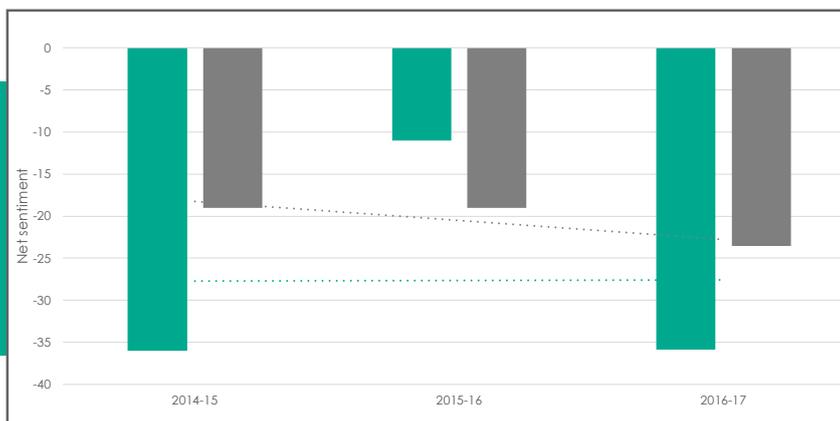
NB: Queensland sentiment in 2012-13 was neutral (zero)

CHART 4.4.6: GOVERNMENT/DEPARTMENTAL ASSISTANCE 2010-11 TO 2016-17



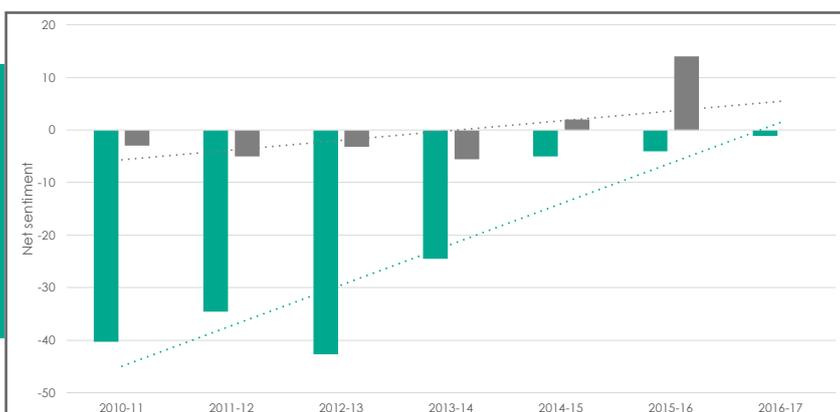
Sentiment towards departmental assistance continues to improve. For the fourth year running, DNRM has achieved its customer service standard for processing exploration applications for mining, meeting its target of deciding 90% of exploration applications within 12 months.

CHART 4.4.7: COMMUNITY PERCEPTIONS OF THE INDUSTRY, 2014-15 TO 2016-17



All of the social licence gains in sentiment from 2015-16 have been eroded in 2016-17—with respondents commenting on the increased activity from activist groups. Establishing and maintaining a social licence to operate continues to be a major challenge for the sector. This question has only been asked since 2014-15.

CHART 4.4.8: EXPLORATION PERMIT PROCESSES 2010-11 TO 2016-17



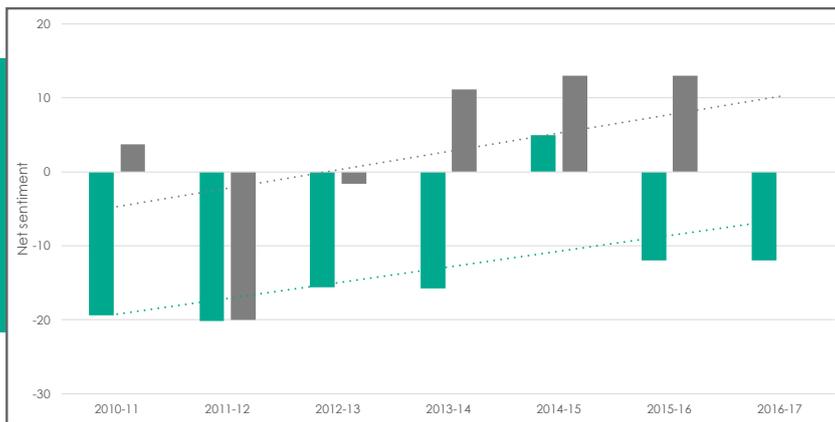
Sentiment towards exploration permit processes has continued to improve, albeit incrementally. Many survey respondents continued to identify extended permitting processes as a key issue.

NB: Rest of Australia's sentiment in 2016-17 was neutral (zero)

LEGEND

- Queensland
- Rest of Australia
- ⋯ Trend (QLD)
- ⋯ Trend (Rest of Australia)

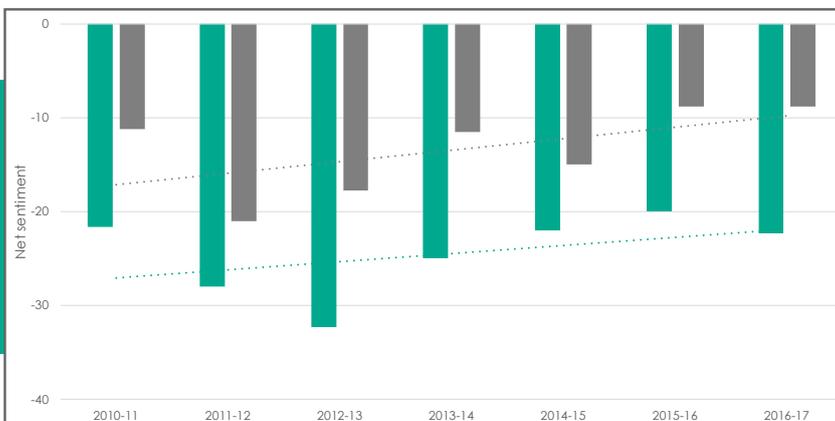
CHART 4.4.9: LAND AVAILABLE FOR EXPLORATION 2010-11 TO 2016-17



Negative sentiment for land availability in 2016-17 appears to reflect comments from respondents over the slow process and limited supply of land released through tenders for coal exploration tenure.

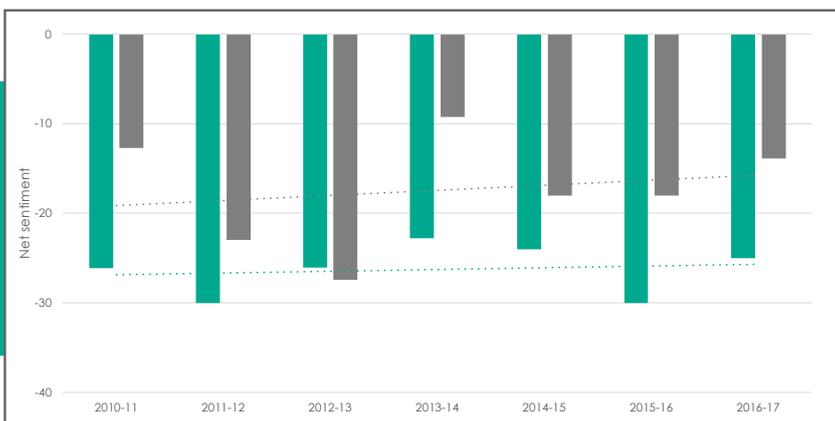
NB: Rest of Australia's sentiment in 2016-17 was neutral (zero)

CHART 4.4.10: CULTURAL HERITAGE REGULATIONS 2010-11 TO 2016-17



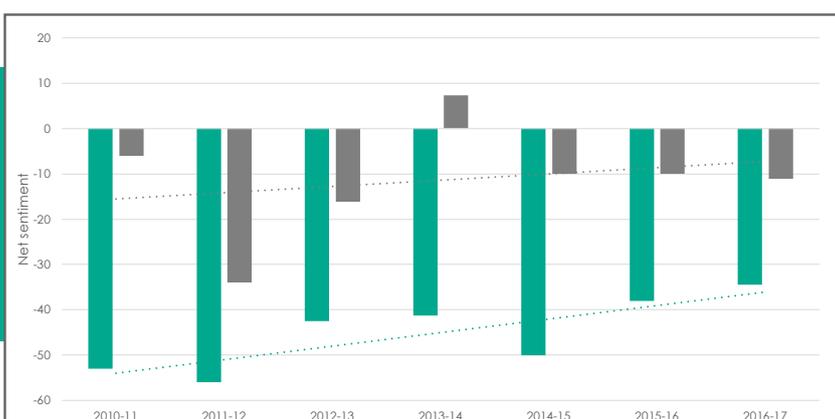
The relative stability of this indicator reflects that there have been only very minor changes in Cultural Heritage regulations over the seven-year life of the Scorecard.

CHART 4.4.11: NATIVE TITLE REGULATIONS 2010-11 TO 2016-17



Stable negative sentiment towards Native Title regulations reflects that there have been almost no changes in Native Title regulations over the seven years.

CHART 4.4.12: CONDUCT AND COMPENSATION AGREEMENTS 2010-11 TO 2016-17

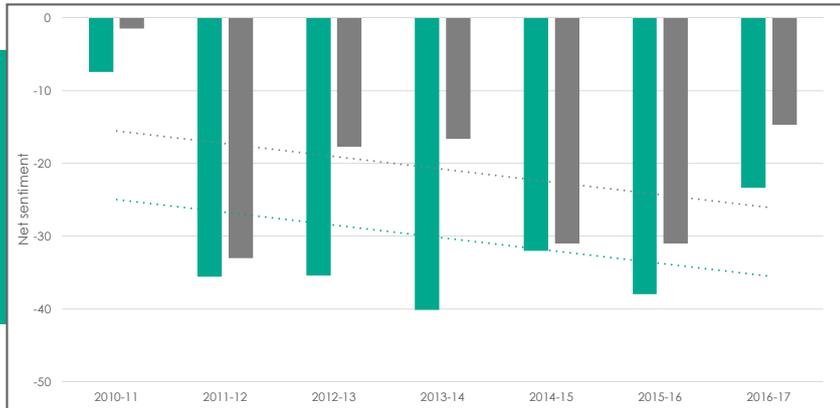


The sentiment results suggest that the conduct and compensation agreement (CCA) process, which has existed largely unchanged since 2010 is gradually becoming less of a drag on sentiment. However, where land access issues do arise, the impact on an exploration project is significant.

LEGEND

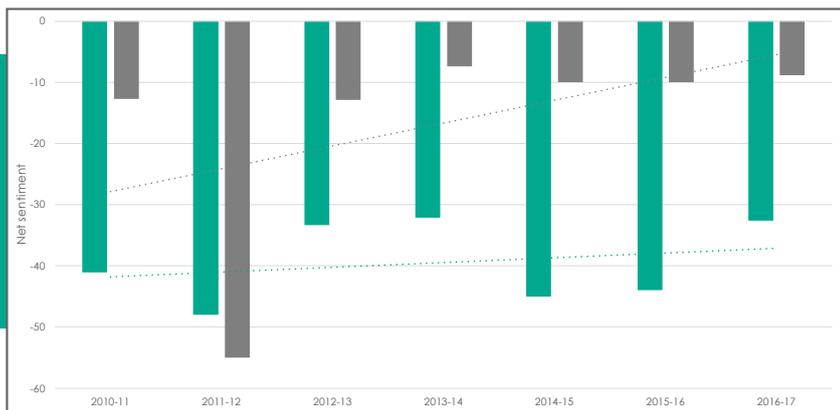
- Queensland
- Rest of Australia
- Trend (QLD)
- Trend (Rest of Australia)

CHART 4.4.13: ACCESS TO INVESTMENT CAPITAL 2010-11 TO 2016-17



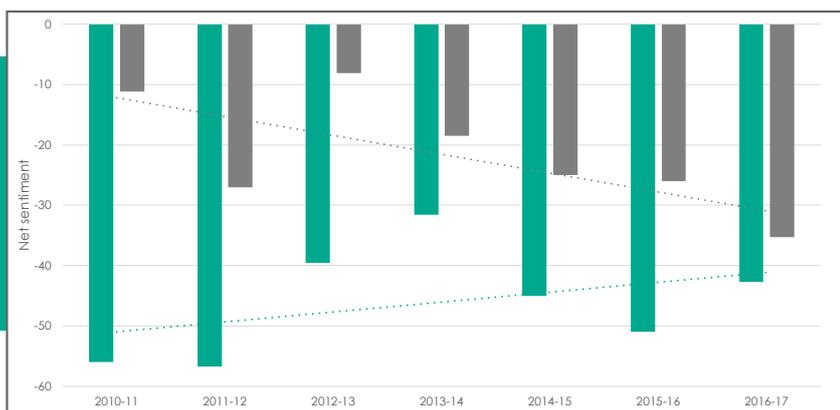
Access to investment capital continues to be an issue in Queensland and across the rest of Australia. However, in 2016-17, Queensland sentiment has improved significantly—achieving the highest (or least negative) score since 2010-11.

CHART 4.4.14: ENVIRONMENTAL REGULATIONS 2010-11 TO 2016-17



The sentiment on environmental regulations and compliance from EHP has improved, yet it remains strongly negative with survey respondents identifying environmental legislation as cumbersome and resource intensive.

CHART 4.4.15: POLICY UNCERTAINTY 2010-11 TO 2016-17

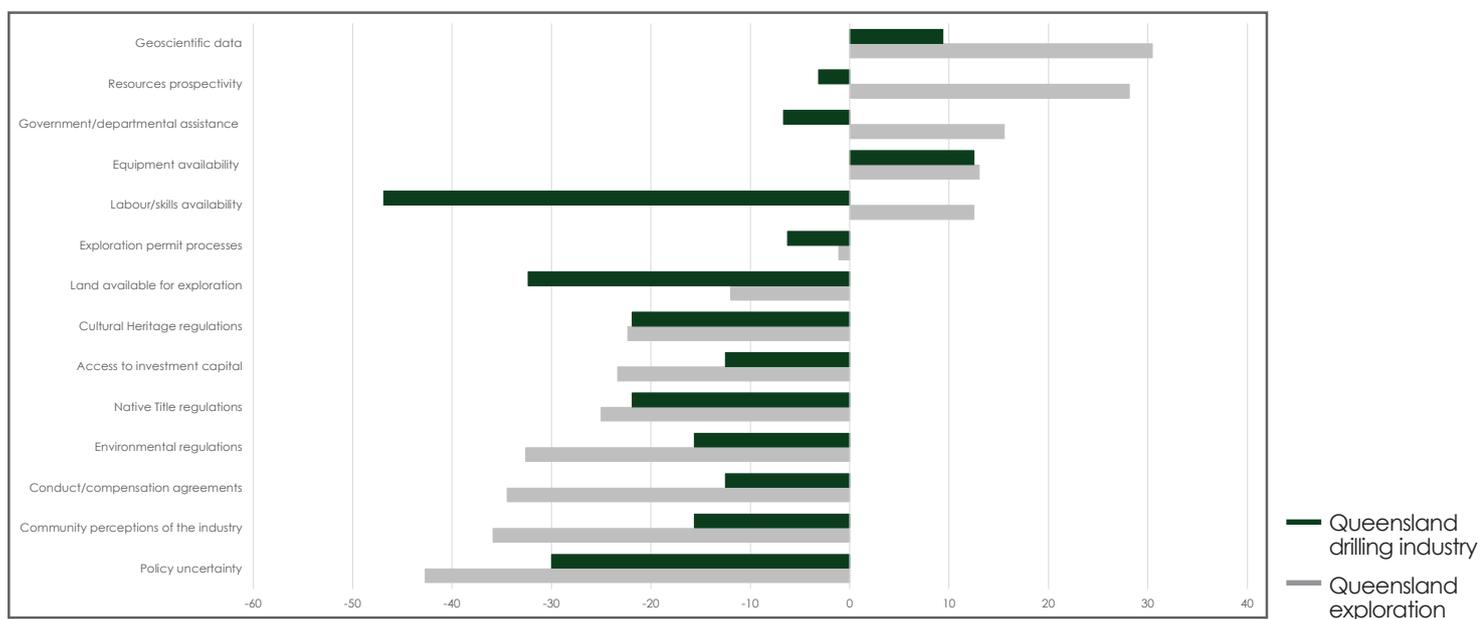


The exploration industry is highly sensitive to changes in policy, even if the policy changes affect production rather than exploration. Sentiment has improved to its highest level since 2013-14, yet it still remains strongly negative, with a number of respondents citing energy policy and uncertain approvals processes as major factors in their negative sentiment rating.

4.5 QUEENSLAND DRILLING INDUSTRY SENTIMENT

The drilling industry is vital for exploring and developing Queensland's natural resources. The Australian Drilling Industry Association asked its member companies with drilling interests in Queensland a number of question to gauge the sentiment and outlook for the industry. The online survey received 22 responses.

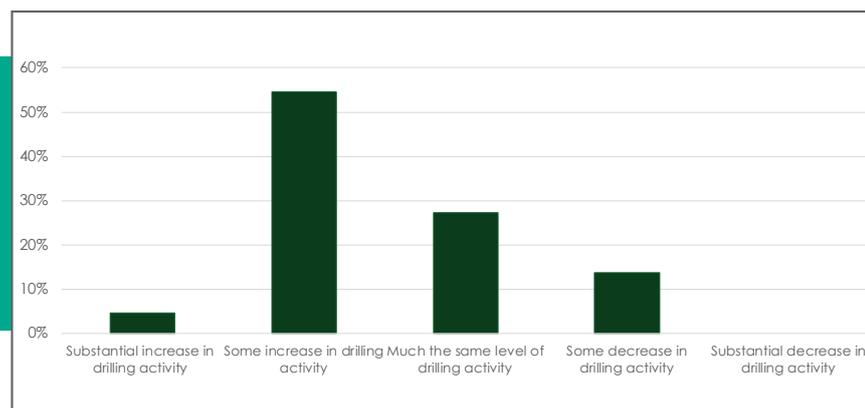
CHART 4.5.1: SENTIMENT COMPARISON: QUEENSLAND EXPLORERS VS. QUEENSLAND DRILLING INDUSTRY, 2016-17



While the general sentiment directions of drilling and exploration respondents are largely in agreement, there are a number of exceptions including labour availability, land availability and departmental assistance.

It's clear that the largest issue facing the drilling industry is labour and skills availability, which achieved the largest negative sentiment score across both surveys. Numerous comments from drilling respondents suggests skills development and retaining key personnel are significant issues across the industry.

CHART 4.5.2: 12 MONTH OUTLOOK FOR DRILLING, 2016-17



The outlook for drilling over the coming 12 months is broadly positive—with 60% of respondents expecting their company's activity to increase and no respondents expecting a substantial decrease in drilling activity.

5.0 TENURE ADMINISTRATION

CHART 5.1: EXPLORATION PERMIT MINERAL COVERAGE, JULY 2017

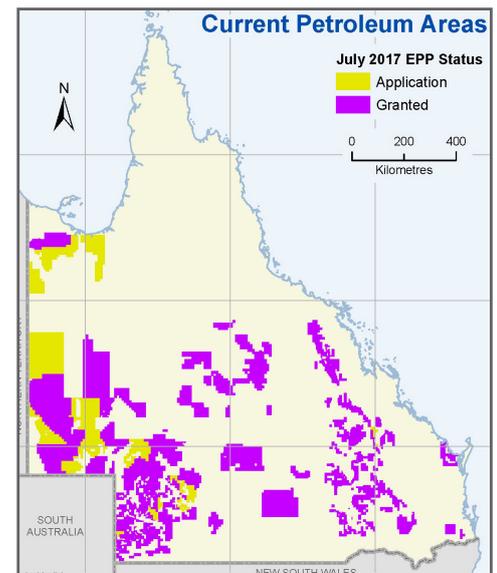
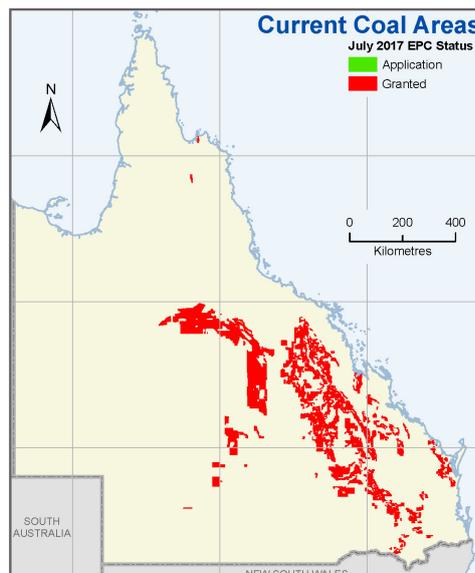
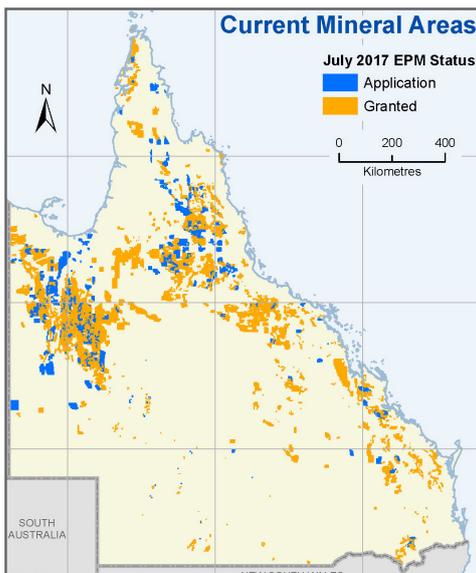
The distribution of minerals exploration tenure applications is a positive indicator of sustained and increasingly diversified interest in the prospective potential of Queensland. Active exploration targets include base and precious metals, with growing interest in specialty metals such as lithium, tungsten and scandium, coupled with non-metals such as graphite.

CHART 5.2: EXPLORATION PERMIT COAL COVERAGE, JULY 2017

It is difficult at the State-wide level to spot applications for coal exploration tenure, reflecting that new areas for coal exploration were not released until April 2017. However, in a positive step for the industry, DNRM's Annual Exploration Program for 2017-18 includes six new coal areas for competitive tender.

CHART 5.3: AUTHORITY TO PROSPECT (PETROLEUM), JULY 2017

The number and distribution of petroleum exploration tenures reflects the strong petroleum prospective potential of the state, with coverage across both brownfield and key greenfield basins. This coverage positions Queensland well to explore and develop frontier basins into the future whilst maintaining production from established fields.



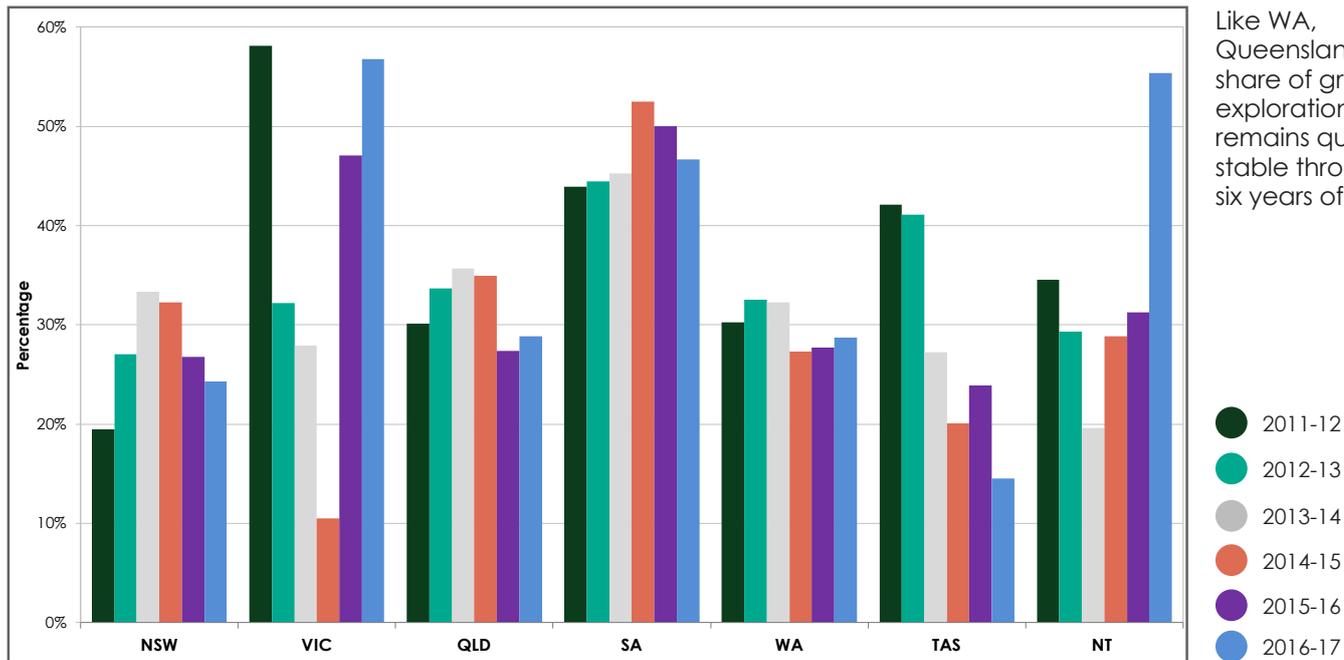
Source: Department of Natural Resources and Mines

KEY FINDINGS

- One of the real success stories in Queensland exploration has been the reforms to tenure processing. A concerted effort over a number of years to streamline these tenure processes, combined with a clear focus on managing the time taken to reach decisions has delivered a major acceleration in processing time.
- DNRM has achieved its customer service standard for processing applications for coal (EPC) and mineral (EPM) exploration of 90% of applications processed within 12 months (6 months if there is no native title).
- Once again, the tenure maps show the clear clustering of applications and granted tenures around known commodity deposits.

6.0 MINERALS AND PETROLEUM EXPLORATION

CHART 6.1: GREENFIELD AS PERCENTAGE OF TOTAL MINERALS EXPLORATION EXPENDITURE, 2011-12 TO 2016-17

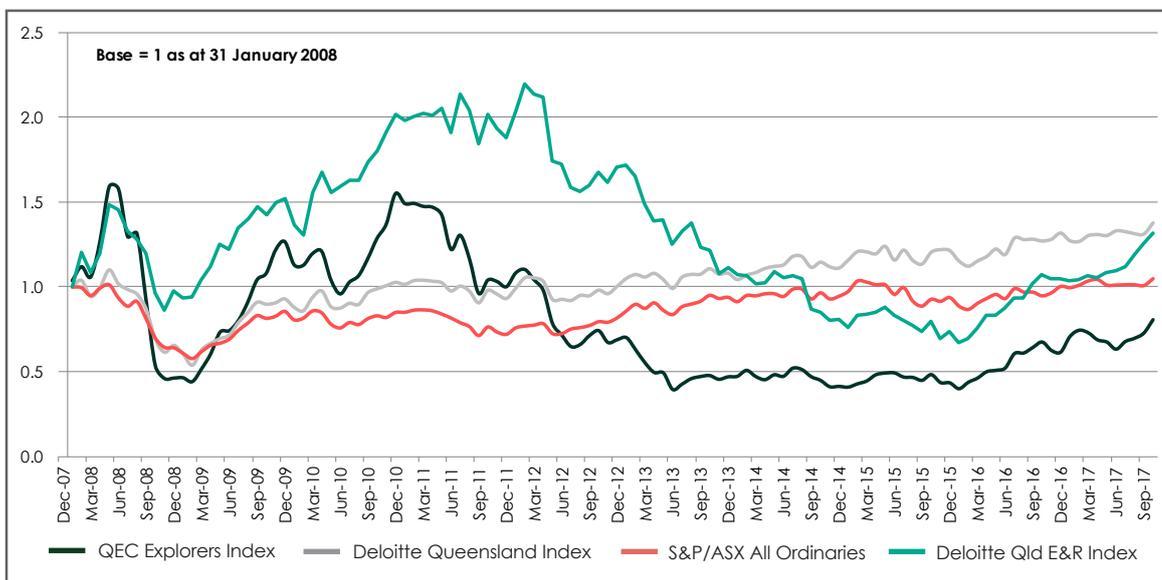


Like WA, Queensland's share of greenfield exploration remains quite stable through the six years of data.

Source: ABS 8412.0

7.0 MARKET CAPITALISATION MOVEMENTS

CHART 7.1: QEC EXPLORATION INDEX VERSUS OTHER CAPITAL INDICES



The QEC Exploration Index continued to improve in the 12 months to June 2017 - increasing by 21% or 11 points on the index. However, similarly strong growth was recorded across the other major indices tracked in the QEC Scorecard, with the Deloitte Queensland Index up 12%, the S&P/ASX All Ordinaries up 9% and the Deloitte Queensland E&R Index (Queensland-based ASX listed energy and resources companies) increasing by 26% in 2016-17.

Source: Capital IQ and Deloitte

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