

Queensland
EXPLORATION
SCORECARD

TRACKING QUEENSLAND'S PROGRESS
TOWARDS BECOMING AN EXPLORATION
LEADER BY 2020, WITH BRISBANE
AT ITS HEART

2016

GREEN SHOOTS EMERGE
FROM THE CHALLENGES

An initiative of the
Queensland Exploration Council
and the
Queensland Resources Council

Queensland Resources Council
Level 13 133 Mary Street Brisbane QLD 4000
Phone: +617 3295 9560 Fax: +617 3295 9570

qrc.org.au
queenslandexploration.com.au

© Queensland Resources Council 2016

CONTENTS

INTRODUCTION	5
Foreword - <i>Welcome to the sixth annual exploration scorecard</i>	5
Putting the scorecard in context - <i>A note from the working group Chair</i>	6
1.0 Scorecard summary - <i>How did Queensland exploration perform in 2015-16?</i>	8
LEAD INDICATORS – WHAT DRIVES FUTURE EXPLORATION ACTIVITY?	10
2.0 Resource prospectivity - <i>the glittering lure of Queensland's geology</i>	10
3.0 Commodity prices and exploration - <i>nothing delivers exploration funding like high prices</i>	11
4.0 Explorer and investor confidence - <i>measuring the degree of optimism</i>	13
4.1 Geoscientific funding and activities - <i>public funding for pre-competitive geoscientific data</i>	13
4.2 Regulatory and policy stability - <i>what regulatory changes have affected exploration?</i>	14
4.3 Fraser Institute ranking – <i>how is Queensland seen internationally?</i>	15
4.4 Exploration company sentiment – <i>how do Queensland explorers see the industry?</i>	16
LAG INDICATORS – EXPLORATION SUCCESS BREEDS FUTURE SUCCESS	21
5.0 Tenure administration – <i>how much tenure was pegged this year?</i>	21
6.0 Exploration expenditure - <i>how much was invested in exploration this year?</i>	22
7.0 Market capitalisation movements - <i>how have capital markets valued Queensland exploration?</i>	23



FOREWORD

WELCOME TO THE SIXTH ANNUAL EXPLORATION SCORECARD

Queensland is an international powerhouse in minerals and energy production. Our coal sector makes us the largest exporter in the world; our gas sector is now a major part of the Australian economy, and our minerals sector has a long established history as a major supplier of critical metals. Our production and export industry strength is built upon a strong and established history of exploration success.

However, we now find ourselves at a critical juncture, with our industry facing harsh market conditions, changing societal expectations toward environmental and social performance, and increasingly difficult exploration challenges. It is a time for industry and government to work closely together, to face the challenges, to cooperate, and to maintain the important contribution of the resources sector to our State.

We are seeing some positive signs from this joint approach to overcoming the challenges to our industry. We welcome the work of the joint industry-government taskforce to address the challenges facing the North West Minerals Province, where our explorers are facing the challenge of exploring deeper and beneath non-mineralised cover material. Likewise, we welcome the collaborative development of the Gas Supply and Demand action plan, with a vision that sets Queensland apart from other jurisdictions across the nation.

Unfortunately though our sentiment survey has highlighted significant problems too, with two very clear messages:

- **Application reforms are undone by compliance creep** – explorers feel that they need reforms to stand still. The industry welcomes the tangible achievements in reforming application systems and improved access to geoscientific data; but feels real frustration at cumulative compliance creep, particularly on environmental issues.
- **Policy risk** – this year's survey calls out a litany of concern with freshly forged regulations. Queensland explorers are very clearly concerned by this policy uncertainty which makes it more difficult for them to secure investment capital.

The bottom-line from the industry is that exploration is a high-risk investment that produces no immediate revenue. Investors make no money until exploration success delivers a project which can be developed for production. All stakeholders in Queensland exploration – landholders, traditional owners, governments, explorers and investors – have a shared goal in fostering exploration success.

We thank the Minister for Natural Resources and Mines, Dr Anthony Lynham for once again launching the exploration scorecard. Dr Lynham and his department are to be commended for their willingness to hear industry's feedback, which is often couched in blunt and urgent terms.

The Scorecard aims to assay all the changes of the 2015-2016 year. Our hope is that this objective assessment of the past year will help to inform the development of a reform agenda for the years ahead.



The Hon. Ian Macfarlane
Chief Executive Officer
Queensland Resources Council



Dr Geoff Dickie, PSM
Chair
Queensland Exploration Council

PUTTING THE SCORECARD INTO CONTEXT

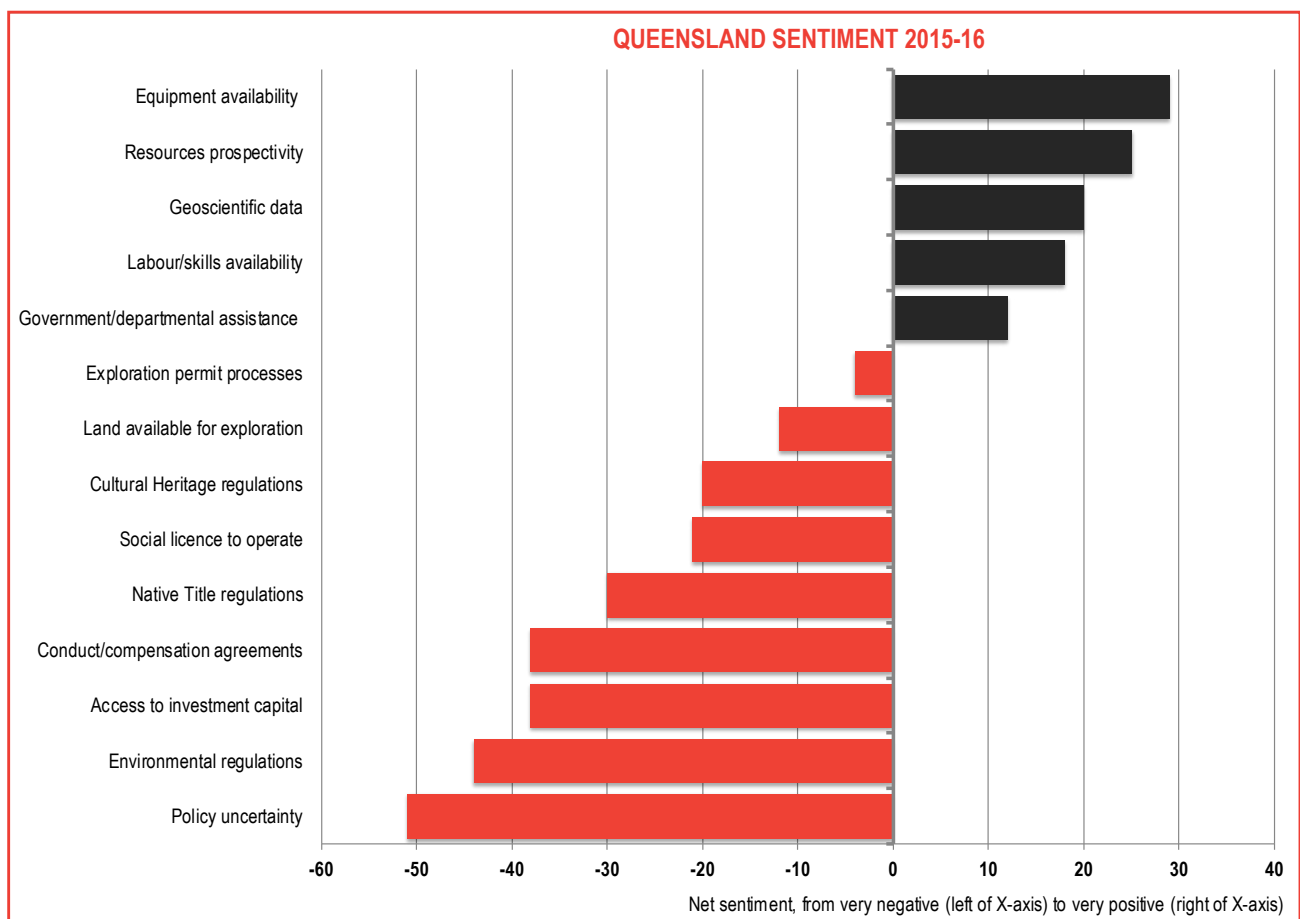
2016 – GREEN SHOOTS EMERGE FROM THE CHALLENGES

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 Queensland's 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'. The annual exploration scorecard is a valuable tool in tracking progress towards *Discover Queensland, the 2020 Exploration Vision*. This is the sixth edition following the publication of the inaugural Scorecard in 2011.

The Scorecard runs a ruler over exploration in Queensland with objective performance data and also an annual survey of explorer sentiment. Chart 1 below presents a net sentiment score for the key issues that influence exploration success.

CHART 1: FULL RESULTS FOR THE 2016 SENTIMENT SURVEY



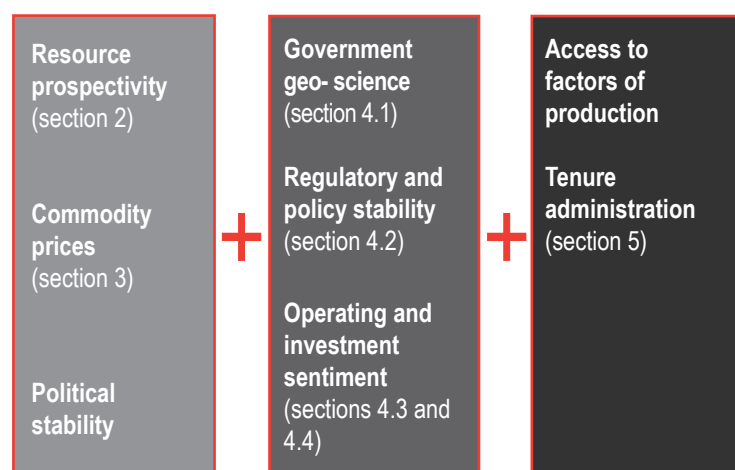
This year's Scorecard retains the layout of previous versions with a more focused analysis of key exploration indicators (above). The Scorecard is developed on the assumption that increasing exploration activity is broadly driven by:

- Queensland's resource prospectivity and endowment (section 2);
- the price of key commodities (section 3);
- explorer and investor confidence (section 4); and
- policy and regulatory stability (section 4.2).

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**



Source: QRC

I'd like to thank all the members of the QEC 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 with the Department of Natural Resources and Mines.

We have worked hard to present an objective measure of exploration in Queensland in 2015-16. 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 2016

Euan Morton	Synergies Economic Consulting Pty Ltd	Brett O'Donovan	Exploration Industry Consultant
John Briggs	Ashurst Australia	Darren Rutley	Santos Limited
Chris Brown	Morgans Financial Limited	Darren Walker	U&D Mining
Todd Harrington	Resources and Investment Commissioner		
Jason Douglas	Department of Natural Resources and Mines	SUPPORT	
Lyall Hinrichsen	Department of Natural Resources and Mines	Andrew Barger	Queensland Exploration Council
Tony Knight	Geological Survey of Queensland	Emma Haigh	Queensland Resources Council

PERFORMANCE SUMMARY

THE QUEENSLAND EXPLORATION SECTOR, 2015-2016

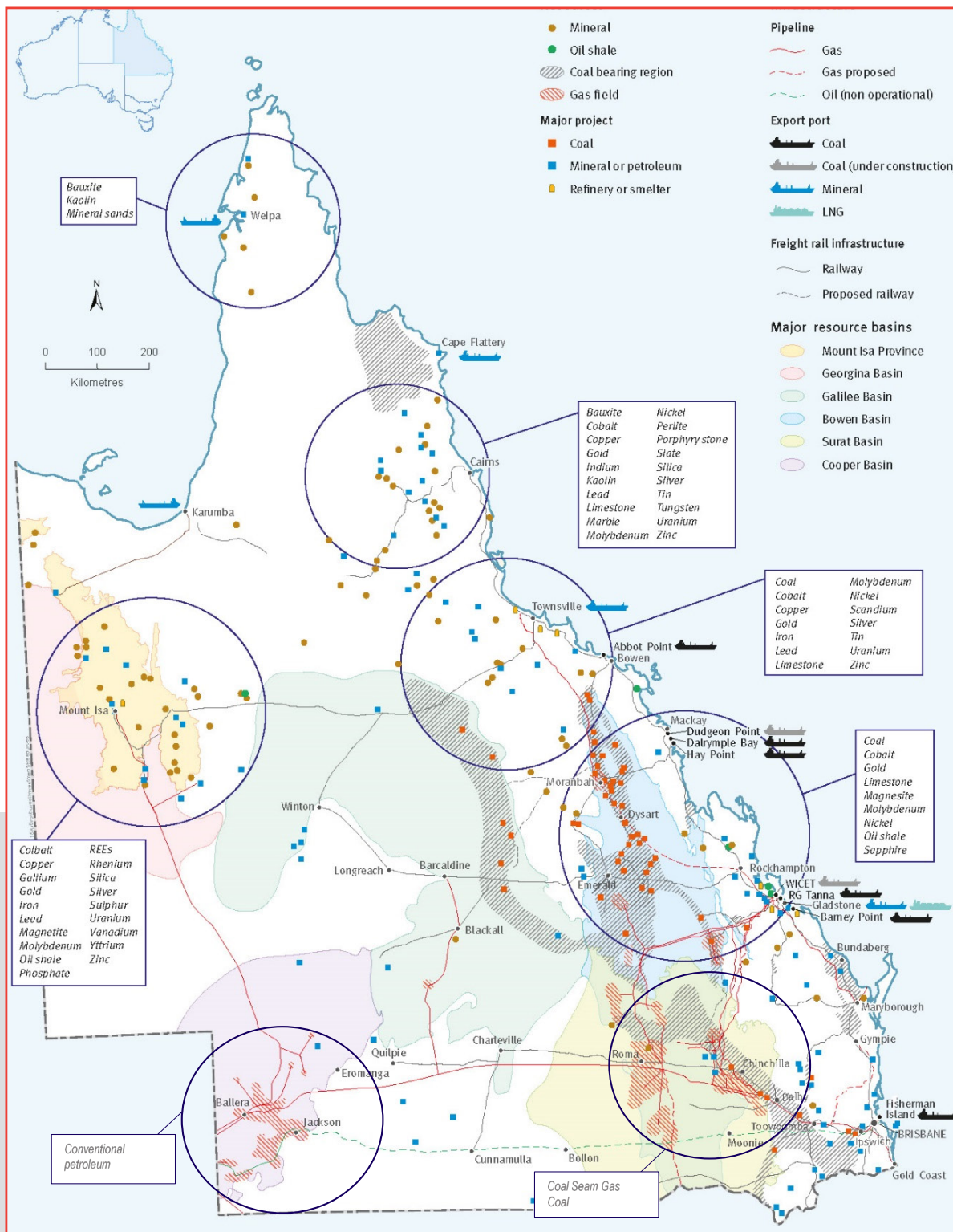
LEGEND

- Good 
- No significant impediment 
- Cause for concern 
- Significant problems 

	Year to June...					
LEAD INDICATORS – DRIVERS OF FUTURE ACTIVITY AND PERFORMANCE	2011	2012	2013	2014	2015	2016
Resource prospectivity and endowment (Section 2) Highly prospective - Queensland enjoys significant endowments of coal, minerals and gas.						
Commodity prices (Section 3) - While global economic growth has remained soft, an uncertain global macroeconomic outlook has seen prices for a number of base and precious metals strengthen over the past 12 months. - Persistent global oversupply and a softer demand from China has seen weak \$US thermal and metallurgical coal price to June 2016 (despite substantial increases since). - As the global oil price has fallen, so too has the index price for LNG.						
State government geoscientific funding and activities (Section 4.1) Base expenditure for the Geological Survey of Queensland in 2016 was \$8.6 million, with the only program spending the unallocated Future Resources Program funds of \$10 million. So while the total budget for GSQ is much the same as last year, almost half is from program money which expires next year rather than being an evergreen source of funding.						
Regulatory and policy stability (Section 4.2) - Day-to-day service of DNR and QDEX have improved, with the role of the coal hub particularly acknowledged. <i>MyMinesOnline</i> continues to be recognised as a helpful information resource for industry and the public. - Adverse legislative change makes attracting investment very difficult with a roll call of new challenges for production including the Chain of Responsibility amendments, objection rights, financial assurance, and fly-in, fly-out legislation. - 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) Survey results from exploration companies noted: - Seven of the 14 factors showed a net positive sentiment in Queensland. Two of the seven were strongly positive: ✓ resource prospectivity ✓ equipment availability (eg rigs) 10 of the 14 factors showed net negative sentiment in Queensland. Four of the 10 were strongly negative: ✗ policy uncertainty ✗ environmental regulations ✗ access to investment capital ✗ conduct and compensation agreements. - The six-year trends for Queensland show a marked improvement in: ✓ exploration permit processes ✓ departmental assistance (clearly, the coal hub is working well) ✓ pre-competitive geoscientific data.						

LAG INDICATORS – EXPLORATION SUCCESS	Year to June...					
	2011	2012	2013	2014	2015	2016
Tenure administration (Section 5) - One of the real success stories in Queensland exploration has been the year-on-year reforms to tenure processing. A concerted effort over a number of years to streamline these tenure processes has slashed the time taken to reach decisions. - Despite increasing the annual customer service target from 80 to 90%, DNRM has again outperformed delivering 91%. The goal is 90% of coal and minerals exploration applications processed within 12 months (six months if there is no native title). - The Exploration Industry Expenditure Concession was announced in February 2016, to assist resource explorers meet permit expenditure commitments. At 15 November 2016, 239 concessions had delivered approximately \$32 million in relief to explorers. - Industry continues to express frustrations with land releases and particularly the limitations of the tender system.						
Mineral exploration (Section 6) - Queensland in 2015-16 recorded a 24% decrease in mineral exploration (from \$340 million to \$260 million). - Queensland's greenfields performance as a percentage of total minerals exploration expenditure decreased in 2015-16 to 27%, compared with 35% in 2014-15.						
Petroleum exploration (Section 6) Petroleum expenditure in Queensland decreased sharply in 2015-16 (from \$752 million to \$205 million), which raises real concerns about maintaining future production rates.						
Market capitalisation movements (Section 7) The QEC Exploration Index showed a 29.5% increase over the 12 months to 30 June 2016 (but from a low base). This compares with a 6.6% decrease for the S&P/ASX All ordinaries, a 5.8% increase in the <i>Queensland Exploration Index</i> (Queensland based ASX listed companies) and a 16.2% increase in the Deloitte Queensland E&R Index (Queensland based ASX listed energy and resources companies).						

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 (Figure 2). 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 six years of the Scorecard, sentiment towards Queensland's prospectivity has remained unflinchingly positive.

FIGURE 2: QUEENSLAND'S RESOURCE PROSPECTIVITY

Source: Spatial and Graphic Services, Geological Survey of Queensland 2015

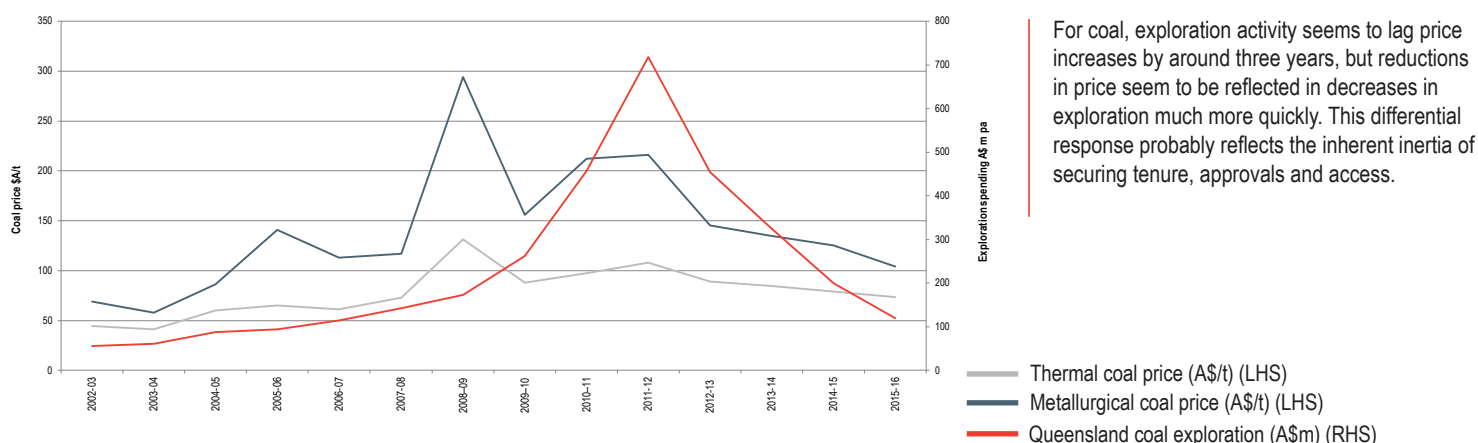
3.0 COMMODITY PRICES

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.

KEY FINDINGS

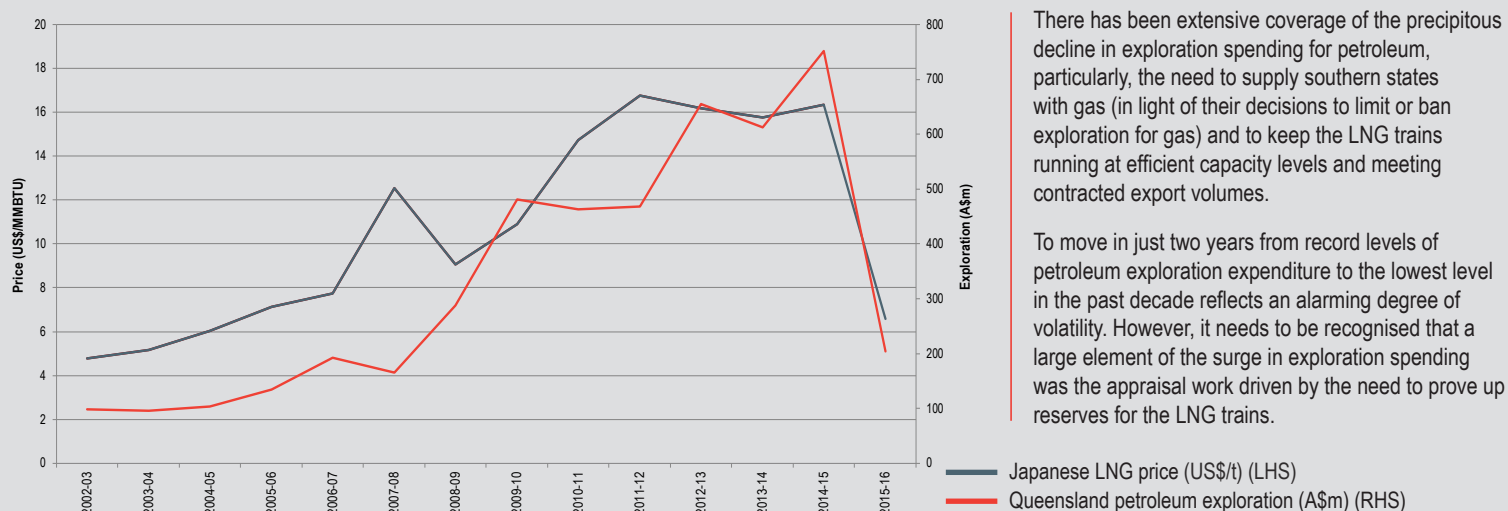
- Queensland's coal exploration expenditure declined by approximately 40% in 2016 (chart 3.1).
- Queensland's petroleum expenditure plummeted by around 72% in 2015-16 mirroring the continued softening in LNG prices (chart 3.2).
- Queensland's gold exploration has enjoyed reasonable prices and remained stable in 2015-16 (chart 3.3).
- Queensland's copper exploration remains low, by the standards of the last decade, in 2015-16 (chart 3.4).

CHART 3.1: GLOBAL AVERAGE BENCHMARK COAL PRICES AND COAL EXPLORATION SPEND IN QUEENSLAND, 2002-03 TO 2015-16



Source: BREE, Resources and Energy Quarterly, ABS 8412.0

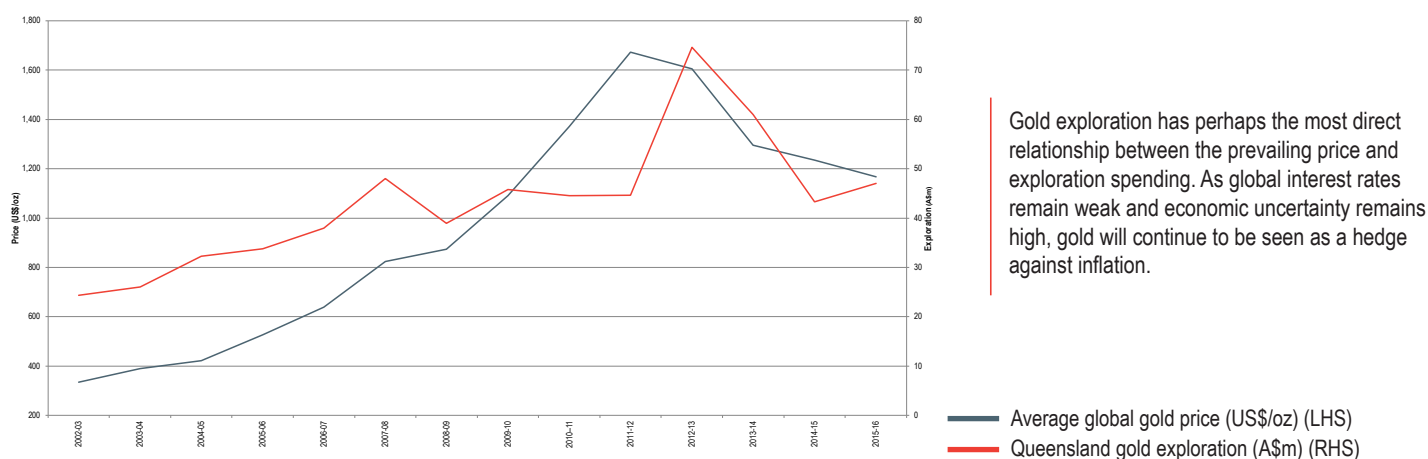
CHART 3.2: GLOBAL AVERAGE BENCHMARK LNG PRICES AND QUEENSLAND PETROLEUM EXPLORATION SPEND, 2002-03 TO 2015-16



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

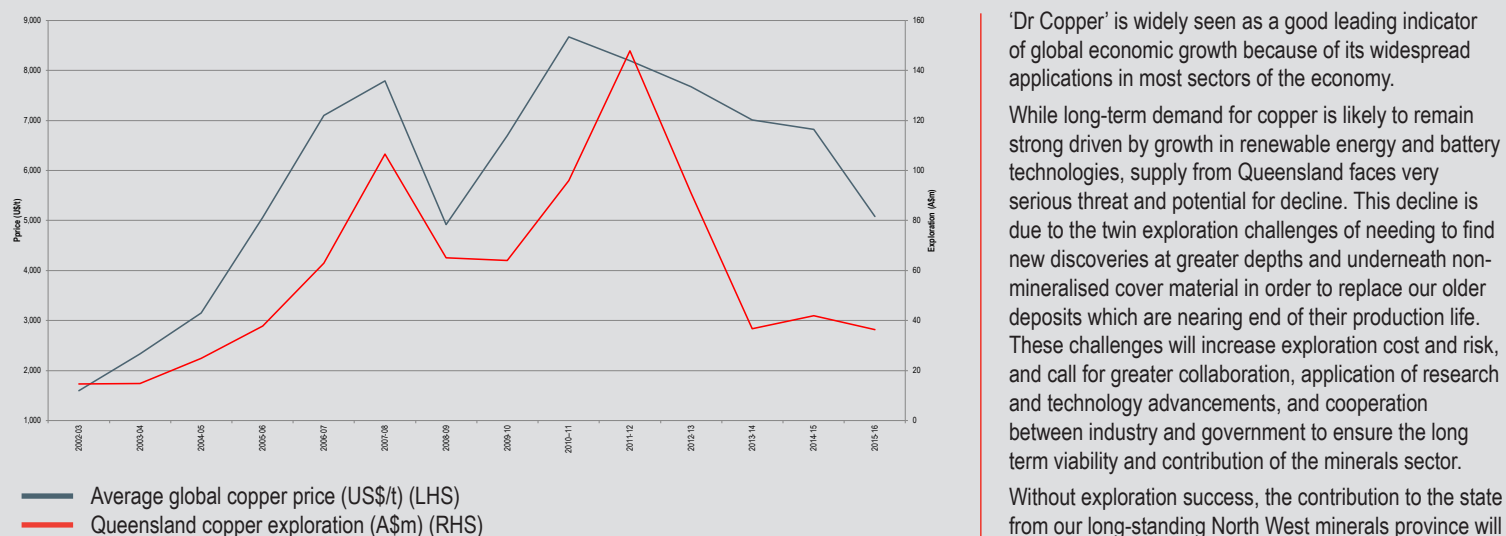


CHART 3.3: GLOBAL AVERAGE BENCHMARK GOLD PRICES AND QUEENSLAND EXPLORATION SPEND, 2002-03 TO 2015-16



Source: BREE, Resources and Energy Quarterly, ABS 8412.0

CHART 3.4: GLOBAL AVERAGE BENCHMARK COPPER PRICES AND QUEENSLAND EXPLORATION SPEND, 2002-03 TO 2015-16



Source: BREE, Resources and Energy Quarterly, ABS 8412.0

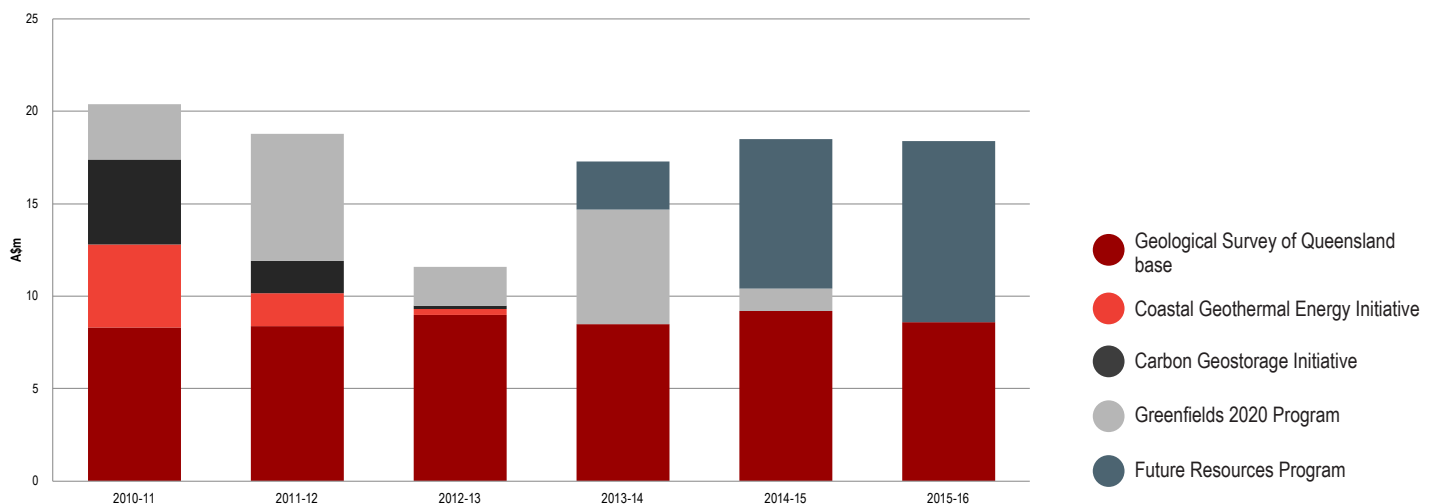
4.0 EXPLORER & INVESTOR CONFIDENCE

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 two to three year program funding.

CHART 4.1: TOTAL GEOLOGICAL SURVEY OF QUEENSLAND EXPENDITURES (A\$M) 2010-11 TO 2015-16



Source: Department of Natural Resources and Mines

KEY FINDINGS

- Base expenditure for the Geological Survey of Queensland in 2016 was just \$8.6 million, with the only program spending the unallocated Future Resources Program funds of \$10 million. So while the budget for GSQ is much the same as last year, almost half of their budget is from program money which expires rather than being a evergreen source of funding.
- Once again this year, the message is clear from explorers that the Geological Survey of Queensland is a critical part of ensuring a vibrant and attractive exploration industry in Queensland. The fact that the GSQ has been able to achieve what it has with a significantly reduced budget is a good news story.
- The Collaborative Drilling program continues to throw up technical successes, for example:
 - i. In the Diamantina region of the far southwest of the state, drilling in two prospects, Machattie and Mulligan, coupled with findings derived from the Industries Priorities Initiative 'Spinifex geochemical survey' led to discovery of an entirely new polymetallic minerals province, rich in platinum group elements and potentially diamonds.
 - ii. In the Cloncurry region, drilling by Graphitecorp confirmed a major graphite discovery in their Mount Dromedary prospect.
 - iii. The Red Metals 'Maronan' lead-silver copper-gold project, north of Cannington mine, discovered with support from the collaborative drilling program, was announced to the ASX in March 2016 as moving into a 'preliminary mine scoping study' phase.

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

TABLE 4.2: CHANGE IN REGULATORY CONTROLS – FROM 1 JULY 2015 TO 30 JUNE 2016

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
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) and priority living areas)				●	○
• Land subject to other third party interests (e.g. overlapped exploration rights for other commodities)	○	○	○	○	○
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, Exploration Industry Expenditure Concession					●
D. Impacts on production (but indirectly relevant to exploration):					
• Policies which limit production, specifically restoration of objection rights, ban on underground coal gasification, and further statutory reduction in area of sand mining leases on North Stradbroke Island					●
E. Year-specific issues:					
• Resources and Investment Commissioner was appointed					●
• Uncertainties created in 2015/16 around future policy decisions – specifically Chain of Responsibility Act, release of new financial assurance calculator and review of the Gas Fields Commission					●

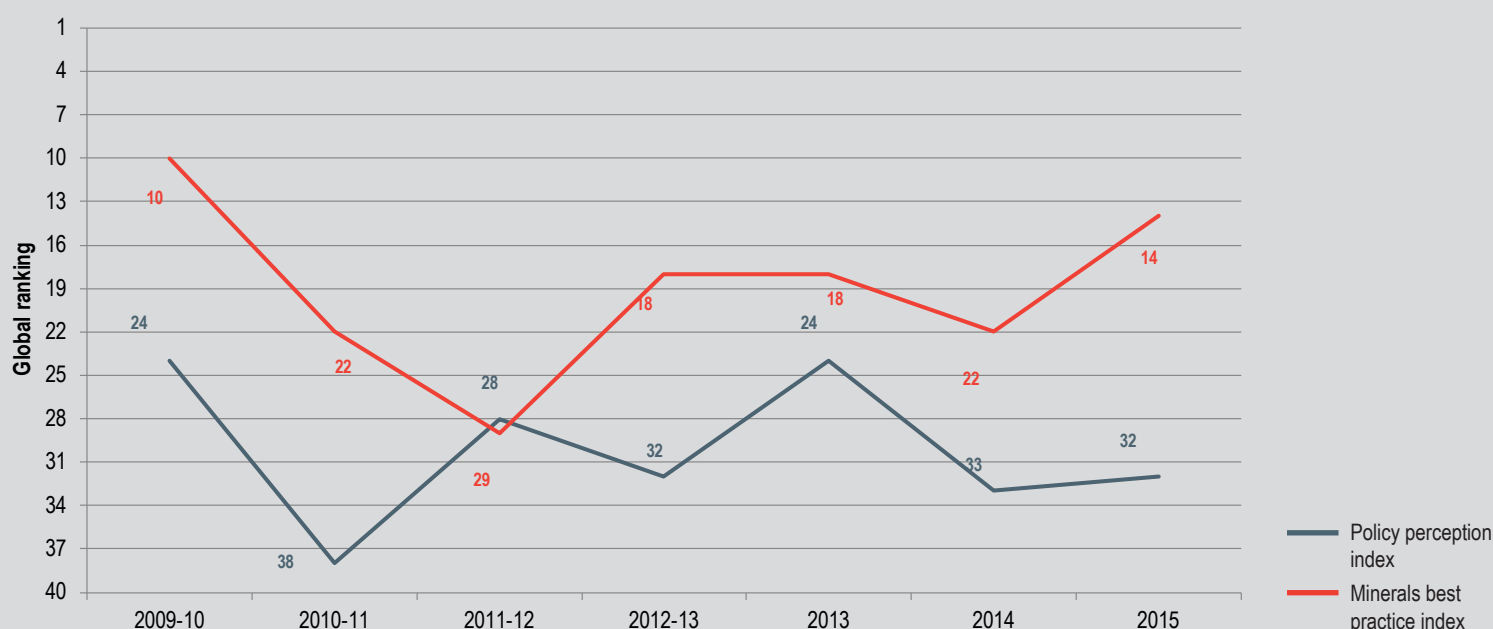
4.3

FRASER INSTITUTE'S ANNUAL SURVEY OF
MINING COMPANIES 2015

The Fraser Institute's *Annual Survey of Mining Companies 2015* was released on 3 March 2016. It ranks jurisdictions based on an *Investment Attractiveness Index*, which considers both mineral and policy perception. In 2015, Queensland was ranked 16th, which was up 6 places from 22nd 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 both of these indices are presented below.

CHART 4.3: FRASER INSTITUTE – QUEENSLAND'S GLOBAL RANK 2009-10 TO 2015



Source: Fraser Institute Annual Survey of mining companies

The report's *Best Practices Mineral 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', ie independent of any policy settings. In 2015, Queensland improved 8 places, from 22nd to 14th, almost back to the ranking of 10th in 2010-11.

The report's *Policy Perception Index* is a composite index that measures the overall policy attractiveness of the 109 jurisdictions in the survey. The index is composed of survey responses to policy factors that affect investment decisions. In 2015, Queensland improved one place, from 33rd to 32nd.

Encouragingly, Queensland saw relative improvements in rankings across all measures. Nationally, Australia surpassed Canada and the United States this year to become the most attractive region in the world for investment when both policy and mineral potential are considered. Western Australia is the top jurisdiction in the world for investment, with the Northern Territory at 7th, South Australia at 10th and Queensland at 16th, up from 22nd last year.

The Fraser Institute's survey was conducted in September to November 2015. This Scorecard's sentiment survey was conducted in August/September 2016. As a result, the sentiment in the Fraser Institute will lag the sentiment in this scorecard.

4.4

OPERATING SENTIMENT

Companies were asked to indicate to what degree individual factors positively or negatively impacted upon their commercial objectives for their Queensland operations during 2015-16. The 14 factors chosen were considered important in the day-to-day operations of a resources exploration company and the core group of 12 factors have remained constant since the 2011 scorecard.

Companies were also asked to nominate which Australian jurisdiction they are most active in apart from Queensland. For that jurisdiction, they were asked to indicate to what degree the same factors positively or negatively impacted upon their commercial objectives in that jurisdiction during 2015-16. These results were aggregated to present a 'Rest of Australia' comparison. For Queensland-specific factors, the number of responses was 67, and for other jurisdictions the number of responses was 37.

In order to coalesce the responses into a single value it was necessary to apply weights to the responses. '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. These weightings were applied to the number of responses to arrive at a single value reflecting the sentiment for that factor. 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 2016 shows the range of issues encompassed in the sentiment survey (Chart 4.4.1).

- Seven of the 14 factors showed a net positive sentiment in Queensland. Two of the seven were strongly positive:
 - ✓ resource prospectivity
 - ✓ equipment availability (eg rigs)
- 10 of the 14 factors showed net negative sentiment in Queensland. Four of the 10 were strongly negative:
 - ✗ policy uncertainty
 - ✗ environmental regulations
 - ✗ access to investment capital
 - ✗ conduct and compensation agreements.
- The six-year trends for Queensland show a marked improvement in:
 - ✓ exploration permit processes
 - ✓ departmental assistance (clearly, the coal hub is working well)
 - ✓ pre-competitive geoscientific data.

In 2016, with talk of the green shoots of recovery, the challenge for Queensland is to be poised and ready to attract exploration when interest in exploration returns.

New questions this year on Departmental processes show that industry recognises and appreciates where assistance is provided with applications and compliance.

CHART 4.4.1: COMPARING QUEENSLAND TO THE REST OF AUSTRALIA 2015-16

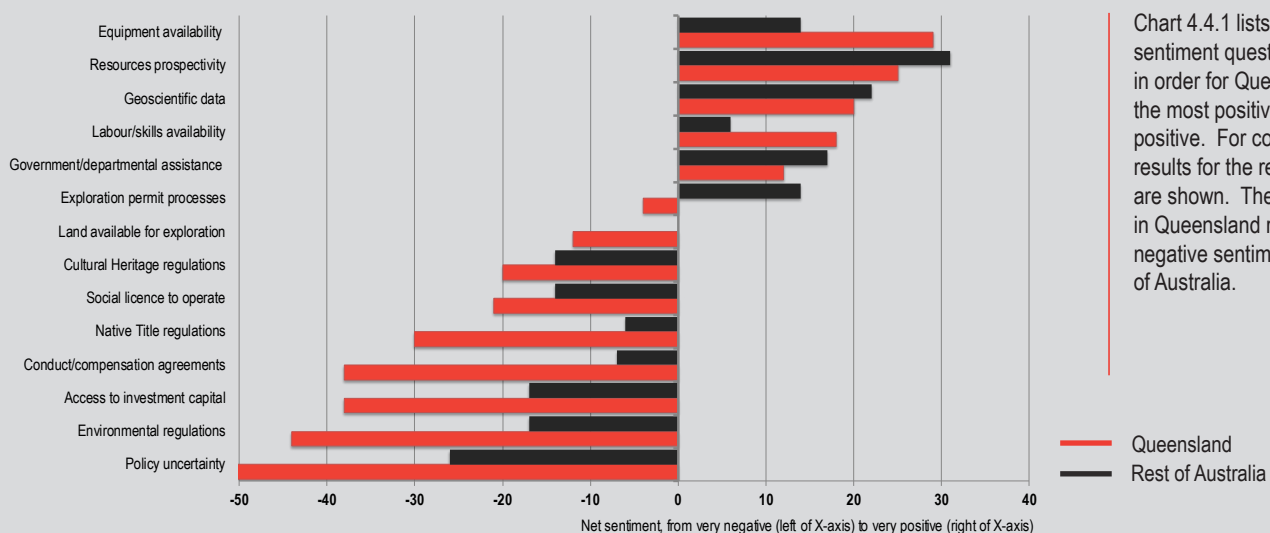
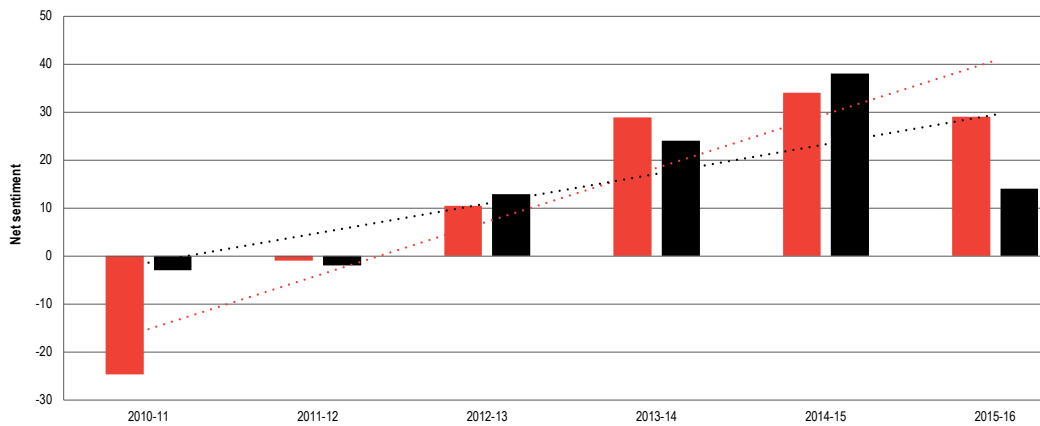


Chart 4.4.1 lists the core sentiment questions ranked in order for Queensland from the most positive to the least positive. For comparison, the results for the rest of Australia are shown. The general trend in Queensland reflects the more negative sentiment than in the rest of Australia.

LEGEND

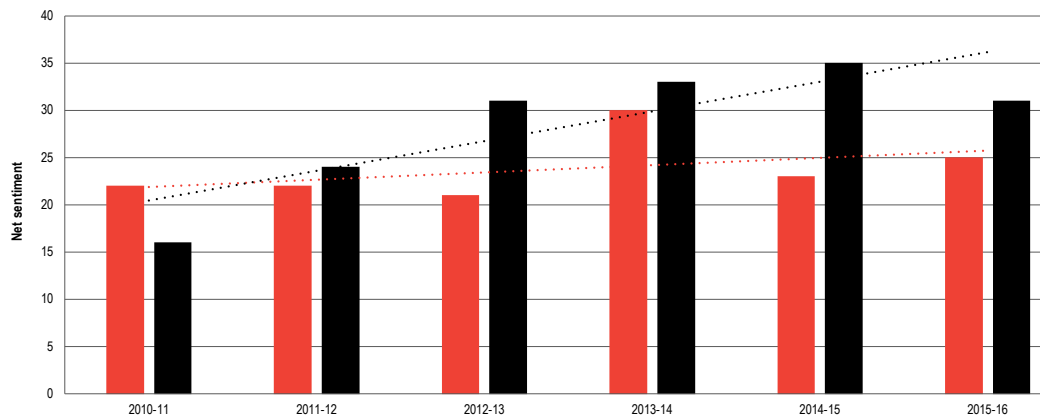
- Queensland Trend (QLD)
- Rest of Australia Trend (Rest of Australia)

CHART 4.4.2: EQUIPMENT AVAILABILITY 2010-11 TO 2015-16



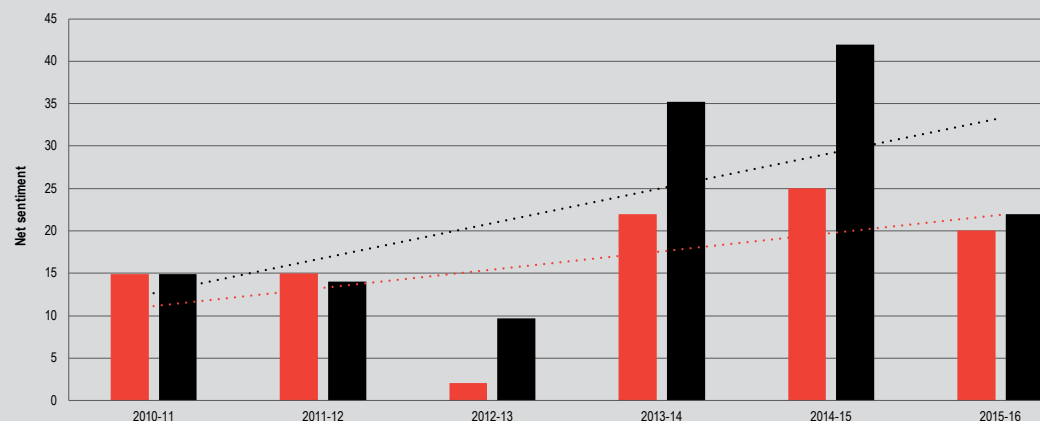
The downturn in activity levels across the industry has translated into very high levels of availability for equipment.

CHART 4.4.3: RESOURCE PROSPECTIVITY/ENDOWMENT 2010-11 TO 2015-16



Queensland's world-class prospectivity continues to be reflected in very positive sentiment.

CHART 4.4.4: PRE-COMPETITIVE GEOSCIENCE DATA 2010-11 TO 2015-16

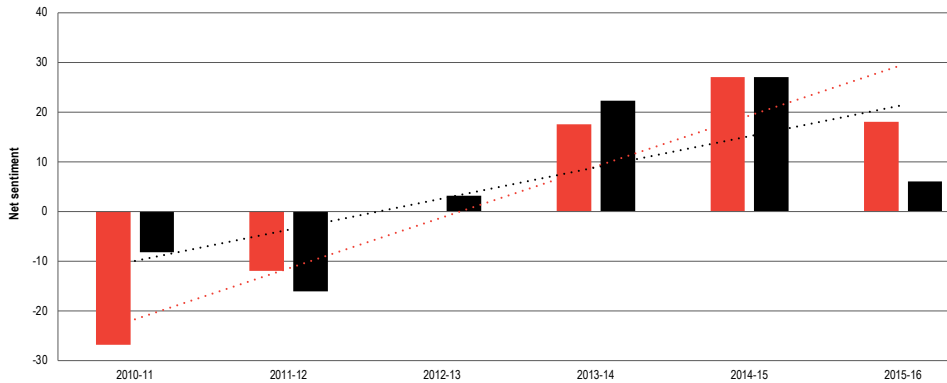


The need to catch the attention of explorers and investors by providing geoscience data remains imperative. While the Geological Survey of Queensland attract a lot of compliments from industry on the quality and accessibility of their data, Queensland risks being left behind by big spending States and Territories.

LEGEND

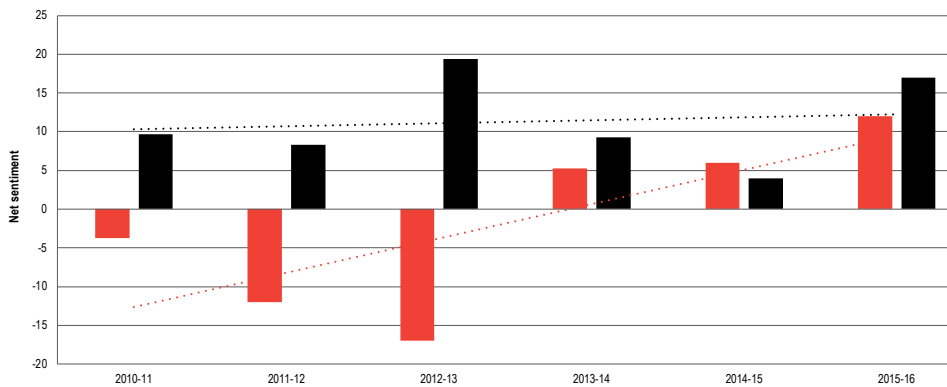
- Queensland Trend (QLD)
- Rest of Australia Trend (Rest of Australia)

CHART 4.4.5: LABOUR/SKILLS AVAILABILITY 2010-11 TO 2015-16



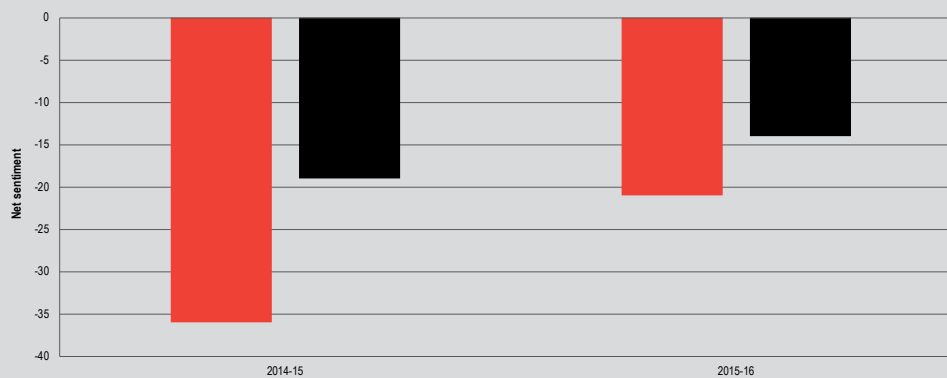
The shortage of skills was a critical issue when the Scorecard commenced, but as the activity cycle has turned, the availability of skills and labour have greatly increased.

CHART 4.4.6: GOVERNMENT/DEPARTMENTAL ASSISTANCE 2010-11 TO 2015-16



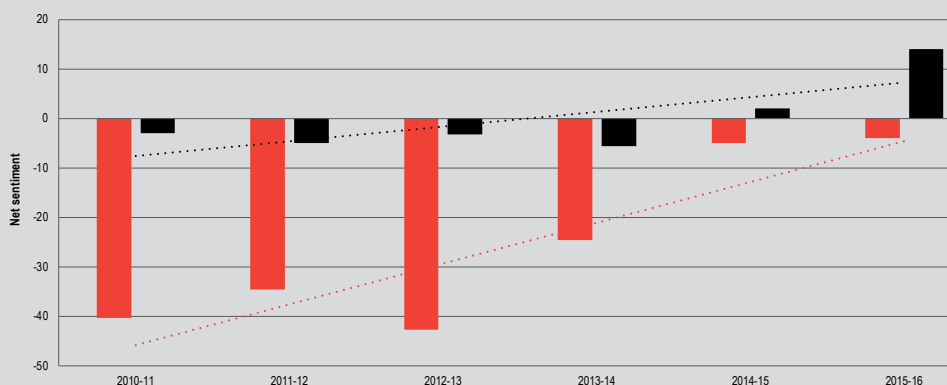
For the third year running, DNRM has outperformed its customer service standard for processing applications for coal (EPC) and mineral (EPM) exploration. This financial year DNRM increased the customer service standard, up from 80% to 90% of applications processed within 12 months (6 months if there is no native title). In 2015-16 this aggressive target was achieved, with 91% of applicable applications being processed within these timeframes.

CHART 4.4.7: SOCIAL LICENCE TO OPERATE, 2014-15 TO 2015-16



This question has not been collected every year, but even a two year comparison with the rest of Australia is telling. It is encouraging to see the reduction in negative sentiment in 2015-16.

CHART 4.4.8: EXPLORATION PERMIT PROCESSES 2010-11 TO 2015-16

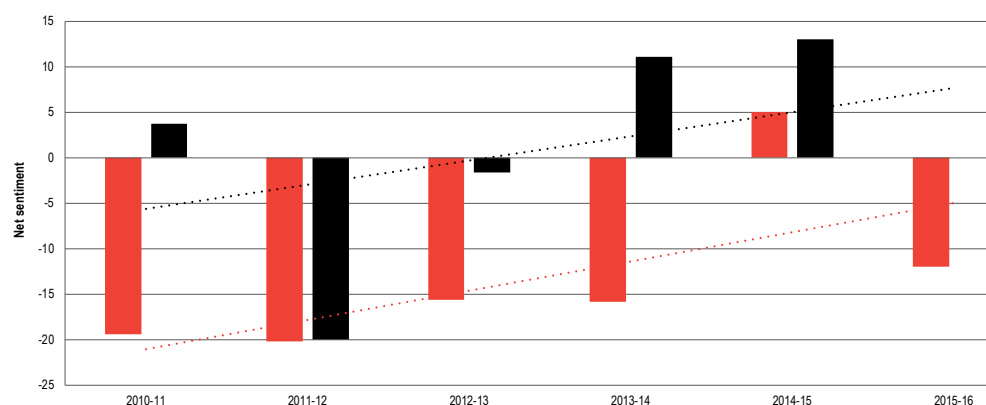


The small improvement from last year continued a positive trend in exploration permit processes.

LEGEND

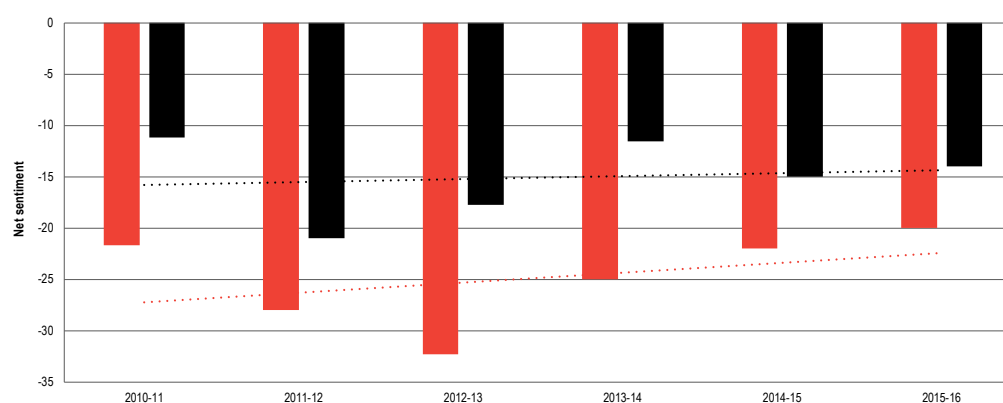
- Queensland Trend (QLD)
● Rest of Australia Trend (Rest of Australia)

CHART 4.4.9: LAND AVAILABLE FOR EXPLORATION 2010-11 TO 2015-16



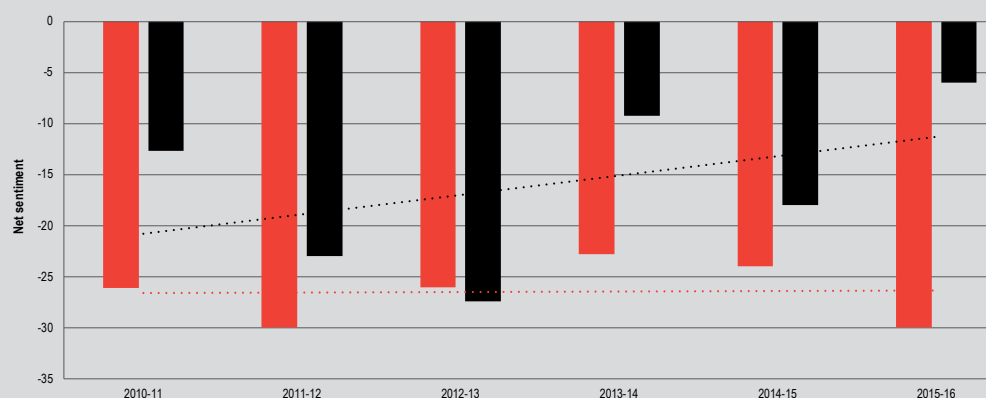
Negative sentiment in 2015-16 may reflect the delays in the tender release for the Cooper Basin.

CHART 4.4.10: CULTURAL HERITAGE REGULATIONS 2010-11 TO 2015-16



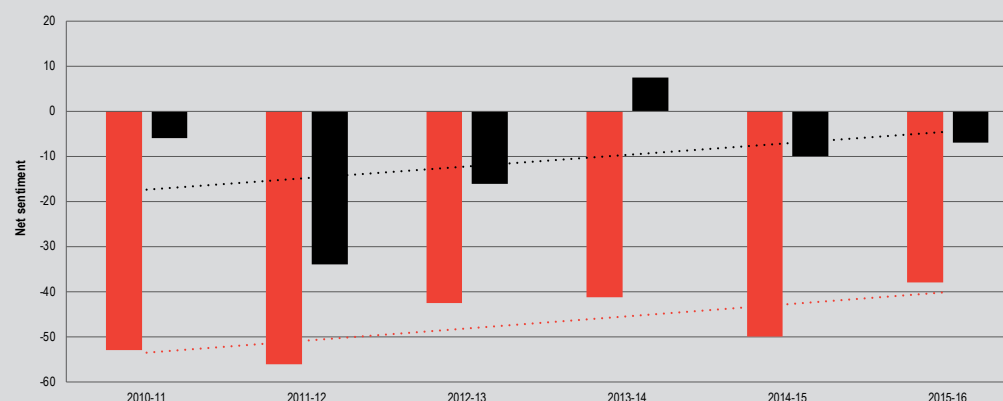
The relative stability of this indicator reflects that there have been only very minor changes in Cultural Heritage regulations over the six-year life of the Scorecard. Sentiment over this time has been stable but significantly negative.

CHART 4.4.11: NATIVE TITLE REGULATIONS 2010-11 TO 2015-16



There have been almost no changes in Native Title regulations over the six years and industry sentiment also seems to be at a fairly stable level.

CHART 4.4.12: CONDUCT AND COMPENSATION AGREEMENTS 2010-11 TO 2015-16

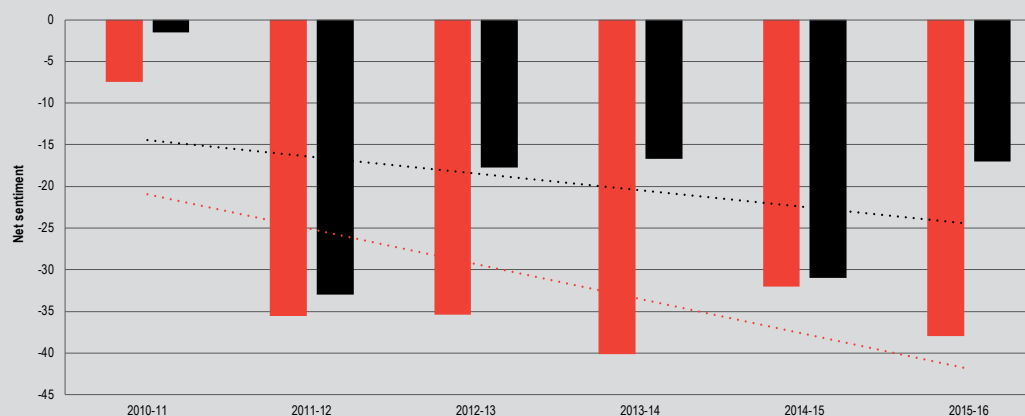


The sentiment results suggest that the conduct and compensation agreement (CCA) process, which has existed largely unchanged since 2010 is gradually becoming less of a drag on sentiment.

LEGEND

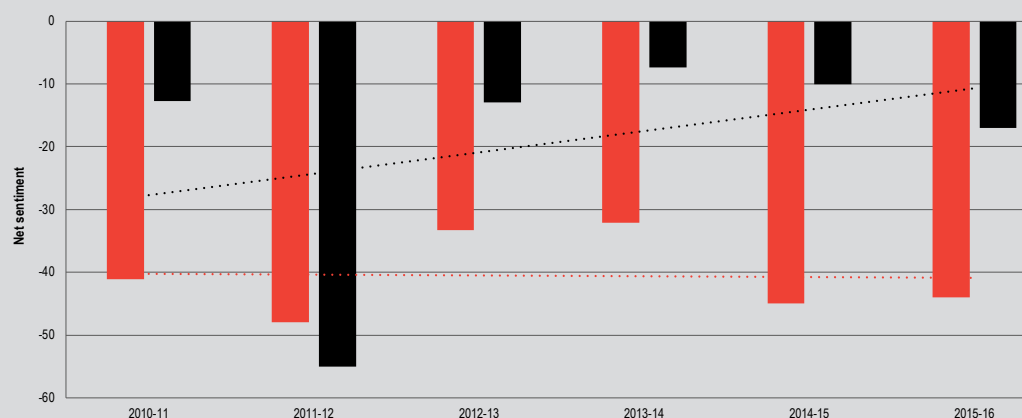
- Queensland
- Rest of Australia
- Trend (QLD)
- Trend (Rest of Australia)

CHART 4.4.13: ACCESS TO INVESTMENT CAPITAL 2010-11 TO 2015-16



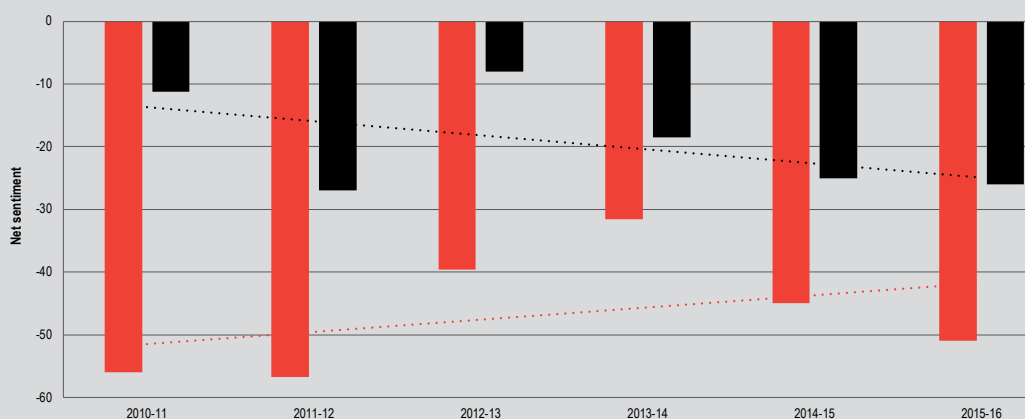
The deterioration in access to investment capital is mirrored at the national and global level. Tight capital markets, and (until recently) weak commodity prices have made it difficult to source capital for explorers.

CHART 4.4.14: ENVIRONMENTAL REGULATIONS 2010-11 TO 2015-16



The sentiment reported around environmental regulations and compliance from the Department of Environment and Heritage Protection (EHP) remains very negative.

CHART 4.4.15: POLICY UNCERTAINTY 2010-11 TO 2015-16



The exploration industry is highly sensitive to changes in policy, even if the policy changes affect production rather than exploration.

5.0 TENURE ADMINISTRATION

CHART 5.1: EXPLORATION PERMIT MINERAL COVERAGE, JULY 2016

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.

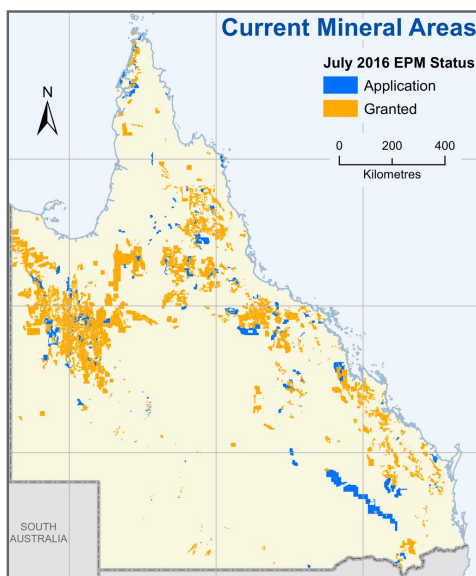


CHART 5.2: EXPLORATION PERMIT COAL COVERAGE, JULY 2016

It is difficult at the state-wide level to spot any applications for coal exploration tenure. A number of explorers made suggestions about how to improve the land release system. It seems clear that the industry is not yet accustomed to the tender system.

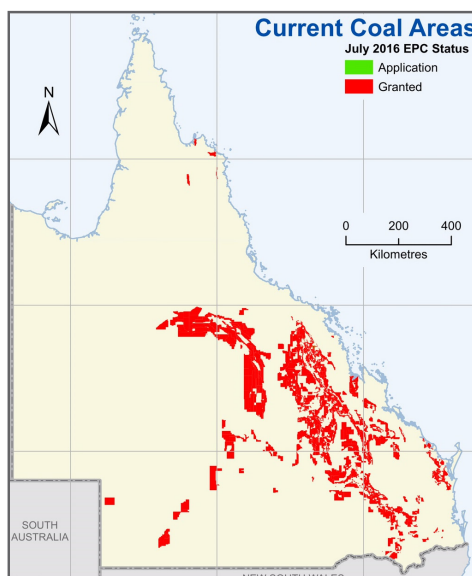
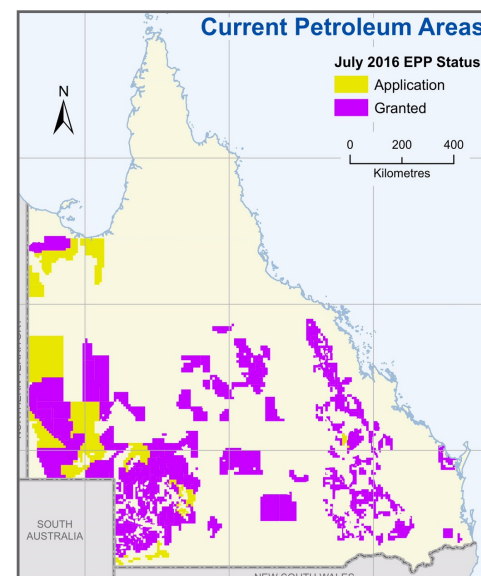


CHART 5.3: AUTHORITY TO PROSPECT (PETROLEUM), JULY 2016

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 while 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 outperformed its customer service standard for processing applications for coal (EPC) and mineral (EPM) exploration. This financial year DNRM increased customer service standard to 90% of applications processed within 12 months (six months if there is no native title) from the previous 80% benchmark. This was achieved, with 91% of applicable applications being processed within these timeframes. This is a reform that will service Queensland well when the next upswing in demand for exploration tenure arrives.
- The Exploration Industry Expenditure Concession was announced in February 2016, to assist resource explorers meet permit expenditure commitments. As at 15 November 2016, 239 applications for the concession have been approved by the department, which has resulted in approximately \$32 million in financial relief to explorers.

6.0 MINERALS AND PETROLEUM EXPLORATION

The most notable trends in Queensland has been the steady and substantial decline in coal exploration. This is perhaps due to the tender system and the general lack of land releases. The sharp fall in petroleum exploration has seen exploration spending in Queensland almost halve since last year. Such low levels of exploration are not sustainable for maintaining production levels in the medium term.

CHART 6.1: MINERALS AND PETROLEUM EXPLORATION IN MAJOR AUSTRALIAN JURISDICTIONS - 2011-12 TO 2015-16

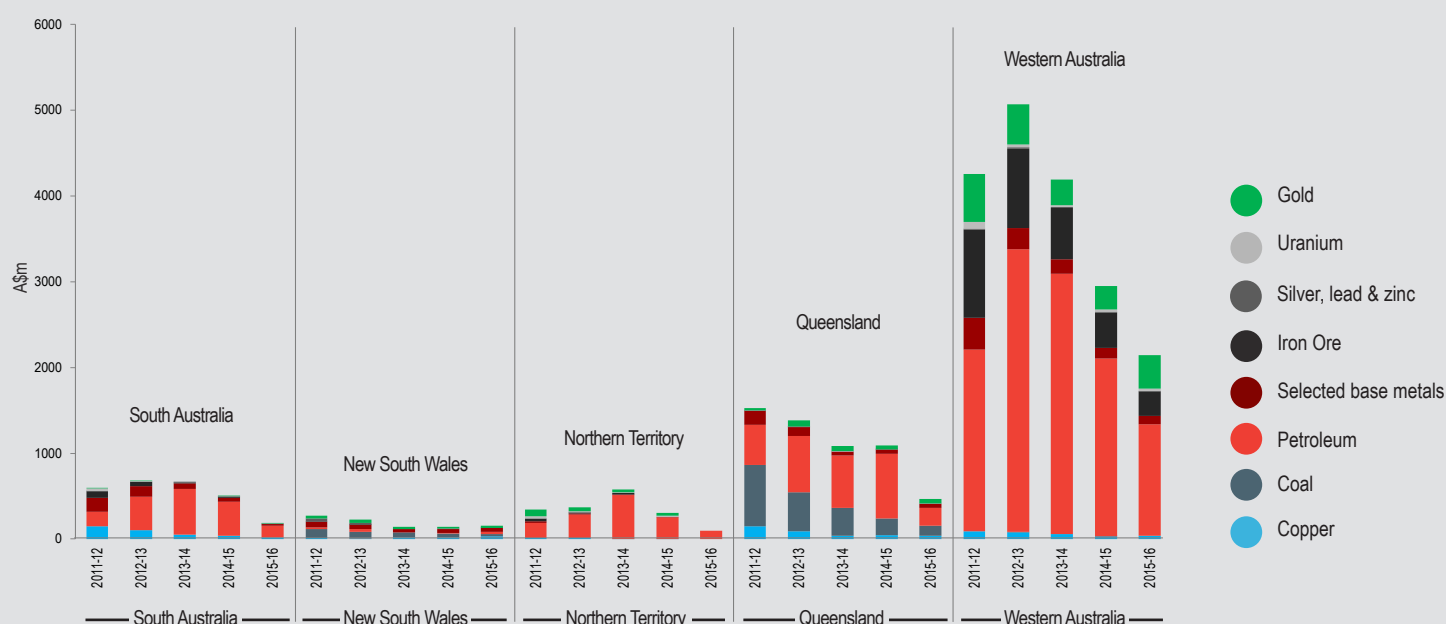
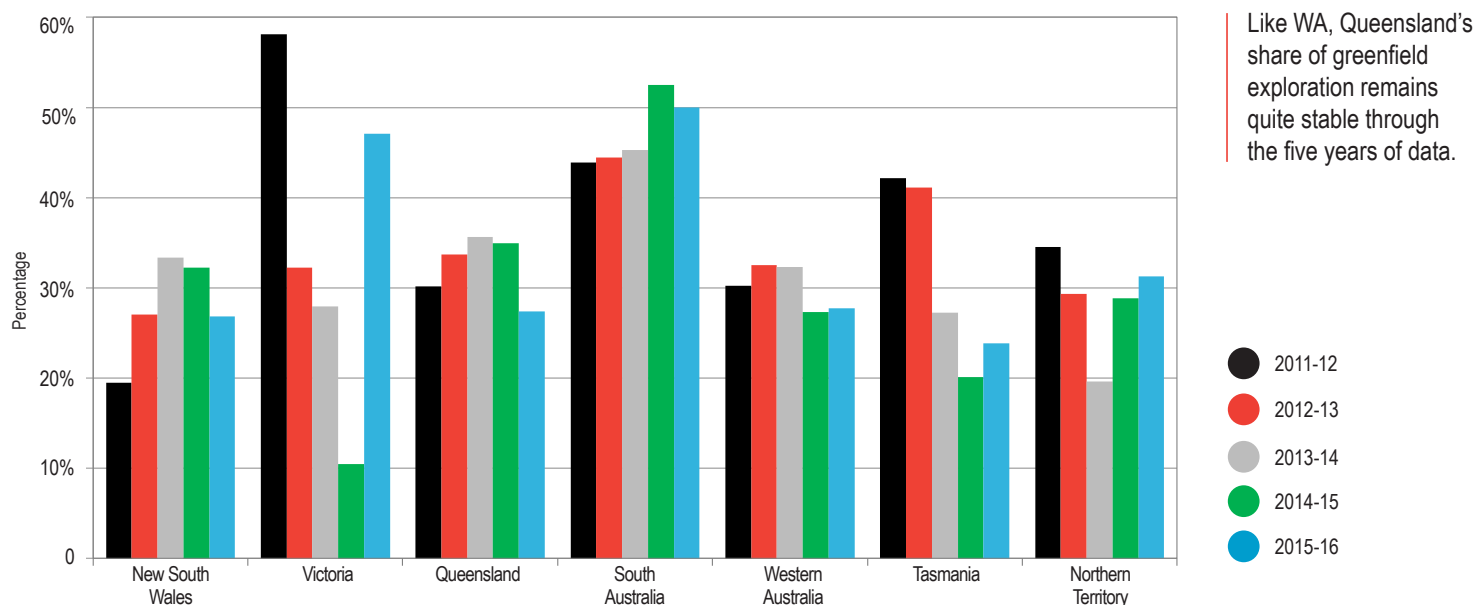


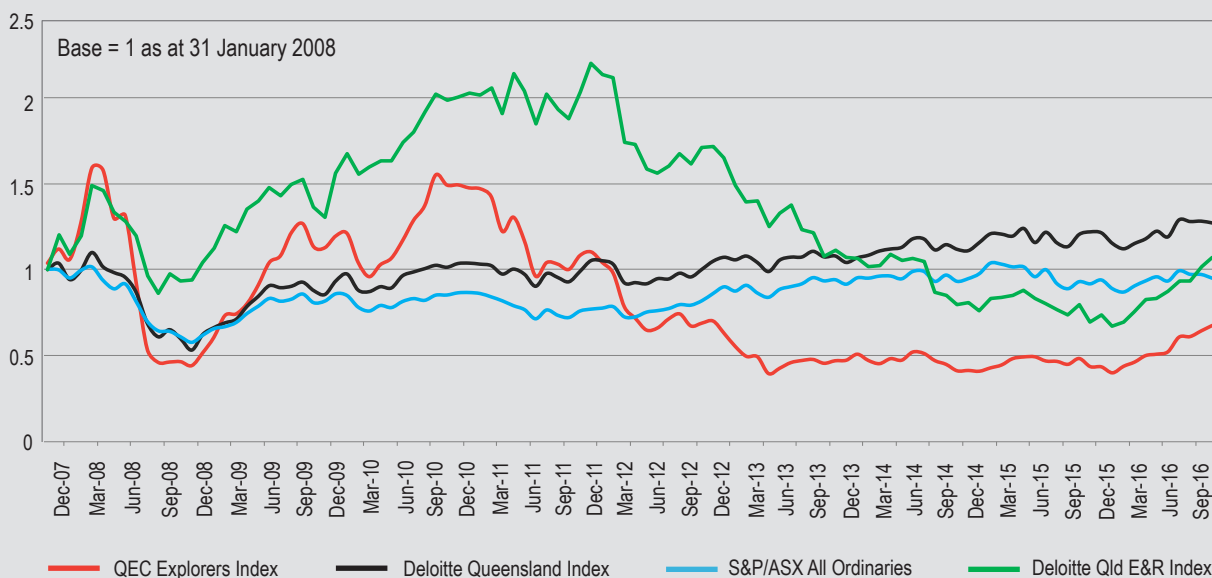
CHART 6.2: NEW DEPOSITS (GREENFIELDS) AS PERCENTAGE OF TOTAL MINERALS EXPLORATION EXPENDITURE - 2011-12 AND 2015-16



7.0 MARKET CAPITALISATION MOVEMENTS

The QEC Exploration Index showed an improvement of 14 points or almost 30% over the 12 months to 30 June 2016, (but from a very low base). This compares with a 6.6% decrease for the S&P/ASX All Ordinaries, a 5.8% increase in the Queensland Exploration Index (Queensland based ASX listed companies) and a 16.2% increase in the Deloitte Queensland E&R Index (Queensland based ASX listed energy and resources companies).

CHART 7: QEC EXPLORATION INDEX VERSUS OTHER CAPITAL INDICES



Source: Capital IQ and Deloitte

DISCLAIMER

The Queensland Resources Council, Members of the Scorecard Working Group, Ashurst Australia, Capital IQ and Deloitte, Department of Natural Resources and Mines and the Queensland Exploration Council accepts no responsibility for the accuracy or completeness of the contents and accepts no liability in respect of the material contained on the website. These parties recommend that users exercise their own skill and care in evaluating accuracy, completeness, and relevance of the material and where necessary obtain independent professional advice appropriate to their own particular circumstances.

In addition, parties, their members, employees, agents and officers accept no responsibility for any loss or liability (including reasonable legal costs and expenses) or liability incurred or suffered where such loss or liability was caused by the infringement of intellectual property rights, including the moral rights, of any third person.

COPYRIGHT

This document and its attachments may be privileged or subject to copyright. Any use of this document or any of its contents should have the prior and express authorisation in writing from the Queensland Resources Council.

An initiative of



Queensland
Exploration
Council



Queensland Resources Council
Level 13 133 Mary Street Brisbane QLD 4000
Phone: +617 3295 9560 Fax: +617 3295 9570

qrc.org.au
queenslandexploration.com.au

© Queensland Resources Council 2016