Resources

Cooper Basin

Industry Development Strategy
Contents

About the Cooper Basin 2
Developing the Cooper 2
Summary of actions and timeframes 3
Actions in detail 4
  1. Attract new investment 4
  2. Support exploration activity 6
  3. Consistent regulatory arrangements 7
  4. Build trust and confidence 7
  5. Support and accelerate development of the Cooper Basin 9
  6. Facilitate productive and responsible resource development 10
Government initiatives to deliver growth 11
Further information and contacts 12

Cover Image; Cooper Basin
Courtesy of Beach Energy
Foreword

The Queensland Government is committed to growing this state’s four pillar economy and establishing Queensland as a global resources leader to support our vision for a vibrant and prosperous state.

The development of onshore natural gas and oil—in particular deep gas and oil—is vital to enable this vision.

Queensland has led the way in onshore gas development, with $70 billion of investment in LNG production with gas from the Surat and Bowen basins.

In August this year, I announced the release of the Framework for the next generation of onshore oil and natural gas in Queensland, which included a recommendation to produce a development strategy for the Cooper Basin region. We believe that with the right policy settings, Queensland can repeat the successes of previous onshore gas developments in the state.

Developing deep gas and oil resources in the Cooper Basin will have long-term economic benefits for both the region and the state, by leading regional development and employment opportunities, boosting royalties, and potentially increasing gas supplies to the Australian Eastern Gas Market.

As part of our strong plan for the future, the Queensland Government has worked closely with industry to develop the ResourcesQ 30-year vision and action plan to generate an economically strong, competitive and diverse resources sector. Together with other initiatives including RegionsQ, Royalties for the Regions and the Ministerial Advisory Committee on Exploration (MACE) we will power up our regions and support the development of the sector to benefit the regions and all Queenslanders.

The Honourable Andrew Cripps MP
Minister for Natural Resources and Mines

1 Cooper Basin Industry Development Strategy
About the Cooper Basin

The Cooper Basin is a large (approximately 130,000 km²) and highly prospective sedimentary basin that is Australia’s premier onshore conventional petroleum province. It is located in a remote and sparsely populated region, straddling the borders of south-west Queensland and north-eastern South Australia. In Queensland, the Cooper Basin underlies the Barcoo, Bulloo and Quilpie shires, with a combined population of around 1,755. The Queensland portion of the basin is overlain by the Eromanga Basin.

In addition to existing oil and natural gas extraction, other industries in the region include pastoral activities, opal mining, geothermal exploration and tourism, with organic beef farming being the most significant local industry. In Queensland, over a third of those employed in the region worked in the agriculture, forestry and fishing industry in 2011.

The Cooper Basin underlies areas of significant environmental value, including the Great Artesian Basin and catchments flowing into Lake Eyre. In recognition of its environmental values, parts of the Cooper Basin have been declared a strategic environmental area under the Regional Planning Interests Act 2014, which allows government to manage the impact of resource activities and regulated activities.

Developing the Cooper

While the Cooper Basin has significant potential, some major challenges must be overcome to develop the emerging deep gas and oil industry. The industry is currently in the early exploration stage. Over the next few years significantly more exploration is required to better understand the geology and whether reserves can be extracted in a cost effective manner. Building a competitive oilfield services industry and new oil and gas infrastructure are key areas for reducing the cost of exploration and enabling development.

The Cooper Basin contains vast natural gas and oil resources — 93 trillion cubic feet of recoverable resources according to recent reports — and is considered one of Australia’s most prospective and commercially viable regions for deep gas and oil development.

The Australian East Coast Gas Market consumes approximately 650 petajoules of gas per year domestically. Based on current demand, there is potentially around 149 years of gas resource in the Cooper Basin.

With approximately 73 per cent of the basin located in Queensland, and several potentially economic geological formations contained within the basin itself, commercial development of the Cooper Basin deep gas and oil resources will significantly benefit industry, the region and the state.

This strategy outlines actions the Queensland Government will undertake, in collaboration with the oil and natural gas sector and the community, to help support the development of the deep gas and oil industry in the Cooper Basin, so that it benefits local communities and all Queenslanders.

Enabling the development of the deep gas and oil industry requires implementation of a strategy that:

1. attracts new investment in deep gas and oil exploration and associated service industries
2. supports innovative and productive exploration activity
3. provides consistent regulatory arrangements
4. builds the trust and confidence of communities in industry and government regulation
5. supports and accelerates long-term development of the Cooper Basin
6. facilitates productive and responsible resource development.

The Cooper Basin Strategy sets ambitious goals and targets to ensure that all Queenslanders benefit from its resource potential.
Summary of actions and timeframes

To deliver on this strategy the following actions will be implemented:

<table>
<thead>
<tr>
<th>Action</th>
<th>Status and expected delivery date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Attract new investment</strong></td>
<td></td>
</tr>
<tr>
<td>1.1 Release new areas for exploration in the Cooper Basin during 2015</td>
<td>1.1 Mid 2015</td>
</tr>
<tr>
<td>1.2 Regularly release new areas for exploration beyond 2015</td>
<td>1.2 2016 – 2018</td>
</tr>
<tr>
<td>1.3 Promote Cooper Basin land releases to national and international markets</td>
<td>1.3 First quarter 2015</td>
</tr>
<tr>
<td><strong>2. Support exploration activity</strong></td>
<td></td>
</tr>
<tr>
<td>2.1 Adopt a case manager approach across government to facilitate projects in the Cooper Basin</td>
<td>2.1 January 2015</td>
</tr>
<tr>
<td>2.2 Build on recent tenure changes to continue to deliver practical and flexible tenure arrangements</td>
<td>2.2 Commenced – complete by mid 2016</td>
</tr>
<tr>
<td>2.3 Make high quality geological and geophysical data available online</td>
<td>2.3 Commenced – complete by mid 2015</td>
</tr>
<tr>
<td>2.4 Investigate and implement processes to facilitate resolution of native title under the Commonwealth Native Title legislation</td>
<td>2.4 Mid 2015</td>
</tr>
<tr>
<td><strong>3. Consistent regulatory arrangements</strong></td>
<td></td>
</tr>
<tr>
<td>3.1 Negotiate a Memorandum of Understanding between Queensland and South Australia identifying opportunities to encourage investment and facilitate cross border operations</td>
<td>3.1 First quarter 2015</td>
</tr>
<tr>
<td>3.2 Aim to harmonise regulatory and administrative arrangements with South Australia to facilitate exploration and production in the Cooper Basin</td>
<td>3.2 End 2015</td>
</tr>
<tr>
<td><strong>4. Build trust and confidence</strong></td>
<td></td>
</tr>
<tr>
<td>4.1 Form a Cooper Basin Ministerial working group with representatives of the community and industry</td>
<td>4.1 Early 2015</td>
</tr>
<tr>
<td>4.2 Communicate government's comprehensive regulatory requirements for deep gas and oil to promote industry social licence</td>
<td>4.2 Commenced and ongoing</td>
</tr>
<tr>
<td>4.3 Undertake community engagement sessions in the Cooper Basin</td>
<td>4.3 Commenced and ongoing</td>
</tr>
<tr>
<td><strong>5. Support and accelerate development of the Cooper Basin</strong></td>
<td></td>
</tr>
<tr>
<td>5.1 Facilitate future infrastructure needs with proponents, local councils and other government agencies</td>
<td>5.1 Commenced</td>
</tr>
<tr>
<td>5.2 Grow supply chain opportunities in partnership with industry</td>
<td>5.2 Commenced</td>
</tr>
<tr>
<td><strong>6. Facilitate productive and responsible resource development</strong></td>
<td></td>
</tr>
<tr>
<td>6.1 Develop a Cooper Basin Water Strategy to ensure responsible and productive use of water resources in the basin</td>
<td>6.1 Commence the strategy in early 2015 – complete by end 2016</td>
</tr>
</tbody>
</table>
Actions in detail

1. Attract new investment

The Queensland Government is putting in place a number of measures to encourage new investment in new projects in the Cooper Basin and drive competition and innovation in the deep gas and oil sector.

1.1 Release new areas for exploration in the Cooper Basin during 2015

The release of land for exploration is a key driver of new investment and projects.

The Queensland Government will release land via a work program-based tender in 2015. The release of work program-based tenders will be particularly useful in facilitating exploration in areas that have had little, to no exploration activity and provide the greatest opportunity for all resource companies to bid.

1.2 Regularly release new areas for exploration beyond 2015

A forward plan for the release of land in future years will be developed by the Department of Natural Resources and Mines (DNRM). This will ensure that new areas are regularly opened up for exploration in the Cooper Basin. The release of land for exploration and production in 2015–2018 will be timed to coincide with the annual APPEA conference.

1.3 Promote Cooper Basin land releases to national and international markets

The Queensland Government is developing a marketing strategy that includes a number of initiatives to promote the Cooper Basin, and more broadly Queensland, as a resource investment destination.

For the Cooper Basin, the objectives of the marketing strategy will:

- Raise the profile and highlight the potential of the Cooper Basin for oil and gas exploration and production
- Encourage new direct investment in deep gas and oil exploration and production in the Cooper Basin
- Encourage investment in existing operators undertaking exploration or producing oil and gas in the Cooper Basin.

The strategy will include international advertising, trade delegations, attendance at global resources events, active engagement by Queensland’s Trade Commissioner network in international markets and communication materials in multiple languages.
2. Support exploration activity

The Queensland Government recognises that the deep gas and oil industry is an emerging industry with most of its proponents at the early exploration stage of their projects. Supporting the exploration sector in the Cooper Basin will assist in realising the benefits from Queensland's oil and natural gas resources.

2.1 Cooper Basin case manager approach

A case manager approach will be adopted by DNRM to provide an interface across government for exploration companies that are active in the Cooper Basin. The case manager will assist companies through approvals processes across government. They will also assist exploration companies in the Cooper Basin to make the right linkages within government, ensuring access to the right information in a timely manner.

2.2 Practical and flexible tenure arrangements

In consultation with industry, DNRM is developing a new resource tenure framework. This will bring a new approach to tenure management that provides certainty and flexibility of tenure term through fit-for-purpose regulation tailored to resource type and location.

Since July 2014 many oil and gas exploration tenure holders have benefited from a two-year extension on all work programs and relinquishment dates. This gives explorers more time on the ground to complete exploration work plan activities, with improved flexibility to amend work programs going forward.

These actions mark the beginning of the government's ongoing commitment to deliver a responsive and outcome focused resource tenure framework that will grow productive and responsible resource development.

2.3 High quality geoscientific data available online

High quality geoscientific data improves knowledge about Queensland’s resource potential, and is a vital tool for attracting exploration investment to Queensland. The ready availability of this data provides explorers with access to information to reduce exploration risk and help inform decisions. For the Cooper Basin, a large amount of information is available from the Geological Survey of Queensland (GSQ). This data is sourced from well completion reports and seismic survey reports submitted by resource companies.

Well completion, seismic surveys and other exploration reports for the Cooper Basin are available for viewing and downloading through QDEX Reports free of charge on the Department of Natural Resources and Mines’ website (http://qdexdata.dnrm.qld.gov.au/flamingo/).

GSQ will make wireline log and seismic data for the Cooper Basin available through QDEX Data and QDEX Reports by mid-2015. This will include all available wireline log data files (e.g. LAS and DLIS) for wells drilled in the Cooper Basin region and all available data relating to seismic surveys, including those scanned as part of the Seismic Section Scanning Initiative.

2.4 Investigate and implement processes to facilitate resolution of native title

The Cooper Basin has a variety of land tenures, including freehold, leasehold and unallocated state land. Whilst there have been no native title determinations, there are a number of native title claims within the area. Where there is no evidence of exclusive tenure (e.g. freehold) native title must be addressed in accordance with the requirements of the Commonwealth Native Title Act 1993 before proponents are able to explore for, or produce, natural gas and oil.

DNRM recognises that addressing Commonwealth native title legislation can require navigating through numerous processes. As a result, the department is conducting an analysis of land tenure in the Cooper Basin in relation to native title. This will assist current and future explorers and native title claim groups when negotiating to address native title.
DNRM is also looking at ways to reduce the transaction costs associated with the native title system and make land ‘development ready’. One option being investigated is the State facilitating an opt-in Indigenous Land Use Agreement (ILUA) in the Cooper Basin, which would mean companies can opt into the ILUA to address any native title requirements with certainty, saving time and money. In the meantime, the department has developed a streamlined native title process that companies can adopt.

3. Consistent regulatory arrangements

Feedback from industry has been that some regulatory differences between South Australia and Queensland increase costs and paperwork and are hampering exploration. These include processes and requirements around transportation of heavy vehicles, environmental approvals, codes of practice relating to wells and safety and health matters such as modification of gas equipment and electrical wiring requirements for drilling rigs.

There are many opportunities for Queensland to work with the South Australian, and Australian Government to streamline and standardise regulations to make it easier for operators in the field, whilst achieving the best environmental outcomes for Queensland.

3.1 Negotiate a Memorandum of Understanding between Queensland and South Australia

As a matter of priority, the Queensland Government is negotiating a Memorandum of Understanding with the South Australian Government that will identify the areas where greater consistency can be achieved. This represents an important commitment between the two governments to reduce regulatory barriers and make it easier for industry to do business in the Cooper Basin.

The key areas of focus of the Memorandum of Understanding in order to achieve enhanced regulatory consistency include:

- transportation of specialised equipment
- accreditation of equipment, including electrical standards
- ensuring responsible outcomes focused
- ensuring leading practice is applied to safety and health matters.

3.2 Aim to harmonise regulatory and administrative arrangements

The Queensland Government is committed to working together with the South Australian Government and industry to deliver a more consistent regulatory regime which will reduce costs and remove barriers to doing business in the Cooper Basin. The areas where greater consistency can be achieved will be set out in the Memorandum of Understanding with South Australia.

4. Build trust and confidence

The main land use in the Cooper Basin is seasonal cattle grazing. Industry and landholders have co-existed with gas and oil production since the 1980s. Increased deep gas and oil development in the Cooper Basin will be able to make positive contributions to regional development in the form of improvements to infrastructure, employment and business opportunities. Nevertheless, it is important that the oil and gas industry continue its long history of co-existence and build community trust and confidence around deep gas and oil operations.

4.1 Form a Cooper Basin Ministerial Working Group

In order to provide ongoing oversight of development in the Cooper Basin and promote shared value of the industry the Queensland Government will establish a high level Cooper Basin Ministerial working group. The group will be made up of representatives from the local community and industry and will provide a means to give feedback on progress, barriers to development in the Cooper Basin and implementation of this strategy. It will also provide an opportunity to communicate the Queensland Government’s commitment to addressing cross-jurisdictional barriers by identifying priority areas for action.
4.2 Communicate government’s comprehensive regulatory requirements for deep gas and oil

The Queensland Government will ensure the community is accurately informed about activities, risk mitigation strategies, performance standards, compliance and monitoring activities for the industry. Information about the deep gas and oil industry is available on the DNRM website. In addition, the role of the DNRM’s Coal Seam Gas Compliance Unit has recently expanded to include deep gas activities. This will mean the unit is the first point of contact for landholder issues around compliance and it will also help build community confidence in this emerging industry.

4.3 Undertake community engagement sessions in the Cooper Basin

The Queensland Government will hold community information sessions in the Cooper Basin with assistance from the GasFields Commission and the Coal Seam Gas Compliance Unit. The GasFields Commission plays a key role in improving sustainable coexistence among rural landholders, regional communities and the onshore gas industry, and has visited the Cooper Basin to discuss the deep gas and oil industry with local mayors. The Commission will continue to work closely with industry and regional communities to keep them informed about developments in the deep gas and oil industry. The Coal Seam Gas Compliance Unit will also assist in community engagement for this developing industry.
5. Support and accelerate development of the Cooper Basin

Whilst the deep gas and oil industry is still at the early exploration stage, the government is committed to assist in the development of the industry in the Cooper Basin. The Queensland Government believes that deep gas can be brought on sooner than planned by other state governments. Queensland's experience in bringing on coal seam gas in the Surat and Bowen Basins has shown that momentum can be generated quickly. In order to fast-track development of the Cooper Basin, a range of project facilitation and supply chain initiatives are available for companies to utilise.

5.1 Facilitate future infrastructure needs

Greater certainty and a stable operating environment will assist companies when making investment decisions. This applies to infrastructure investment in particular. Existing infrastructure in the Cooper Basin can be utilised for deep gas and oil production as the region already has access to pipelines and two gas processing facilities.

The remoteness of the Cooper Basin provides some challenges for industry to operate. Upgrades to roads, air transport, processing facilities and pipelines will likely be required to enable the efficient operation of supply lines and the transport of gas to market as the industry moves into production. The Department of State Development, Infrastructure and Planning (DSDIP) is working with local governments in and around the Cooper Basin to ensure their planning schemes take account of the future requirements of residents and industry. This will ensure that when the industry does progress, the planning framework is ready to support development.

In addition, the Queensland Government has a variety of mechanisms that can assist in the assessment and facilitation of infrastructure or projects. For example, there are a range of powers available through the State Development and Public Works Organisation Act 1971 including the declaration of State Development Areas, Coordinated Projects and Prescribed Projects.

The Economic Development Act 2012 plays a key role in accessing land and streamlining and fast-tracking development throughout the state, including the use of Priority Development Areas.

Collectively these regulatory instruments provide levers for the State to make land available for development, undertake strategic planning to support industry development, or to ensure the efficient and coordinated assessment of major infrastructure and projects. These tools were put to good use in developing Queensland's $70 billion coal seam gas export industry and they can be of equal benefit in the Cooper Basin as well.

5.2 Grow supply chain opportunities

The Queensland Government is committed to providing capable local suppliers with full, fair and reasonable access to emerging major project and procurement opportunities.

There is already a critical mass of gas projects underway in southern inland Queensland that have a well-established supply chain network of regional businesses. These regional businesses have demonstrated experience and capability in the gas industry as a result of their extensive work within the Surat Basin. Existing supply chains are strategically positioned to respond to potential gas industry developments in the Cooper Basin.

The Accessing Supply Chain Opportunities program run by DSDIP has been designed to meet the needs of suppliers and project proponents. For proponents, the program addresses a range of issues in the supply chain. For suppliers, the program assists them to develop a strong customer focus, understand major project supply chain requirements and be better placed to submit complete tenders. Suppliers committed to implementing safety, environmental, risk and quality management systems within their organisation will benefit from this program.

DSDIP will continue to work with regional stakeholders and proponents to assess and deliver targeted programs supporting the development of supply chains in the Cooper Basin, with a natural gas and oil industry focus.
6. Facilitate productive and responsible resource development

The deep gas and oil industry requires secure water sources for its operations. The Queensland Government is committed to ensuring a secure and sustainable water supply for industry and existing users.

6.1 Develop a Cooper Basin Water Strategy

Up to 90 per cent of the total water consumption in deep gas operations is used during well stimulation, with the remainder used in the drilling phase and for activities such as dust suppression and vehicle wash down. The volume of water that will be required to stimulate each well is dependent on the geology of the formation being targeted and the well stimulation design.

Best estimates at this stage are that a single vertical exploration well typically requires up to 5 ML of water, while a long horizontal appraisal or development well could require up to 20 ML. Approximately one third of this volume may be reused by recycling the water that flows back up the well to the surface after well simulation (often referred to as "flowback water"). This technique helps minimise total water use and increase operational efficiency.

In order to manage the long-term use of underground water and guard against impacts to existing users, various options for both refining the regulatory framework and sourcing water need to be considered.

As an immediate action, a Cooper Basin Water Strategy will be developed to ensure responsible and productive use of water resources in the basin that meets the needs of existing users and the deep gas and oil industry.
Government initiatives to deliver growth

The Queensland Government is implementing a number of initiatives and reforms to encourage investment and develop employment opportunities across Queensland, including in the Cooper Basin.

Queensland Government initiatives include:

- The Queensland Plan: a shared vision for the next 30 years, identifying local and state-wide priorities and guiding future activities delivered by all levels of government, business and the community.

- ResourcesQ: the Queensland Government and industry have worked in partnership to develop a long-term vision and action plan for the resources sector. The Queensland Government is taking a staged approach to collaborate with key stakeholder groups including leading resource companies, the supply chain to the resources sector, businesses and communities in key resource regions, and the Queensland public.

- RegionsQ: the Queensland Government is committed to supporting our regional communities and through the Royalties for the Regions program will invest $495 million, over four years from 2012–13 to 2015–16, in new and improved infrastructure. The program aims to provide an economic future for Queensland’s regions, beyond mining and resources, by investing in targeted infrastructure projects.

- Royalties for the Regions: initiated in 2012, this program is investing $495 million over a four-year period in new and improved community infrastructure, roads and floodplain security projects that benefit those who live, work and invest in Queensland’s resource regions.

- A Framework for the next generation of onshore oil and natural gas in Queensland: released on 28 August 2014, the framework focuses on the development of Queensland’s deep gas and oil resources, including the regulatory framework. The framework contains 12 recommendations to be implemented by government which encourage development investment and provide greater community certainty in the industry. This includes the framework’s second recommendation – Develop a Cooper Basin Industry Development Strategy.

- Ministerial Advisory Committee on Exploration (MACE): this committee was formed in October 2013 to provide a means for industry to provide direct feedback on Queensland’s exploration performance and direction and advise on how to position Queensland as the best performing exploration area in Australia. The MACE report was provided to government in June 2014.

- Resources Cabinet Committee: the Resources Cabinet Committee is working to stimulate and drive investment and to support the sustainable development of the resource sector in Queensland. The Committee is focused on cutting red tape, streamlining approvals, fast-tracking investment in the resource sector and maximising local business opportunities to assist in creating jobs for Queenslanders.

- Governing for Growth – Economic Strategy and Action Plan strategy: sets out the government’s direction and priorities to steer economic growth in Queensland. It details all the government’s big economic initiatives and will provide the private sector with the certainty on government direction needed to make informed investment decisions.

- Future Resources Program: aims to maximise exploration success by supporting Queensland’s resource and exploration industries.
Further information and contacts

For further information on the actions in the strategy please contact:

Bernadette Ditchfield
Executive Director
Land and Mines Policy
Bernadette.Ditchfield@dnrm.qld.gov.au
phone: +617 3199 7373

Marcus Rees
Director
Land and Mines Policy
Marcus.Rees@dnrm.qld.gov.au
phone: +617 3199 7383

Department of Natural Resources and Mines
PO Box 15216
City East QLD 4002

Find out more, visit:
www.dnrm.qld.gov.au
or call 13 QGOV (13 74 68)