

# COAG Energy Council Gas Supply Strategy

Fourth Implementation Progress Report

1 November 2017 - 30 June 2018

10 August 2018



**COAG**  
**Energy Council**

## Fourth progress report on Gas Supply Strategy (GSS) Implementation

The COAG Energy Council agreed to the Gas Supply Strategy (GSS) Implementation Plan for Collaborative Actions on 19 August 2016 and to its amendment in August 2017. This fourth report provides detail on progress made during the period **1 November 2017 to 30 June 2018**.

In addition, the GSS implementation effectiveness review was completed in the first half of 2018. The Steering Committee's findings on how GSS implementation has progressed over the period 19 August 2016 to 31 December 2017 and recommendations for future implementation were provided to Ministers for consideration in August 2018.

### ACRONYMS

<b>GWG</b>	Geoscience Working Group
<b>RPEWG</b>	Resources Policy and Engagement Working Group
<b>SCO</b>	Senior Committee of Officials
<b>UPR</b>	Upstream Petroleum Resources Working Group

	<b>GSS Collaborative Action</b>	<b>Lead</b>	<b>Progress report</b>
<b>1</b>	Ensure that pre-competitive science and geological programs, including petroleum and water, continue to be developed in consultation with industry and other relevant stakeholders	GWG in cooperation with UPR	<p>Geoscience Australia's broader petroleum pre-competitive program is continually being evaluated in light of its current priorities and ongoing discussion with petroleum exploration industry stakeholders.</p> <p>A draft of the National Petroleum Exploration Strategy was circulated to GWG and UPR members for comment, and discussed at the GWG meeting in May. The document is currently being revised in response to feedback received and will be finalised during Q3 2018, for endorsement by GWG and UPR, prior to consideration by SCO and the Energy Council later in 2018. The Strategy will address the technical risk for the discovery of petroleum in Australia's sedimentary basins with a focus on frontier basins, and challenge current perceptions of prospectivity to ensure that Australia maintains its status as a premier investment destination.</p> <p>As part of a wider Australian Government initiative to boost exploration for resources in northern Australia, Geoscience Australia (GA) is leading the four-year <a href="#">Exploring for the Future program</a> to help identify potential mineral, energy, and groundwater resources across the region. The program will deliver new pre-competitive data and information on minerals, energy and groundwater in collaboration with state and territory partners to guide and encourage investment in onshore resource exploration.</p>

		The Geological Survey of Victoria continued rock characterisation studies and environmental benchmark sampling of groundwater, as part of the Victorian Gas Program. 3D geological models of the Otway Basin (onshore and offshore) have been commissioned and over 300 community and stakeholder engagements have been conducted to date.
2	Agree on detailed geoscience data standards to support inter-operability of data management systems, reduced submissions costs, and enhance data search and integration capability for exploration study analysis and interpretation.	UPR in cooperation with GWG and RPEWG  A draft scoping report was prepared by the Government Geoscience Information Committee (GGIC) and considered by GWG at its May 2018 annual meeting. It was concluded that a uniform response from GWG was difficult due to differences between jurisdictions, but that individual jurisdictions and the GGIC would continue to contribute to this action in cooperation with UPR. UPR consideration of how to implement this action in the future will be subject to agreed action arising from the GSS Implementation Review process.
3	Define programs that will enhance the characterisation of interactions between hydrocarbon and water resources, and the ready access to this information to increase inform project plans and stakeholders' knowledge.	UPR & GWG  <i>Exploring for the Future</i> projects for energy, minerals and groundwater continue in northern Australia.  In 2017 the Australian Government's Geological and Bioregional Assessments program commenced. This is a three year program that will look at the interaction between potential shale gas and groundwater resources. On <a href="#">29 November 2017</a> , <a href="#">18 January 2018</a> and <a href="#">27 April 2018</a> the Australian Government announced that the following basins had been selected for assessment: <ul style="list-style-type: none"> <li>• The Cooper Basin, which spans south-west Queensland and north-east South Australia.</li> <li>• The Isa Superbasin, which covers parts of northern Queensland, extending east from the Northern Territory border.</li> <li>• The Beetaloo Sub-basin, which lies southeast of Katherine in the Northern Territory.</li> </ul> The Geological Survey of Victoria continued to collect groundwater samples in the onshore Otway Basin, as part of the Victorian Gas Program – data on groundwater chemistry and methane concentration is being collected to establish baseline environmental conditions.
4	Look at options to develop a database to provide a mechanism for jurisdictions to share a nationally agreed set of statistical data on industry activity, including the addition of environmental data to improve public availability	UPR  Due to a lack of funding and public availability of data elsewhere, the UPR agreed to closure of the Resources Data Initiative activity. All jurisdictions have open-data policies and have developed portals to facilitate access to the data held by their government agencies: <ul style="list-style-type: none"> <li>• Commonwealth: <a href="http://data.gov.au">http://data.gov.au</a> &amp; <a href="https://nationalmap.gov.au">https://nationalmap.gov.au</a></li> <li>• New South Wales: <a href="http://data.nsw.gov.au">http://data.nsw.gov.au</a></li> </ul>

	of baseline environmental and monitoring results.		<ul style="list-style-type: none"> <li>• Victoria: <a href="http://data.vic.gov.au">http://data.vic.gov.au</a></li> <li>• Tasmania: <a href="http://www.egovernment.tas.gov.au">http://www.egovernment.tas.gov.au</a></li> <li>• South Australia: <a href="http://data.sa.gov.au">http://data.sa.gov.au</a></li> <li>• Western Australia: <a href="http://data.wa.gov.au">http://data.wa.gov.au</a></li> <li>• Northern Territory: <a href="https://nt.gov.au">https://nt.gov.au</a></li> <li>• Queensland: <a href="http://data.qld.gov.au">http://data.qld.gov.au</a></li> </ul>
5	Agree on a statistical dataset that can be shared and compiled for UPR's Coal Seam, Shale and Tight Gas in Australia: Resources Assessment and Operation Overview including expansion to cover all onshore gas reserves, resources, drilling activity, well performance, and production data.	UPR	Data collection from the jurisdictions has been completed. Data coverage remains an issue. Geoscience Australia will submit the draft report and an options paper on future reports to be discussed at the next UPR meeting in September 2018.
6	Expand the Gas Industry Social and Environmental Research Alliance (GISERA) model into New South Wales and ensure arrangements/framework allows for other jurisdictions to join the alliance in the future.	Australian Government – CSIRO in cooperation with jurisdictions	<p>Complete.</p> <p>National expansion of GISERA progressed, with the South Australian government announcing its \$1 million commitment in February 2018. The <a href="#">South Australian Regional Research Advisory Committee</a> was established, and met for the first time, in May 2018 where they approved the following projects:</p> <ul style="list-style-type: none"> <li>• <a href="#">Onshore gas and water contamination: causes, pathways and risks</a></li> <li>• <a href="#">Understanding natural gas impacts and opportunities on primary industries in the South East of South Australia</a></li> <li>• <a href="#">Community wellbeing and attitudes to conventional gas development in the South East of South Australia</a></li> <li>• <a href="#">Assessing the value of locally produced conventional gas</a></li> </ul> <p>During the period, the <a href="#">Queensland Regional Research Advisory Committee</a> approved two new projects:</p> <ul style="list-style-type: none"> <li>• <a href="#">Trends in community wellbeing and attitudes to CSG development – Survey 3</a></li> <li>• <a href="#">Potential health impacts from CSG</a></li> </ul> <p>A number of GISERA research reports were released during the period:</p> <p>NSW</p> <ul style="list-style-type: none"> <li>• <a href="#">Social Baseline Assessment: Narrabri Final Report</a></li> <li>• <a href="#">CSG-induced groundwater impacts in the Pilliga region: prediction uncertainty, data-worth and optimal monitoring strategies</a></li> </ul>

		<ul style="list-style-type: none"> <li>• <a href="#">Human Health Effects of Coal Seam Gas Activities – A Study Design Framework</a></li> <li>• <a href="#">Assessing the economic effect of CSG activity under different scenarios in NSW</a></li> <li>• <a href="#">Community wellbeing and social attitudes to coal seam gas development, Social baseline assessment: Narrabri project – Phase 3 survey report</a></li> <li>• <a href="#">Assessing linkages between regional economic indicators and CSG industry activity in NSW 2001-2011</a></li> </ul> <p>QLD</p> <ul style="list-style-type: none"> <li>• <a href="#">An assessment of ambient air quality in the Surat Basin, Queensland</a></li> <li>• <a href="#">Design of a study to assess the potential impacts of hydraulic fracturing on air quality in the vicinity of well sites in the Surat Basin, Queensland</a></li> <li>• <a href="#">Constraining conceptual groundwater models for the Hutton and Precipice aquifers in the Surat Basin through tracer data</a></li> </ul> <p>Information about individual projects can be viewed at <a href="https://gisera.org.au">https://gisera.org.au</a>.</p> <p>A number of external stakeholders consulted during the GSS implementation effectiveness review process learnt about GISERA for the first time. As they wished to stay informed about GISERA’s activities, the UPR Secretariat advised they could subscribe to GISERA newsletters from GISERA’s home page.</p>	
7	Coordinate the development of a common set of FAQs for use by all jurisdictions, including hosting a forum of representatives from relevant agencies such as Geoscience Australia and state and territory based regulators to consider and publish agreed facts and answers to FAQs.	UPR in cooperation with RPEWG and GMPIT	<p>On 27 June 2018, the <a href="#">FAQs were published</a> on the Energy Council’s website.</p> <p>The ongoing six-monthly FAQ review process will be managed via a standing agenda item at UPR’s face-to-face meetings, which occur twice per year.</p>
8	Continue efforts to encourage better community engagement, particularly in respect to land access case studies and community acceptance research through sharing communications tools and resources that have proven to be successful. This will include: hosting a forum	RPEWG in cooperation with UPR and GMPIT	<p>The case studies handbook has been completed and will be published on the COAG Energy Council website. Remaining elements of this activity will be considered with progressing action #17 which will have a significant communications element.</p>

	and development of a better practice case studies document, which will include, CSIRO community engagement and acceptance research, review of jurisdictional approaches to native title issues and pursue better visibility of RPEWG on COAG Energy Council website.		
<b>9</b>	Host a forum of Government officials to discuss pursuing Australian standard(s) on relevant onshore gas issues that will underpin productivity.	UPR	Complete.  UPR have agreed to maintain individual jurisdictions participation and support in ME-092 and NERA-led work and initiatives towards its primary goal in aligning Australian and International standards as appropriate.
<b>10</b>	Develop and share work-flow diagrams to document the robustness and equivalence of upstream petroleum licensing and activity approval processes across Australian jurisdictions.	UPR in cooperation with RPEWG	No progress to report in this period.
<b>11</b>	Review of the National Harmonised Regulatory Framework for Natural Gas from Coal Seams (NHRF).	UPR	The leading practices and legal consultants lodged their final reports in November/December 2017. UPR consideration of the report outcomes and appropriate update of the Framework continues.  Victoria and Tasmania are observing this action.
<b>12</b>	Review of relevant Inquiry reports (e.g. into hydraulic fracturing) to identify common recommendations that could be addressed in the NHRF update and/or point to further work that could be done at a national level.	UPR	Complete.  An update of this document will occur in future, to include outcomes and Government responses to the: <ul style="list-style-type: none"> <li>• <a href="#">Independent Scientific Inquiry into Hydraulic Fracturing of Onshore Unconventional Reservoirs in the Northern Territory.</a></li> <li>• <a href="#">Independent Scientific Panel Inquiry into Hydraulic Fracture Stimulation in Western Australia 2017.</a></li> </ul> Victoria and Tasmania are observing this action.
<b>13</b>	Lead development of a paper to seek national alignment of objectives for the regulation of shale and tight gas developments.	UPR	Commonwealth, Western Australia and Northern Territory officials held further discussions during this period to advance development of a proposal to merge implementation of this action with GSS collaborative action #11.  Victoria and Tasmania are observing this action.

<p>14</p>	<p>Support and promote the National Energy Resources Australia (NERA) and METS Ignited (Mining Equipment, Technology and Services) Growth Centres.</p>	<p>Australian Government – Department of Industry, Innovation and Science</p>	<p>Collaborative action milestones now considered complete.</p> <p>NERA announced funding support from its Project Fund (funds provided by the Australian Government) for a number of industry-led projects aimed at boosting the productivity and sustainability of Australia’s gas industry. Further information is available at the NERA website <a href="http://www.nera.org.au">www.nera.org.au</a>. Projects include:</p> <ul style="list-style-type: none"> <li>• A number of projects being undertaken through the University of Queensland Centre for Coal Seam Gas to improve the industry’s understanding and productivity from CGS wells, thereby improving security of gas supply into the Queensland gas network</li> <li>• Feasibility study for <a href="#">LNG living lab</a> to be built in Western Australia as a national, open access facility to demonstrate new technologies in a micro-scale live LNG plant environment.</li> <li>• Transforming Australia Subsea Equipment Reliability (<a href="#">TASER</a>) <a href="#">living lab project</a> to assess the effectiveness of innovative coatings, materials and technologies against biofouling on subsea equipment in warm waters off north west Australia.</li> <li>• Demonstration of <a href="#">integrated hybrid power supply solution for coal seam gas well sites</a>. The project will undertake field trials in Queensland for an integrated solar, battery storage, and gas generation package for reliable, low carbon and economical power supply.</li> <li>• <a href="#">3D printing for remote operating environments project</a> will trial a new 3D printing technology developed in the Northern Territory to fabricate metal parts on demand at remote locations.</li> </ul> <p>In May 2018 NERA launched a new online portal <a href="https://referencecases.nera.org.au">https://referencecases.nera.org.au</a> as an electronic repository for environmental reference cases – detailed reports that capture common content relating to environmental impacts and risks - for offshore petroleum activities. The portal continues work started in 2017 through the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA).</p> <p>In June 2018 NERA launched the Nureka online collaboration and innovation platform <a href="http://nureka.io/">http://nureka.io/</a> for the oil and gas industry. This is a secure platform where oil and gas challenges can be posted, where innovators can showcase their solutions, and where funding and investors can be sourced.</p> <p>Planning is underway for the NERA-hosted <a href="#">International Oil and Gas Standardisation event</a> to be held in Perth on 22 November 2018. The event will showcase leading initiatives by the Australian oil and gas industry to move to international standardisation, including for subsea,</p>
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		automation and digital technologies. The workshop links with international standards meetings being held in Perth from 19-21 November through the International Organization for Standardization (ISO) and the international Association of Oil and Gas Producers (IOGP).
<b>15</b>	Develop broad principles for collaborative cross-jurisdictional programs to inform future offshore acreage releases and facilitate gas exploration and development in priority areas in Commonwealth offshore and State and Territory offshore waters.	UPR The Australian Government Department of Industry, Innovation and Science released the <a href="#">Offshore South East Australia Future Gas Supply Study</a> on 24 November 2017. Victoria presented a paper on proposed broad principles for collaborative cross-jurisdictional programs to inform future offshore acreage releases and facilitate gas exploration and development in priority areas in Commonwealth offshore and State and Territory offshore waters at UPR on 21 March 2018. The UPR has not made any decisions, this item will be discussed at the next UPR meeting in September 2018.
<b>16</b>	Identify geological formations that have the potential to be developed for gas storage to improve security of gas supply	GWG The Geological Survey of Victoria (GSV) is investigating the potential for further underground gas storage sites in the onshore Otway geological basin, as part of the Victorian Gas Program. The program incorporates analysis and modelling of geoscientific information to assess the potential of known subsurface geological structures for underground gas storage, including rock characterisation studies (e.g. porosity, permeability). Initial technical assessments have been undertaken on potential sites in collaboration with CSIRO. GSV is now conducting detailed geoscience and commercial feasibility assessments of these reservoirs, including discussions with industry to determine synergies or collaborative opportunities.
<b>17</b>	Communicate information for landholders and communities about the onshore gas industry, including information to assist landholders in negotiating access to land for gas developments	RPEWG RPEWG is considering the scope of this activity and what mechanisms are necessary for its delivery.

## ATTACHMENT – INDIVIDUAL JURISDICTIONAL ANNOUNCEMENTS

The following individual jurisdictional announcements and key events relating to gas development and/or supply occurred during the reporting period:

- In late 2017, the Australian Government Department of the Environment and Energy released the [National assessment of chemicals associated with coal seam gas extraction in Australia](#) report. The Assessment examined 113 chemicals used by companies in Australia between 2010 and 2012 in drilling and hydraulic fracturing for coal seam gas, to develop a stronger understanding of the risks these chemicals could pose to the health of workers, the public and the environment.
- On 13 December 2017, the ACCC released its [December 2017 interim report](#) as part of its inquiry into Australia's wholesale gas supply arrangements. The report notes that while the gas supply outlook for 2018 and 2019 has improved, there are continuing immediate and longer-term concerns. The report also found that gas storage continues to be important in managing supply outages and maintaining system security, particularly in Southern States where gas storage is increasingly being used as swing supply during peak demand periods (e.g. winter).
- On 18 December 2017, [South Australian Minister for Mineral Resources and Energy Tom Koutsantonis announced](#) the four successful recipients to receive funding under the second round of the PACE Gas Program. SA government investment of \$24 million in this round will potentially leverage more than \$70 million in private investment to find new South Australian gas supplies.
- On 12 January 2018, [Victorian Minister for Resources Tim Pallas released](#) the [first Victorian Gas program progress report](#). The report provides a comprehensive overview of the program, including an aggregation of the scientific activities that have been carried out to date.
- On 7 February 2018, [South Australian Minister for Resources and Energy Tom Koutsantonis announced](#) the South Australian government's [\\$1 million over three years](#) partnership with GISERA to conduct research into the social and environmental impact of the gas industry in the onshore Otway Basin in South Australia's South East.
- Following release of the [draft Final report](#) on 12 December 2017, the [Final report](#) of the Independent Scientific Inquiry into Hydraulic Fracturing in the Northern Territory was handed down on 27 March 2018. The Inquiry panel made 135 recommendations to mitigate risks in regards to the potential of hydraulic fracturing in the Northern Territory. On 17 April 2018, [Northern Territory Chief Minister Michael Gunner announced](#) the Northern Territory government had accepted all of the inquiry recommendations and would release an implementation plan in July 2018. On 9 June 2018, the [Onshore Shale Gas Community and Business Reference Group](#) was established to oversight and input into the development of the implementation framework and its subsequent execution.
- On [28 March 2018](#) and [1 June 2018](#), Australian Government Minister for Resources and Northern Australian Matthew Canavan announced the five successful recipients of the Australian Government's \$26 million Gas Acceleration Program. The program is supporting projects with the greatest likelihood of securing new and significant volumes of gas for domestic gas consumers located in target markets (e.g. the east coast gas market), from onshore gas fields by 30 June 2020. Further information is available at [www.business.gov.au/gap](http://www.business.gov.au/gap).
- On 15 May 2018, the [Australian Government Minister for Resources and Northern Australia Matthew Canavan announced](#) the [2018 Offshore Petroleum Exploration Acreage Release](#). The 2018 acreage release comprises 21 areas located across six sedimentary basins in Commonwealth waters offshore of Western Australia, South Australia, Victoria and the Ashmore and Cartier Islands. 16 areas are available for work program bidding and five areas for cash bidding. The areas are located in water depths of 15

to 4,534 metres, vary in size from 80 km<sup>2</sup> to 12,128 km<sup>2</sup> and also vary in level of existing geological knowledge. All areas are supported by pre-competitive geological and geophysical data and analysis undertaken by Geoscience Australia.

- On 16 May 2018, the [Victorian Government released](#) five areas for oil and gas exploration in Victorian waters in the Otway Basin, as part of the Victorian Gas Program. The five release areas cover 1318 square kilometres and are under-explored with limited seismic acquisition and no previous exploration drilling. Applications are via work program bidding with the release closing on 15 February 2019.
- On 20 June 2018, [Queensland Minister for Natural Resources, Mines and Energy Dr Anthony Lynham announced](#) the Queensland government had earmarked the release of 29 areas covering 43,250 square kilometres of land for future petroleum and gas exploration.
- On 22 June 2018, the Australian Energy Market Operator (AEMO) released its [2018 Gas Statement of Opportunities](#) (GSOO). The 2018 GSOO contains AEMO's revised projection of the gas supply-demand balance in the eastern and south-eastern gas markets for the outlook period to 2038. AEMO's analysis suggests:
  - the risk of shortfalls previously forecast for 2019 have reduced due to a range of changes in energy markets including:
    - small reduction in forecast LNG demand
    - potential gas supply enabled by the Northern Gas Pipeline
    - forecast increase in development of alternative electricity generation sources
    - incentives to ensure sufficient domestic gas supply arising from introduction of the Australian Domestic Gas Security Mechanism and Heads of Agreement obligations.
  - no gas supply gaps are forecast before 2030 under expected market conditions, however:
    - new gas reserves and resources are required to be developed to meet forecast demand from 2019 onwards
    - additional gas supply infrastructure will be needed from 2030 to deliver gas to southern customers unless early investment in exploration and production of highly uncertain (and as yet undiscovered) southern prospective resources enables supply to market.
- On 24 June 2018, [NSW Deputy Premier John Barilaro and NSW Minister for Planning, Minister for Housing Anthony Roberts jointly announced](#) the declaration of Port Kembla Gas Terminal project as Critical State Significant Infrastructure. The new state significant classification for the gas terminal means the project will go through a separate assessment pathway, which will be overseen by the Independent Planning Commission.