

COAG Energy Council Gas Supply Strategy Sixth Implementation Progress Report 1 January 2019 – 30 June 2019

November 2019



**COAG
Energy Council**

Sixth progress report on Gas Supply Strategy (GSS) Implementation

The COAG Energy Council agreed to the initial Gas Supply Strategy (GSS) Implementation Plan for Collaborative Actions in August 2016 and its amendment in August 2017. On 18 December 2018, Resources Ministers agreed to the [GSS – Extended Implementation Plan](#) which reduced the number of collaborative actions to six and extended the implementation period to 31 December 2020.

This sixth report provides detail on GSS implementation efforts during the period **1 January 2019 to 30 June 2019**.

Stakeholder feedback on the extended implementation plan and the current approaches to implement the collaborative actions is very welcome. Please direct your feedback, to the attention of the GSS Steering Committee, via upr.secretariat@industry.gov.au.

ACRONYMS

GWG	Geoscience Working Group
RPG	Resources Policy Working Group
SCO	Senior Committee of Officials
UPR	Upstream Petroleum Resources Working Group

GSS Collaborative Action	Working Groups involved	Progress report
1 Improve information to, and understanding of, community expectations on the social and environmental impacts of gas developments and improve the use and standard of base level trusted, neutral information within jurisdictions.	UPR RPG GWG	<p>An updated version of the GSS Frequently Asked Questions document was published on the COAG Energy Council’s website in May 2019. The FAQs now include information on conventional gas, offshore gas and underground gas storage. The next review of the FAQs is scheduled to occur in late 2019.</p> <p>The Northern Territory government commenced work to determine the methodologies for undertaking the Strategic Regional Environment Baseline Assessments (SREBAs). The target completion date is late-2019 and will include a public consultation phase before finalisation. The methodologies for assessing groundwater dependent ecosystems will consider the links between surface and groundwater resources. The baseline studies undertaken for the Beetaloo Sub-basin will include mapping and characterising groundwater-dependent ecosystems, including subterranean aquatic systems, in the Roper River region.</p> <p>The Beetaloo Sub-Basin will be the third region assessed as part of the Geological and Bioregional Assessment Program. The assessment will provide some of the information required as part of the SREBA for that region.</p> <p>Officials supported continued progress – and promoted the outputs – of CSIRO’s Gas Industry Social and Environmental Research Alliance (GISERA) research work in Queensland, New</p>

South Wales, South Australia and the Northern Territory. [Pangaea Resources was announced as a new GISERA Alliance partner](#) in March 2019.

Five new projects were approved by the GISERA Regional Research Advisory Committees during the reporting period:

New South Wales

- [Assessment of faults as potential connectivity pathways](#)
- [Assessing and forecasting on-shore gas effects on agricultural economic and productivity outcomes](#)
- Monitoring changes in community wellbeing and local attitudes to CSG development in Narrabri, NSW (*Note: not published and research project is contingent on NSW government making a decision/announcement about allowing gas development in the future*)

Northern Territory

- [Characterisation of the stygofauna and microbial assemblages of the Beetaloo Sub-basin](#)
- [Environmental monitoring and microbial degradation of onshore shale gas activity chemicals and fluids](#)

Ten research/milestone reports, journal papers and fact sheets were published during this reporting period:

Queensland

- Community functioning and wellbeing 2 project, journal paper - [Rural communities and unconventional gas development: What's important for maintaining subjective community wellbeing and resilience over time?](#)
- Factsheet – [Local attitudes and perceptions of CSG development: 2014 – 2018](#)
- Factsheet – [Community resilience and adapting during CSG development: 2014 – 2018](#)
- Factsheet – [Trends in community wellbeing during CSG development: 2014 – 2018](#)

New South Wales

- Impacts of CSG depressurisation on the Great Artesian Basin (GAB) flux project, milestone report - [Hydrogeological and ecohydrological connections in the CSG development areas of the Namoi region](#)
- Improving groundwater models to better represent coal seam gas extraction impacts in the Namoi region project, [final report](#).
- Analysing economic and demographic trajectories in NSW regions experiencing CSG development and

operations project, journal paper – [Economic impacts of early unconventional gas mining: Lessons from the coal seam gas industry in New South Wales, Australia](#)

Northern Territory

- Baseline measurement and monitoring of methane emissions in the Beetaloo sub-Basin project, report on pre-exploration measurement and monitoring of background landscape methane concentrations and fluxes – baseline results for [Fire Season](#) & [Wet Season](#)

South Australia

- Microbial degradation of onshore gas-related chemical compounds project, milestone report - [An estimation of chemical compound concentrations used in onshore gas production, a review of their degradation, and associated policy frameworks in South Australia](#)
- Factsheet – [Research on conventional gas in South East South Australia](#)

The following communication products/tools were released or updated during this reporting period:

National

- GISERA [e-newsletter #10](#) published online and delivered to national database in January 2019.
- Update of [Summary of research projects](#) brochure and [About Us](#) factsheet for distribution at APPEA 2019 Oil & Gas Conference in Brisbane from 27-30 May where CSIRO and GISERA exhibited.

Queensland

- An [interactive website](#) was developed for Trends in community wellbeing and attitudes to CSG development - Survey 3 project allows users to interactively explore survey data from CSIRO's report [Trends in community wellbeing and local attitudes to coal seam gas development, 2014 – 2016 – 2018: Western Downs and eastern Maranoa regions, Queensland](#). Changes can be explored between these years in the Western Downs region of Queensland, as well as make comparisons with the neighbouring eastern Maranoa region in 2016 and 2018. The results can be further explored by sub-region, age, gender, and whether residents live in or out-of-town.

Further information about GISERA and the status of other individual projects can be viewed at <https://gisera.csiro.au>.

		<p>As part of the Victorian Gas Program the Geological Survey of Victoria engaged with 466 people over 113 events and will hold many community workshops across the Otway and Gippsland basins seeking residents' views about the region's unique natural, cultural and environmental features. The workshops are a key part to understanding the risks, benefits and impacts of onshore conventional gas. Workshops in the Otway Basin will be held in October and November 2019, and workshops in the Gippsland Basin will be held in the first half of 2020.</p> <p>The Geological Survey of Victoria continues to publish the evidence based scientific reports on the Department's website and has engaged CSIRO to undertake social research into community concerns, expected benefits and factors important for building trust and acceptance in relation to onshore conventional gas development in the Gippsland Basin and Otway Basin. The survey will take place in October and November 2019.</p>	
2	Develop and promote broad principles that apply to all types of onshore gas resource developments.	UPR	Following the UPR's approval of the outline in January 2019, development of the <i>Onshore Gas Principles Guide</i> document detailing the agreed principles progressed throughout this reporting period and will be completed by the end of 2019.
3	Develop broad collaborative principles for future offshore acreage releases, gas exploration and development in Commonwealth offshore and State and Territory offshore (coastal) waters.	UPR GWG	<p>The COAG Energy Council Senior Committee of Officials endorsed the principles in February 2019.</p> <p>This collaborative action is now complete. The UPR will provide an ongoing forum for dialogue around the application of these principles. Effective examples of collaboration will be presented to SCO as they occur.</p> <p>Queensland and Tasmania were observers during implementation of this collaborative action.</p>
4	Communicate information for landholders and communities about the onshore gas industry, including information to assist landholders in negotiating access to land for gas developments.	RPG UPR	<p>King & Wood Mallesons is preparing a Regulatory Review Report on the Establishment of Land Access Agreements for Petroleum and Mining Activities on behalf of the RPG. The final report is expected in late 2019.</p> <p>In May 2019, the UPR Chair wrote to the RPG Chair to request RPG to consider strategies to increase awareness of the GSS FAQs, including translation into culturally appropriate languages and forms for Indigenous Australian communities.</p> <p>The <i>Gas Resources in Australia: Resources Assessment and Operation Overview 2017</i> report was under development during the reporting period to be considered by SCO in mid-2019. UPR continued to watch the ACCC's gas inquiry process closely and specifically for outcomes relating to the proposed reserves and resources reporting framework, which may result in the need to</p>

		reconsider the UPR's plans and/or approach for its future reports.
5	<p>Improve basin-level geological and hydrocarbon understanding in onshore and offshore basins that cross jurisdictional boundaries.</p>	<p>GWG UPR</p> <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>As part of a wider Australian Government initiative to boost exploration for resources in northern Australia, Geoscience Australia is leading the four-year Exploring for the Future program. This program aims to help identify potential mineral, energy, and groundwater resources across the region. It 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. During this period, Geoscience Australia released the 872 kilometre Kidson Sub-basin seismic survey, extending from Kiwirrkurra to Marble Bar in WA.</p> <p>Geoscience Australia and the Queensland and NT Geological Surveys continue to collaborate on studies of the South Nicholson Basin and Lawn Hill Platform (Isa Superbasin). This includes seismic data collected by Queensland during this period, and further data to be acquired by Geoscience Australia and the NT later in 2019.</p> <p>Since 2008, the Geological Survey of Western Australia is collaborating with NT Geological Survey to study the structure and stratigraphy of the Amadeus Basin including joint field work and several joint publications, including two records in 2018.</p> <p>South Australia is engaging with the Geological Survey of Victoria and industry to resolve the stratigraphic nomenclature of the Otway Basin as part of a project to develop a petroleum system model of the basin.</p> <p>The Geological Survey of Victoria is conducting comprehensive studies of the Otway Basin. The Otway Basins extends into South Australian, Victorian and Commonwealth jurisdiction. Studies include:</p> <ul style="list-style-type: none"> • Rock characterisation. 7175 Otway Basin rock specimens have been sampled, yielding over 300000 measurements and observations. The new measurements have been interpreted to assess key components of the petroleum system; reservoir, seal and source rocks. • A comprehensive basin-scale chemostratigraphic correlation study in the Otway Basin is nearing completion. The main objective is to geochemically characterise rock samples from 11 legacy petroleum wells and one side-tracked well from the Victorian

		<p>Otway Basin. Victoria in conjunction with South Australia is also including additional wells in South Australia.</p> <ul style="list-style-type: none"> • Three-dimensional (3D) geological framework models of the Otway Basin have been constructed. These provide the framework for scientists to understand where rock formations that host gas are present as well as the location and movement of groundwater. • Over 32000 line kilometres of innovative airborne gravity and gradiometry data, providing new evidence about rock structures within the Otway Basin <p>Victoria is carrying out comprehensive studies of the Gippsland Basin which extends into both Victorian and the Commonwealth jurisdiction. Studies include:</p> <ul style="list-style-type: none"> • Development of a three-dimensional (3D) geological framework model of the Gippsland Basin will provide the framework for scientists to understand where rock formations that host gas are present as well as the location and movement of groundwater. <p>The Geological Survey of NSW continues to work towards data compilation and delivery for the sedimentary basins in the state's far west.</p>
<p>6 Identify geological formations that have the potential to be developed for underground gas storage to improve security of gas supply</p>	<p>GWG</p>	<p>GWG has committed to create a national map, to be coordinated by Geoscience Australia, of depleted reservoirs across the country that have potential for gas storage.</p> <p>The Victorian Gas Program is assessing the potential for further underground gas storage sites. The assessment focuses on 13 depleted gas fields around Port Campbell. Thirteen sites were evaluated and six were short-listed to progress to a more detailed technical evaluation based on their ranking, structural interpretation, co-location and any original gas remaining. The results of the studies will continue to be published on the Department's website as they are completed.</p>

JURISDICTIONAL ANNOUNCEMENTS – ACTIONS COMPLEMENTARY TO THE GSS

- On 14 February 2019, Senator the Hon Matthew Canavan, Minister for Resources and Northern Australia, released the [National Resources Statement](#). It sets out the government’s policy and long-term reform agenda for the Australian resources sector and includes a 5 point action plan to:
 - deliver the most globally attractive and competitive investment destination for resources projects
 - open up new industries and resources regions
 - better focus the sector’s innovation, research and development on long-term, sectoral growth
 - develop and retain the world’s best workforce
 - deliver better outcomes for stronger and more engaged communities.
- On 28 February 2019, Queensland Minister for Natural Resources, Mines and Energy Dr Anthony Lynham [announced](#) approval of Arrow Energy’s \$10 billion Surat Gas Project. Approval has been granted for 14 petroleum leases between Dalby and Wandoan that will bring an extra 5,000 petajoules of gas to market over 27 years – including 240 petajoules per annum during peak production from 2026.
- On 29 April 2019, New South Wales Deputy Premier John Barilaro and Minister for Planning Rob Stokes [announced](#) planning approval for the \$250 million Port Kembla Gas Terminal.
- On 3 June 2019, Queensland Minister for Natural Resources, Mines and Energy Dr Anthony Lynham [announced](#) APLNG-Armour Energy joint venture was the successful bidder for 18 square kilometres of land 22km south-west of Chinchilla, which was awarded with the condition that gas can only be sold to Australian manufacturing businesses.
- On 12 June 2019, the Northern Territory government released its final [Code of Practice: Onshore Petroleum Activities in the Northern Territory](#). The Code mandates enforceable standards and requirements for the onshore gas industry on key issues, including:
 - Well operations
 - Surface activities
 - Wastewater management; and
 - Methane emissions.
- Victoria’s Department of Jobs, Precincts and regions announced the following:
 - 12 February 2019 [Hydrogeologists providing down to earth view on water at Sungold](#)
 - 20 February 2019 [Good response to offshore gas tender](#)
 - 28 February 2019 [Progress continues in search for new gas](#)
 - 22 May 2019 [A closer look at the Otway Basin’s rocks](#)
- The Western Australian Government progressed development of an implementation plan to describe the actions required to implement the [Independent Scientific Panel Inquiry into Hydraulic Fracture Stimulation in Western Australia recommendations](#) and the Government’s [policy decisions](#), including changes to the way hydraulic fracture stimulation is regulated in Western Australia. The implementation plan is expected to be released in July 2019.