
COAG Energy Council Gas Supply Strategy Seventh Implementation Progress Report

1 July 2019 – 31 December 2019

February 2020



COAG
Energy Council

Seventh 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 seventh report provides detail on GSS implementation efforts during the period **1 July 2019 to 31 December 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
<p>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.</p>	<p>UPR RPG GWG</p>	<p>The UPR reviewed the GSS Frequently Asked Questions document in September 2019. Geoscience Australia will prepare an updated map of the location of gas resources in Australia.</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 South Wales, South Australia and the Northern Territory.</p> <p>Two new projects were approved by the GISERA Regional Research Advisory Committees during the period:</p> <p><u>Northern Territory</u></p> <ul style="list-style-type: none"> • Improved approaches to long-term monitoring of decommissioned onshore gas wells • Mitigating Fugitive Gas Emissions from Well Casings <p>Eight research/milestone reports, journal papers and fact sheets were published during this reporting period:</p> <p><u>Queensland</u></p> <ul style="list-style-type: none"> • Whole of life cycle greenhouse gas assessment of the exploration of the Surat Basin gas reserve Final Report.

- Ambient air quality, Surat Basin [Modelling air quality in the Surat Basin, Queensland Report](#).

Northern Territory

- Baseline assessment of groundwater characteristics in the Beetaloo Sub-basin, NT: Geochemistry Analysis [Milestone Report](#) & [factsheet](#)
- Pre-exploration measurement and monitoring of background landscape methane concentrations and fluxes in the Beetaloo Sub-basin, Northern Territory: [Final Report](#) & [factsheet](#)

South Australia

- Final report [Understanding natural gas impacts and opportunities on agriculture in the South East of South Australia](#) & [factsheet](#) for 'Gas impacts and opportunities on primary industries' project.

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

National

- GISERA [e-newsletter #11](#) published online and delivered to national database in August 2019.
- Factsheet [Fugitive emissions from unconventional gas – what the latest scientific research is telling us about fugitive methane emissions from unconventional gas](#)
- Media releases/statements with links to reports, animations, interviews:
 - [NT baseline methane and groundwater studies completed](#)
 - [Whole of life greenhouse gas emissions final report released](#)

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

Geoscience Australia is partnering with the Department of Agriculture, Water and the Environment's Geological and Bioregional Assessment (GBA) Program to provide information that will help assess the environmental impacts of shale and tight gas development in the Beetaloo Sub-basin region of the Northern Territory. Phase 1 of the Beetaloo Sub-basin seismic monitoring project commenced in Q4 of 2019. More information about the project is available on [Geoscience Australia's website](#).

The Victorian Gas Program continues to share the science by delivering an engagement program with over 710 engagements

		to date. Presentations on regional geology have been made to 1,400 students in south west Victoria.
2	Develop and promote broad principles that apply to all types of onshore gas resource developments.	UPR SCO approved the UPR's final draft of the <i>Onshore Gas Principles Guide</i> in November 2019. Resources Ministers are expected to consider the Guide at the Resources Roundtable meeting in March 2020.
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 This collaborative action was completed for the 1 January – 30 June 2019 reporting period (see progress report #6).
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 The <i>Land Access for Gas, Petroleum and Mineral Development Activities: Regulatory Review Report</i> prepared by King & Wood Mallesons is being prepared for endorsement through the COAG Energy Council processes. The Gas Resources in Australia: Resources Assessment and Operation Overview 2017 report was published on the COAG Energy Council's website in November 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 reconsider the UPR's plans and/or approach for its future reports.
5	Improve basin-level geological and hydrocarbon understanding in onshore and offshore basins that cross jurisdictional boundaries.	GWG UPR 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. 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. Geoscience Australia and the Geological Survey of Western Australia released the 872 kilometre Kidson Sub-basin seismic survey, extending from Kiwirrkurra to Marble Bar in WA and drilled the GSWA Waukarlyarly 1 stratigraphic well in the previously undrilled Waukarlyarly Embayment in the south-western Canning Basin. The well was drilled to a depth of 2680.5 metres. The core and cuttings are now undergoing extensive

analysis by Geoscience Australia and WA. Results are due to be released during next reporting period.

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). During the reporting period 840 km of seismic data was acquired by Geoscience Australia and the NT extending from the Queensland border to the Beetaloo Sub-basin.

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.

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.

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:

- Rock characterisation. 7175 Otway Basin rock specimens have been sampled, yielding over 300,000 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 nearly complete. The main objective was to geochemically characterise rock samples from 11 legacy petroleum wells and one side-tracked well from the Victorian Otway Basin. Victoria in conjunction with South Australia also included additional wells in South Australia.
- 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 32,000 line kilometres of innovative airborne gravity and gradiometry data, providing new evidence about rock structures within the Otway Basin

Victoria is carrying out comprehensive studies of the Gippsland Basin which extends into both Victorian and the Commonwealth jurisdiction. Studies include:

- Development of a three-dimensional (3D) geological framework model of the Gippsland Basin will provide the

		<p>framework for scientists to understand where rock formations that host gas are present as well as the location and movement of groundwater.</p> <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>
6	Identify geological formations that have the potential to be developed for underground gas storage to improve security of gas supply	<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. Datasets have been compiled from jurisdictions in preparation for map production.</p> <p>The Victorian Gas Program has assessed the potential for further underground gas storage sites. The assessment focused 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 Victorian Department's website as they are completed.</p>

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JURISDICTIONAL ANNOUNCEMENTS – ACTIONS COMPLEMENTARY TO THE GSS

- On 31 July 2019, the Australian Government [announced](#) the 2019 Offshore Petroleum Acreage Release, comprising 64 areas, the largest since 2000. More than 120,000 square kilometres of acreage across five basins in Commonwealth waters off Western Australia, Victoria and the Territory of Ashmore and Cartier Islands will be released for a single round of work program bidding. This is the first release of acreage under a new streamlined system which delivers an annual investment cycle that simplifies bidding, offers greater transparency and responds faster to the market demand. A [transcript](#) of Minister Canavan’s address plus [maps and information on the bidding process](#) for the 2019 acreage release provide further information.
- On 6 August 2019, the [Australian Government announced](#) the following [measures](#) to help secure gas supplies, put downward pressure on prices and encourage new investment in gas supplies:
 - extending the ACCC’s role in monitoring and publishing data on the gas market in Australia until December 2025;
 - bring forward the scheduled review of the Australian Domestic Gas Security Mechanism (ADGSM) to 2019;
 - consider options to establish a prospective national gas reservation scheme;
 - engaging with LNG plants to explore whether some of their processes could be electrified, to free up more gas for domestic use;
 - engaging with the manufacturing sector to explore opportunities to lower gas costs and reduce demand through increased energy efficiency and electrification measures;
 - considering the feasibility of establishing mechanisms to facilitate collective bargaining and improve the negotiating position of large industrial users for gas supply; and
 - seeking COAG Energy Council agreement to task the Australian Energy Market Commission with advising on further steps that could be taken to accelerate the establishment of a more liquid wholesale gas market.
- On 14 August 2019, the [NSW government announced](#) that it has declared a proposed Newcastle Liquefied Natural Gas (LNG) import terminal to be Critical State Significant Infrastructure. EPIK’s Newcastle GasDock project will need to prepare an Environmental Impact Statement for public exhibition and community feedback.
- In August 2019, the Queensland Government completed the field acquisition of the Camooweal 2D Seismic Survey, which is centred on Camooweal, North West Queensland, and will provide information on the frontier Isa Superbasin, South Nicholson and Georgina basins, improving regional understanding and enhancing gas exploration in the region. The survey was carried out during July - August 2019, with the acquisition of three hundred line kilometres of data to 20 seconds two way time (up to 40 kilometres depth). Initial field data indicated the presence of a previously unknown sub-basin southeast of Camooweal. Data processing is being conducted in collaboration with Geoscience Australia to ensure the Camooweal survey data is of the same standard and quality as other regional seismic data available for the region. Final data processing is nearing completion and field data and final processed data will be available for download late Q1 2020.

- On 6 September 2019, the WA government [confirmed](#) that the hydraulic fracturing moratorium on petroleum titles in Western Australia that existed since 26 November 2018 had been lifted. This followed the gazettal of the *Petroleum and Geothermal Energy Resources (Hydraulic Fracturing) Amendment Regulations 2019*. The amendment lifts the moratorium on existing titles and prohibits hydraulic fracturing within two kilometres of gazetted public drinking water source areas, in national parks, towns and the Dampier Peninsula.
- Exploration activities recommenced in the Beetaloo and McArthur Basins in the Northern Territory following NT Government approval of [Environment Management Plans](#) (EMPs) relating to drilling and hydraulic fracturing activities. On 10 October 2019, the Northern Territory Minister for Primary Industries and Resources, Paul Kirby, [acknowledged](#) Origin Energy and Falcon Oil and Gas's successful spudding of the Kyalla 117 well as part of their Beetaloo Exploration Program.
- On 30 October 2019, the Queensland Government [announced](#) the release of exploration land available for competitive tender. The land release covered more than 30 000 km² for petroleum and gas exploration and is the last release of the current Queensland Exploration Program. Of the land released, 10 818 km² has been released with an Australian market supply condition. The tender period opened on 7 November 2019 and closes on 13 February 2020. At the same time, the successful tenders for the previous land release process were announced. Six companies were awarded preferred tenderer status over six areas covering 3 450 km² (1 018 km² of which have the Australian market supply condition).
- In December 2019, the Northern Territory government released the [SREBA Framework Consultation Draft - A guide to undertaking a Strategic Regional Environmental and Baseline Assessment in the Northern Territory](#) document for [public consultation](#). The submission period closes 14 February 2020 and submissions can be made by emailing sreba@nt.gov.au.
- On 13 December 2019, AEMO released the [2019 Western Australia Gas Statement of Opportunities](#) (WA GSOO). In the base scenario, potential gas supply exceeds forecast domestic gas demand over the outlook period [2020-2029] however development of prospective sources is required to maintain supply adequacy.
- On 23 December 2019, the [third Victorian Gas Program progress report](#) was released. This report outlines the geoscientific findings to date in relation to potential onshore conventional gas resources, as well as an assessment of the economic case for further development of underground gas storage around the Port Campbell region.