

Meeting of the Roundtable for O & G Projects, 1st December 2016

27 Nov 16 from: <http://www.nytimes.com/interactive/2016/business/energy-environment/oil-prices.html? r=0>

US\$/barrel crude oil

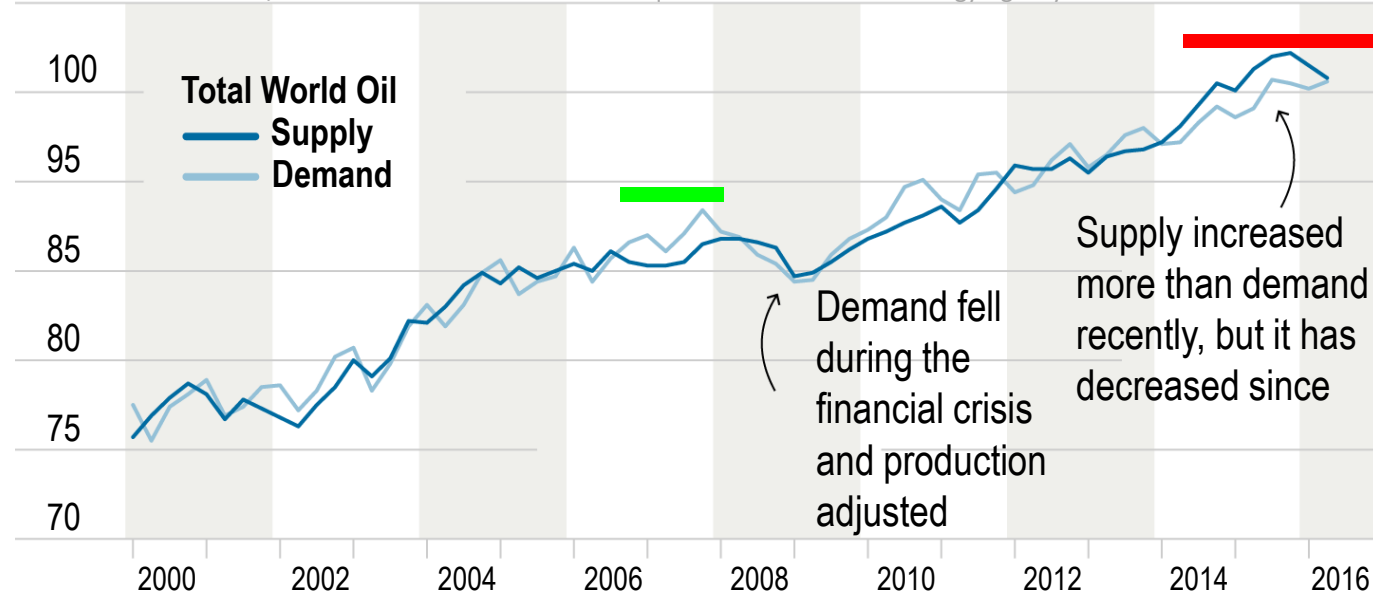


Source: Reuters

The New York Times

million barrels a day

The New York Times | Source: International Energy Agency



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Barry Goldstein

Executive Director

Dept of State Development

Experience and Regulatory Framework in South Australia

1969

Fracture stimulation has been used safely in South Australia since 1969, in both conventional and unconventional wells.



More than 700* wells have been fracture stimulated in the deep sandstone reservoirs of South Australia's Cooper Basin.



No fracture stimulation allowed outside the Cooper Basin without detailed assessment to inform stakeholders ahead of consultation.

45 Years
of fracture stimulation
(fracking) in South Australia

0

Negative impacts identified



Water resources



Soil



Native vegetation and fauna



Landscape and heritage



Air quality



Health and wellbeing of people and enterprise

South Australia has a **BAN** on all oil, gas, geothermal energy and gas (including greenhouse) storage operations **UNTIL** potentially significant risks, risk mitigation strategies and residual risks are established and after **EFFECTIVE CONSULTATION** with potentially affected people, enterprises and organisations.

This is achieved with **STATEMENTS OF ENVIRONMENTAL OBJECTIVES (SEOs)** resolve that operations- and region-specific risks are reduced to as low as reasonably practical and meet community expectations for net outcomes

Thereafter, SEOs are approved and operators give **NOTICE OF ENTRY (NoE)** with sufficient project details to enable stakeholders to make informed decisions whether or not to object to land access.

Every potentially directly affected person, enterprise and organisation is given **NoE** can be a show-stopper with disputes resolved in court. **~15,500 NoEs since 2000 without a single instance of court proceedings**

Vision for Nirvana: Centuries of safe, secure, competitive energy supplies that meet community expectations for net outcomes

To reach the vision

- Simultaneously attain trust with investors and the public
- Gain community consent for (locally) unfamiliar activities **BEFORE IT IS PERSONAL** – before approval sought for on ground activities;
- Potentially affected people and enterprises get timely information to enable informed opinions;
- Convene **roundtables** & deliver **roadmaps** to inform: the **PUBLIC, GOVERNMENTS, AND INVESTORS**, - enable/attract welcomed projects.
Clarify what the future may bring.
- South Australia's 2017/18 *Roadmap for Oil & Gas* will be informed by this Roundtable



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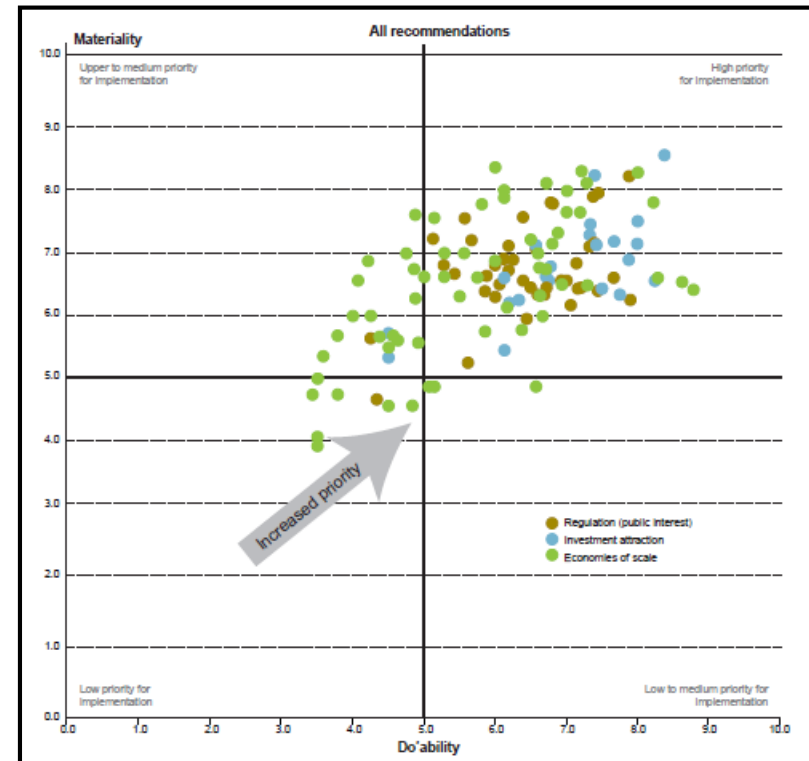


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Priorities to foster sustainable, profitable projects - Feedback from Roundtable / Roadmap for Oil & Gas

Top priorities:

- Legal frameworks provide certainty and simultaneously meet community and investor expectations for outcomes
- Trustworthy, people implement and regulate projects
- Environmental sustainability
- Manage supply-chain risks (people and facilities)
- Bolster understanding of risks, risk management and rewards
- **Since 2014: Given low for longer oil price – lifting productivity is essential**



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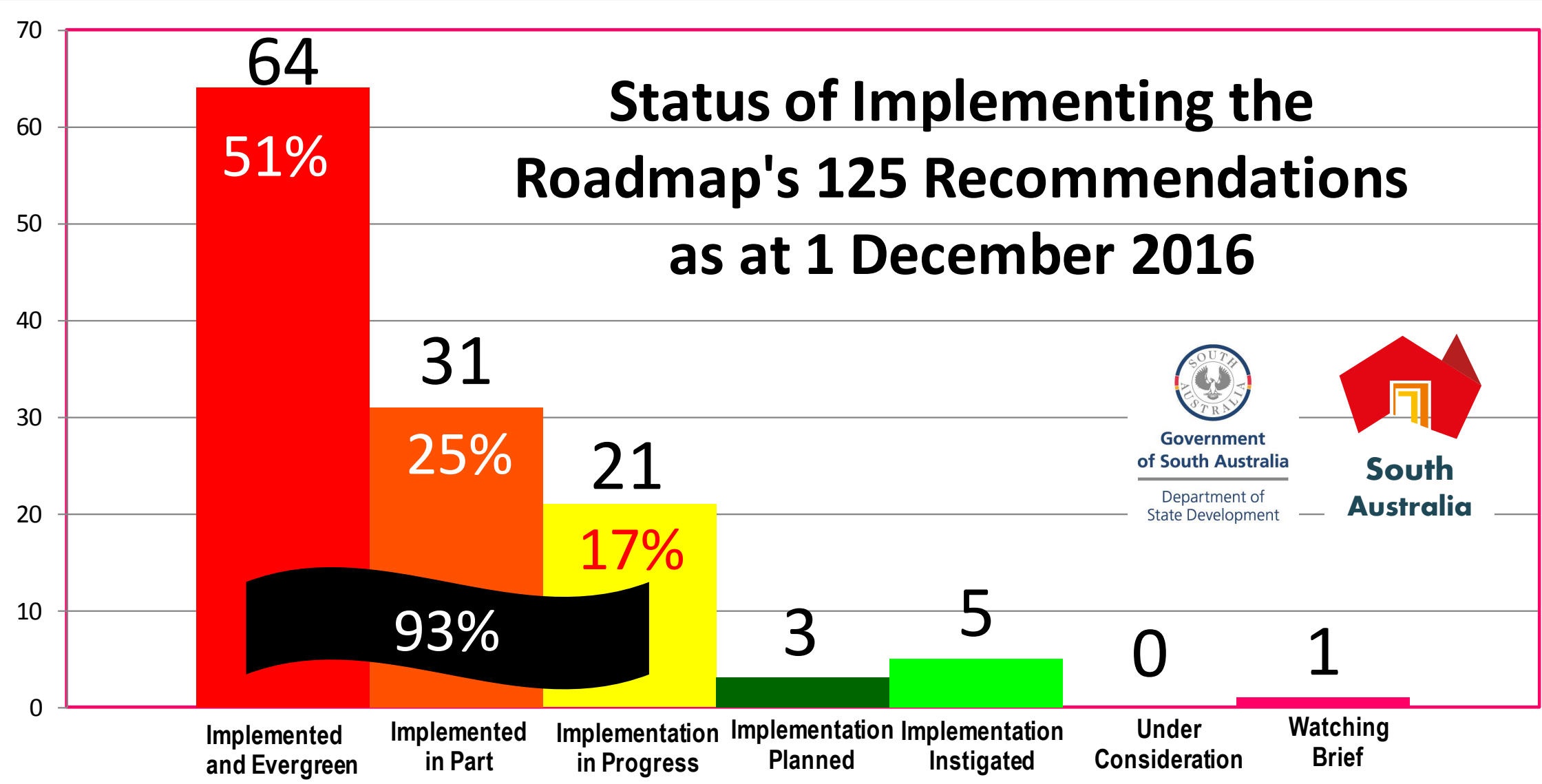
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Implementation of 125 Ranked Recommendations in the Roadmap

Status of Implementing the Roadmap's 125 Recommendations as at 1 December 2016



93%

Recap 8 Working Groups

- #1 Training**
- #2 Supply hubs, roads, rail and airstrips for the Cooper-Eromanga basins**
- #3 Water use in the Cooper-Eromanga basins**
- #4 SA-Qld wharf to well corridors for the Cooper-Eromanga basins**
- #5 Cost-effective, trustworthy GHG detection**
- #6 Suppliers' Forum**
- #7 Use gas for transport and heavy equipment**
- #8 Sharing Information**



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Is it time to revisit Working Group foci with productivity and trust key desired outcomes?

CoAG Gas Supply Strategy (GSS) Implementation –Summary

| | |
|--------------|---|
| GMPIT | Gas Major Projects Implementation Team |
| GWG | Geoscience Working Group |
| LARWG | Land Access for Resources Working Group |
| SCO | Senior Committee of Officials |
| UPR | Upstream Petroleum Resources Working Group |

| | GSS Collaborative Action | Lead | Progress report |
|----------|---|---------------------------------------|---|
| 1 | Pre-competitive programs continue to be developed in consultation with industry and other relevant stakeholders | GWG in cooperation with UPR | Geoscience Australia’s \$100.5m Exploring for the Future Programme (2016-2020) will deliver a suite of new precompetitive geoscience data and knowledge that will improve understanding of mineral, energy and groundwater resources <u>in northern Australia</u> . The programme is being developed in close collaboration with the geological surveys and industry. |
| 2 | Set standards to support: interoperability of data management systems; reduced submissions costs; search tools; and integrated analysis and interpretation. | UPR in cooperation with GWG and LARWG | Initial geoscience data standards have been considered with the Resources Data Initiative (RDI) Project. Proposal: Pilot to enable easy accessibility to all water data from minerals and petroleum resource, resource, water, and environmental databases from all jurisdictions. |

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| 3 | Programs to enhance the characterisation of interactions between petroleum and water resources, to inform project plans and stakeholders' knowledge. | UPR & GWG | SA's research into petroleum operations impacts on water resources, the resilience of cement and well integrity are early, related projects. This will be addressed in today's Roundtable agenda |
| 4 | Develop options for jurisdictions to share industry activity statistical data. To include data that can make the most of environmental baseline and monitoring results. | UPR in cooperation with LARWG | The Resources Data Initiative (RDI) Project has the potential to address the accessibility of environmental data. SA's Roundtable Working Groups, National Energy Resource – Australia (NERA) & the RDI will be relevant to implementation |

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| 5 | Compile coal seam, shale and tight gas reserves and resources, drilling activity, well performance, and production data. | UPR | The SA DSD contracted Core Energy Report - The Cooper-Eromanga Basin Outlook to 2035 has provided some salient data for this action. The report is available at http://petroleum.statedevelopments.sa.gov.au/prospectivity/cooper_basi/core_ener gy_cooper-eromanga_basi_outlook_2035 . This will be addressed in today's Roundtable agenda |
| 6 | Expand the Gas Industry Social and Environmental Research Alliance (GISERA) into NSW and other jurisdictions in the future. | CSIRO in cooperation with jurisdictions | GISERA initiated 4 research projects in NSW (baseline assessment of water, greenhouse gas and socioeconomic issues in the Narrabri region). More to follow. Northern Territory and South Australian next. |

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| 7 | Answers to FAQs for use by all jurisdictions | UPR in cooperation with LARWG and GMPIT | Request for quote documentation issued to market to engage a forum facilitator. All jurisdictions to contribute and secretariat will co-ordinate review. The SA's Roundtable Working Group 8's work program, its FAQs and 'THE FACTS' sheets for fracking and the offshore Bight Basin are aligned |
| 8 | Continuously improve community engagement | LARWG in cooperation with UPR and GMPIT | Request for quote documentation issued to engage supplier to finalise the Better Practice Community Engagement Case Studies Handbook. Interlocks with GSS collaborative action 7. |

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| 9 | Australian standard(s) development to improve productivity for gas operations | UPR | <p>2016 Standards and Conformance Conference, on 9 November 2016.</p> <p>Standards Australia has approved the formation of an Australian Mirror committee under ISO/TC 67 for international oil and gas standards.</p> <p>SA will participate in this mirror committee, and it is aligned with the efforts of the SA Roundtable Working Group 4's (reduce red tape) program</p> |
| 10 | All jurisdictions to share work-flow diagrams to document equivalence of upstream petroleum licensing and activity approval processes across Australia | UPR in cooperation with LARWG | <p>Jurisdictions requested to provide / commence development of work-flow diagrams.</p> <p>Website links to South Australia's work-flow diagrams circulated to UPR members as an example of content expected to be provided for the completion of the first milestone by April 2017. This is an opportunity to implement leading practice regulation and licensing across Australia</p> |

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| 11 | Review of the National Harmonised Regulatory Framework for Natural Gas from Coal Seams (NHRF). | UPR | Engage a consultant to undertake the review and obtain legal advice services to support the review process. |
| 12 | Review of inquiries into hydraulic fracturing (etc) to identify common recommendations for national implementation | UPR | Initial information gathering process completed. Aligned with GSS collaborative action #11. |

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| 13 | Development objectives for the regulation of shale and tight gas developments. | UPR | A draft paper has been developed - 'National Harmonised Regulatory Framework for Petroleum – a Western Australian perspective'. The paper will be presented for Energy Council in December 2016. |
| 14 | Support and promote the National Energy Resources Australia (NERA) and Mining Equipment, Technology and Services (METS) Ignited Growth Centres. | Australian Government – Department of Industry, Innovation and Science | Development of NERA and METS Ignited 10-year sector competitiveness plans progressed in consultation with stakeholders. SA is actively involved in promoting the Growth Centres' projects and progress. |

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