

# ***Session 2 - “What is needed to make the resources economic?”***

## **Unlocking the full potential of SA’s energy resource assets**

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**NERA WORKSHOP 28 APRIL 2016**

[www.petroleum.statedevelopment.sa.gov.au](http://www.petroleum.statedevelopment.sa.gov.au)



# ***“What is needed to make the resources economic?”***

From the perspective of a State Government Department

**Global factors** – oil price is beyond our control

**New technologies** – driven largely by permit operators, service companies and researchers, but ERD has provided funding and in kind support.

**What a State agency can provide:**

**Effective investment and regulatory frameworks** to drive good economic, environmental and social outcomes from petroleum exploration, development and production activity in the State.

Fraser Institute factors that encourage investment:

**National factors** - tax, legal, electricity market, skilled labour availability, industrial relations, socio-economic, environment, security and political stability.

**State factors** – **Better understanding of geology** - provision of data, expert advice and information on State’s prospectivity, efficient and effective regulatory regime, access to land (through regulation - environmental outcomes), access to infrastructure, local fiscal factors and the royalty regime.

# SA Energy Resources Division

Maximise the community's net benefits from the State's ownership of the rights to petroleum and other regulated resources.

- **Investment attraction** - geoscientific research to better understand and promote State's prospectivity and underpin acreage releases (basin modelling, petrophysics, petroleum systems, geothermal provinces, plays, reservoir engineering, generate precompetitive data, PACE) , data value adds e.g. PEPS, SARIG, new analytical data (IT strategy, technology research), customer service.
- **Regulate industry activity** – royalties and fees, onshore drilling, seismic, surveys, pipelines, processing plants, environmental compliance, data compliance and archiving. Regulatory research, environmental research (incl. water), economic modelling etc.
- **Provide advice**

**We apply a diverse array of research to optimise the State's petroleum, geothermal energy and gas storage investment frameworks.**

# Roundtable for Oil & Gas in SA

Designed to inform industry strategies, government policies, and regulations to facilitate oil & gas projects in ways that SA communities welcome.

Roundtable started work in 2010.

Roadmap published 2012.

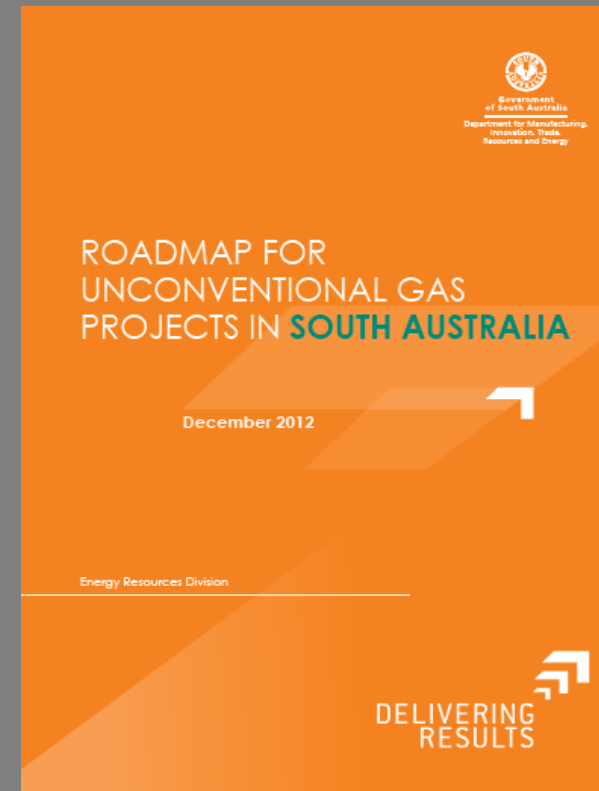
8 working groups addressing recommendations:

- Training hub for deep gas operations;
- Cooper Basin supply hubs, roads & air strips;
- Cooper Basin water use;
- Transport with reduced red tape;
- GHG detection;
- Supplier's forum to boost local content.
- Use gas for transport and heavy equipment
- **Sharing Information**

New edition of Roadmap (for oil & gas in SA) due late 2017, with Roundtable involvement

## Strategic actions:

Demonstrate where the net present value of cooperation exceeds the value of go-it-alone planning / investment – e.g. collaboration and data swaps



# SA's Energy Portfolio

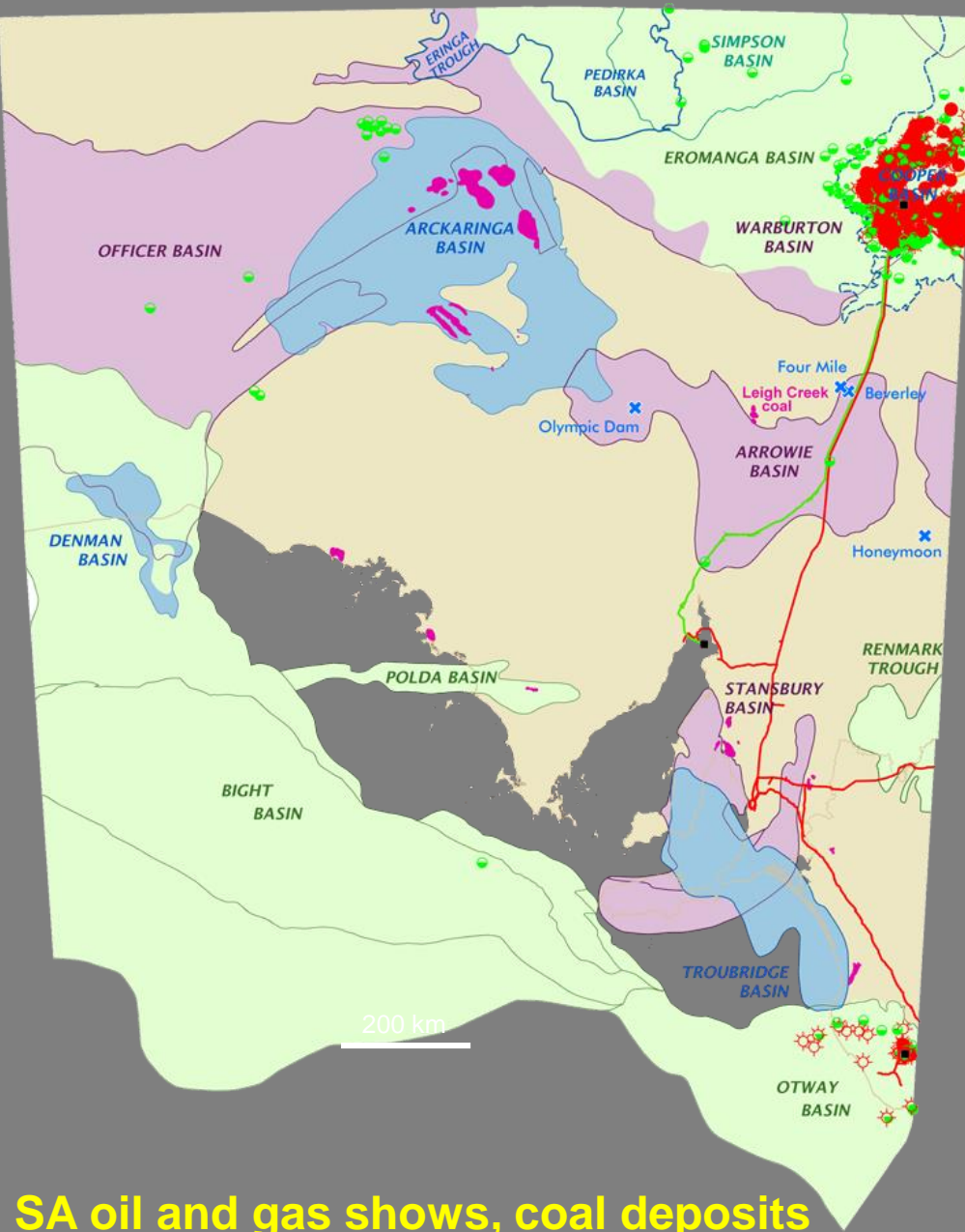
- Basins ranked to prioritise pre-competitive prospectivity research & generation of new datasets, reports and products.
- Critical uncertainties identified and researched for priority basins
- Research priorities also informed by Roadmap recommendations.

## Proven energy plays:

- Uranium
- Cooper-Eromanga & Otway basin oil & gas

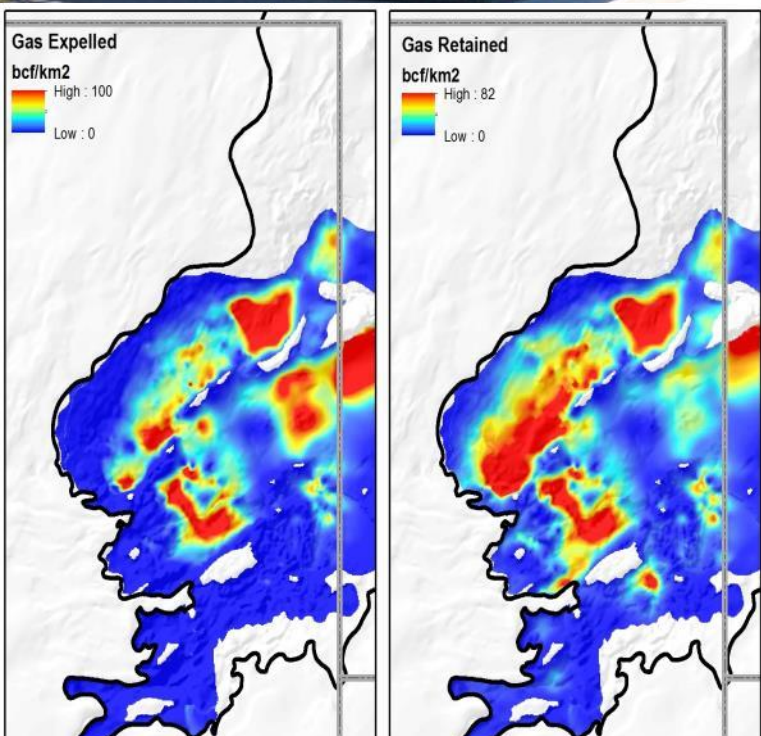
## Prospective plays:

- On and offshore frontier basins, conventional plays yet to be explored
- Shale gas - Cooper and others
- Tight gas/BCG/composite plays - Cooper Basin
- Coal seam gas – focus on deep plays
- Coal mining - power generation, syngas and synfuel
- Geothermal energy

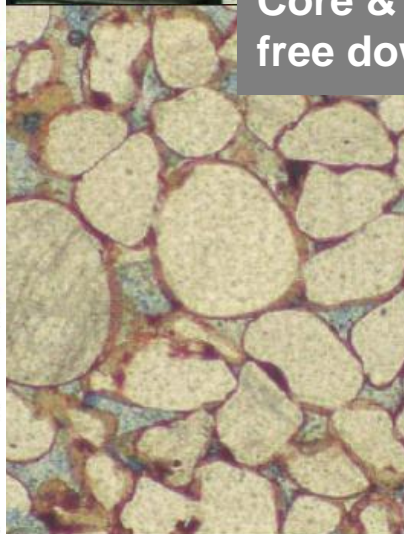


SA oil and gas shows, coal deposits





Dr Lisa Hall, Geoscience Australia, 2015



# Easy access to data for research

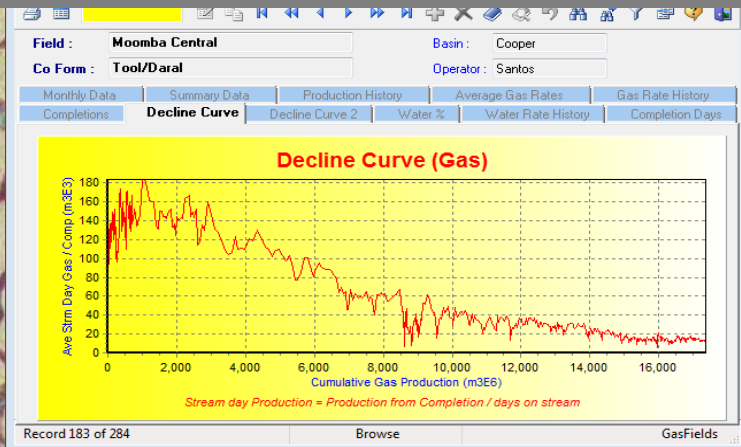
PEPS online – web enabled data this year  
Downloadable WCRs - including scanned mudlogs and composite logs

Digital well logs (field, edit tapes, cased hole), Digital mudlogs, Image logs – free web access to logs via PEPS online in future

Maps, GIS - Cooper isolith, isopach, gas wetness etc.

Core and cuttings available for viewing and sampling (**new Core Library**)

Core & thin section photo databases via free downloads



# South Australia's door is open.

**Rated most attractive petroleum jurisdiction in Australia by Fraser Institute**

**Bight Basin attracting billions in exploration investment**

**Cooper Basin remains Australia's largest onshore oil and gas province**

**A framework placing local companies into a global supply chain**

**Australia's first roadmap for unconventional gas projects**

**Oil and gas roundtable with hundreds of members working to address priorities**



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