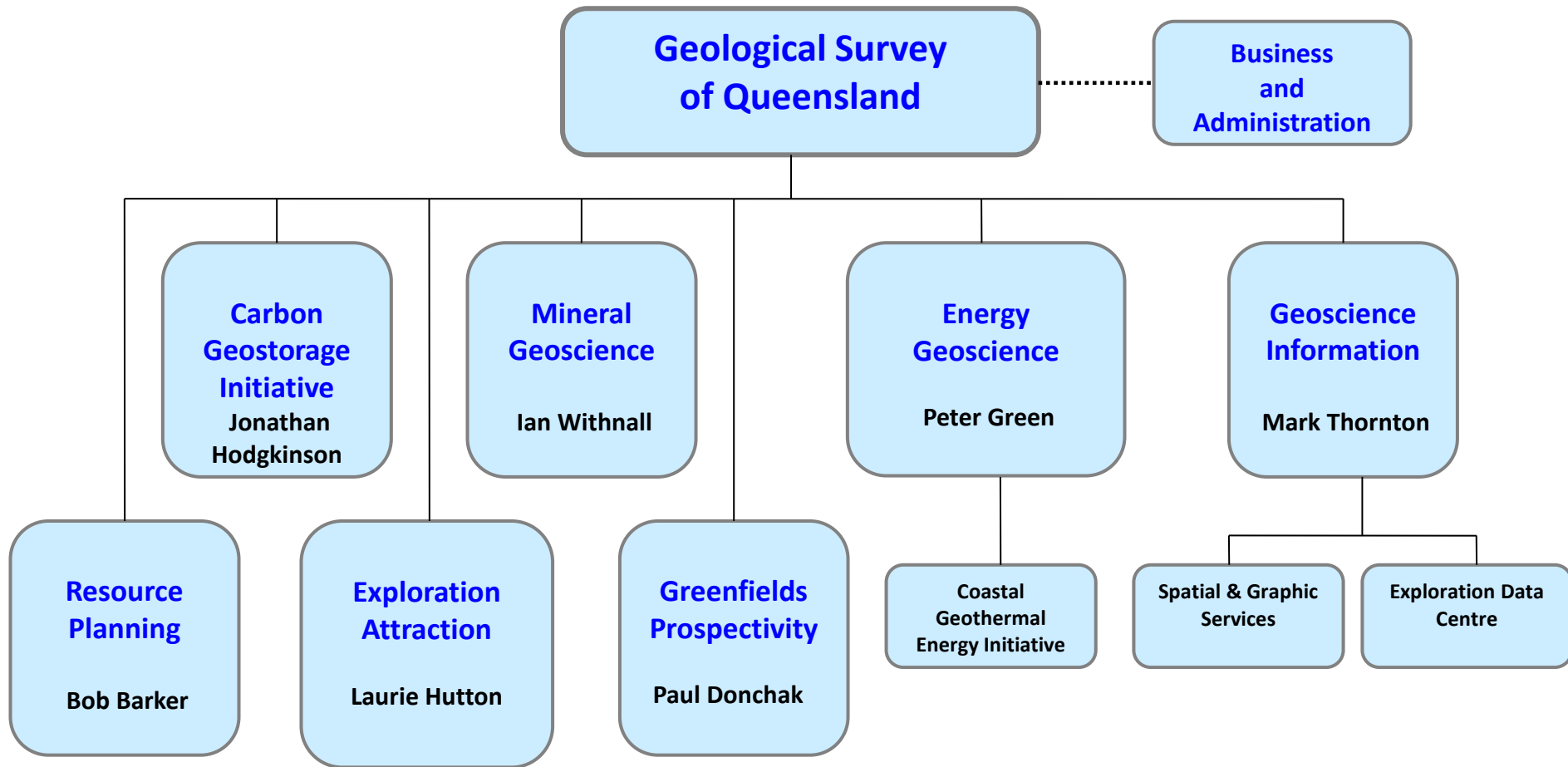




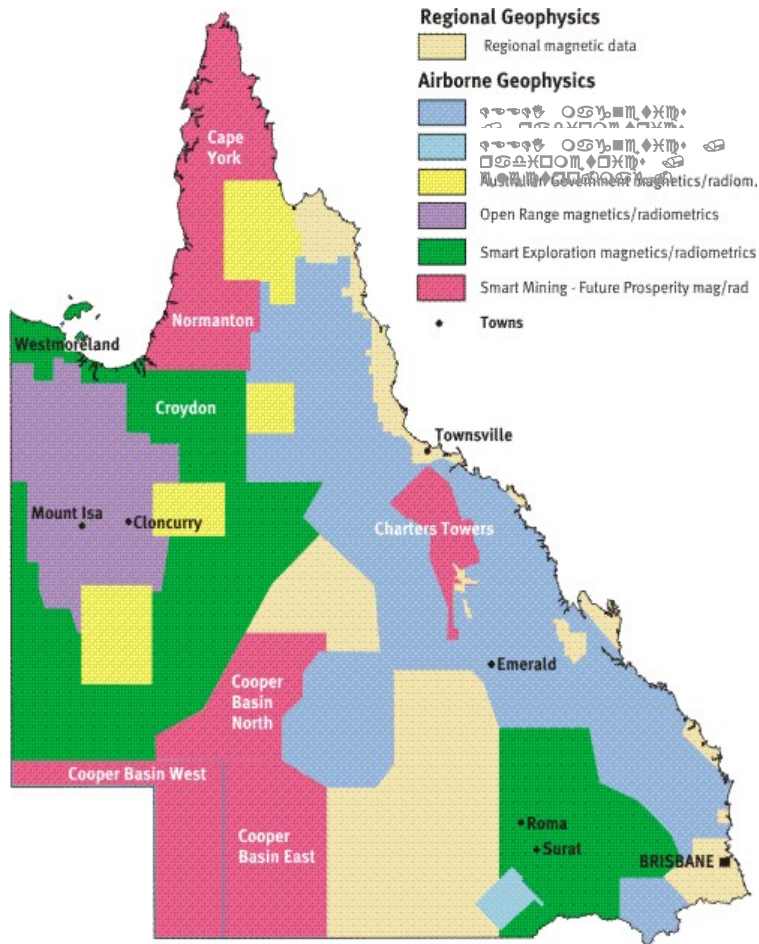
Geological Survey of Queensland

Exploration Initiatives

Brad John
General Manager
Geological Survey of Queensland
Digging Deeper 9, 7 December 2011



Government Support for Exploration



A\$49M – Geoscience data acquisition

A\$18M – Greenfields 2020

A\$10M – Carbon Geostorage (\$50M Program)

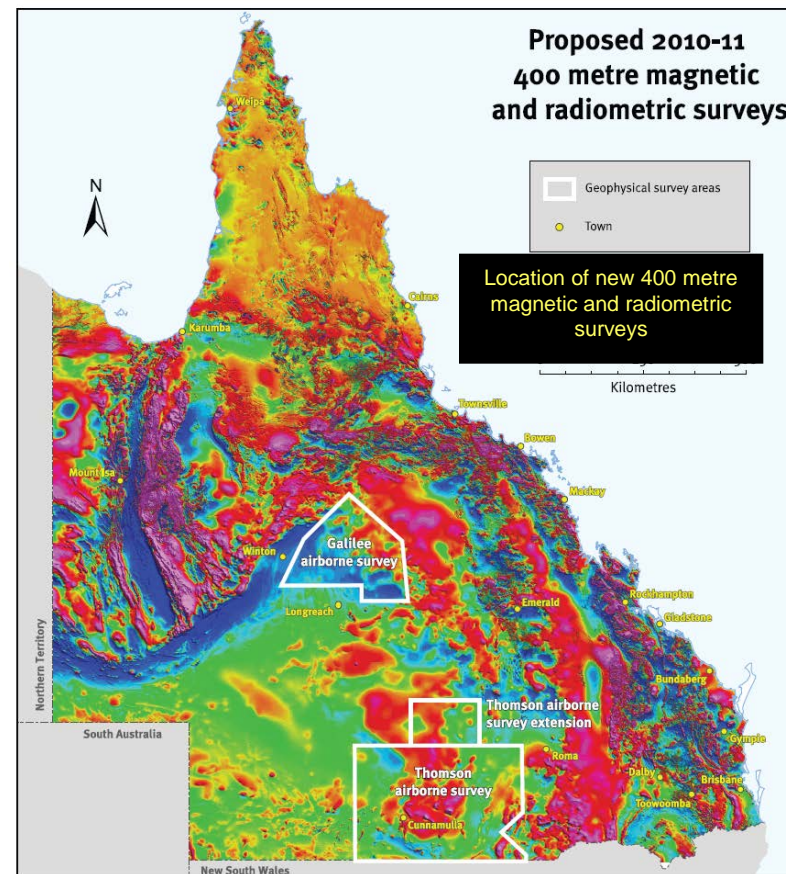
A\$5M – Coastal Geothermal Energy



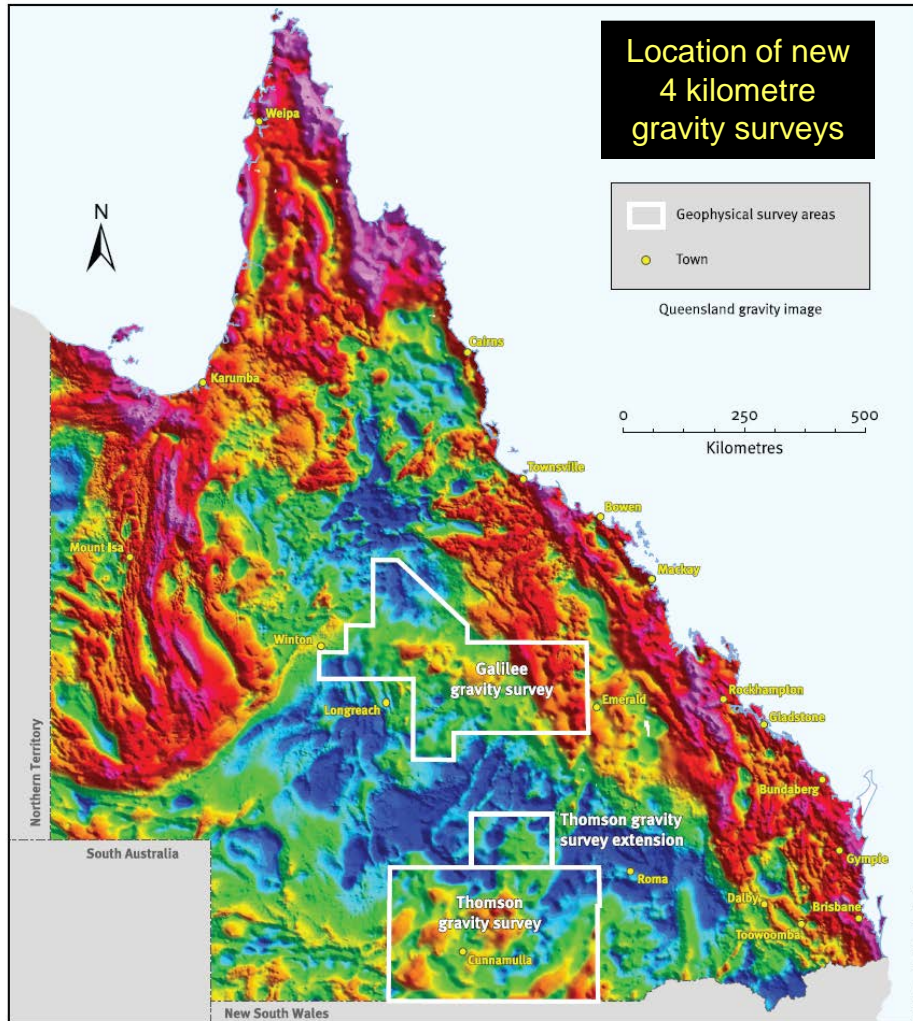
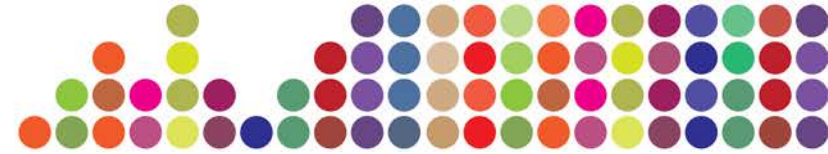
Greenfields Prospectivity

Enhances the understanding of exploration opportunities in under-explored areas and re-appraises mature regions through:

- Collating geoscience information
- Capturing geophysical data
- Interpreting remotely sensed data
- Integrating and analysing data sets
- Carrying out 3D modelling
- Undertaking resource assessments
- Producing syntheses as maps and reports



Geophysical Data Releases



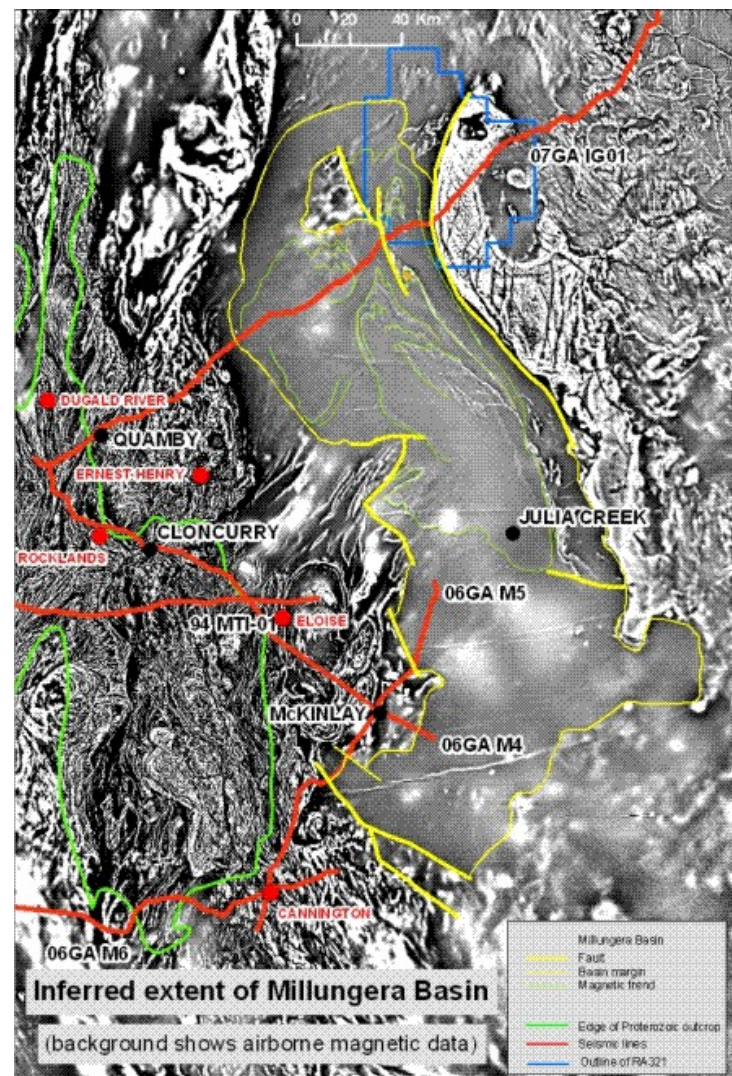
- New gravity surveys of the Thomson and Galilee areas were undertaken in conjunction with Geoscience Australia in 2011
- Surveys were completed in August this year and results now incorporated in the National Gravity Data Base
- Galilee Survey results released in October 2011
- Thomson Survey data released today

Minerals Geoscience



Enhances the understanding of Queensland's geology and mineral resource potential through:

- Collating geoscience information
- Interpreting remotely sensed data
- Carrying out geological mapping and mineral occurrence mapping
- Undertaking geochemical and geochronological studies
- Integrating and analysing data sets
- Producing syntheses as maps and reports



Energy Geoscience



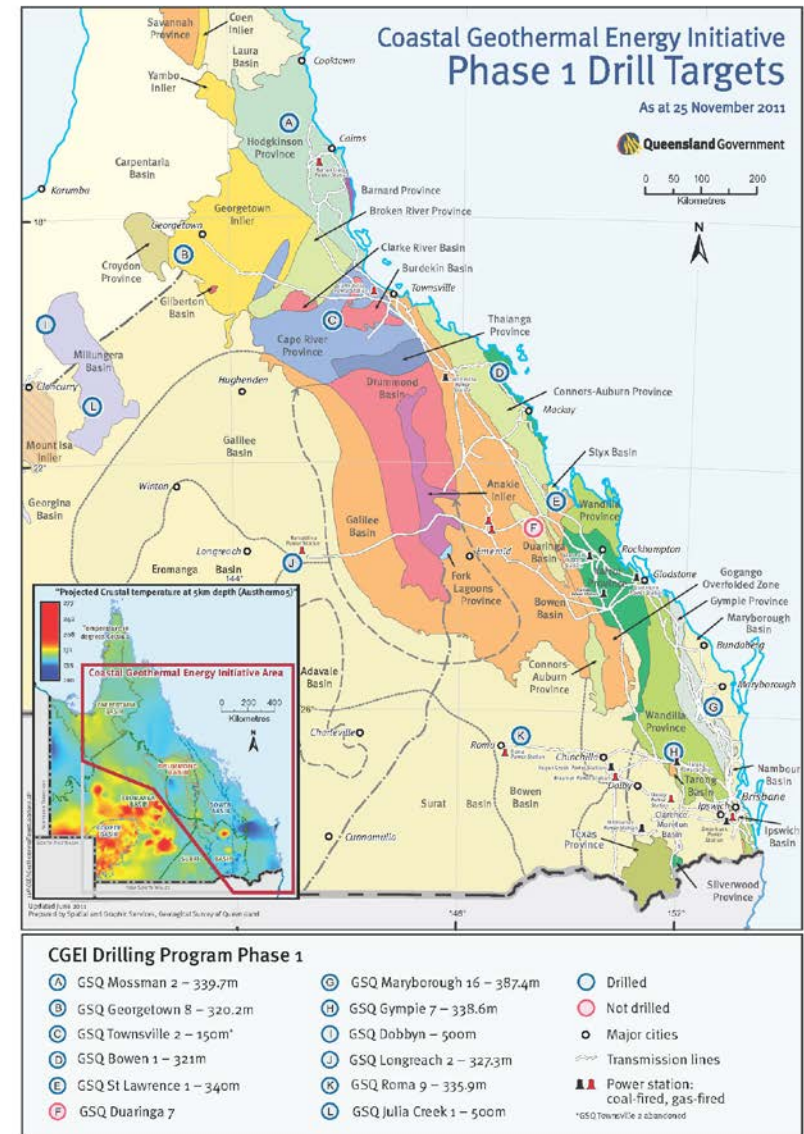
A conveyor belt and coal stockpile at Moorvale. Image courtesy of Macarthur Coal

Enhances the understanding of Queensland's geology, and petroleum, coal and geothermal resource potential through:

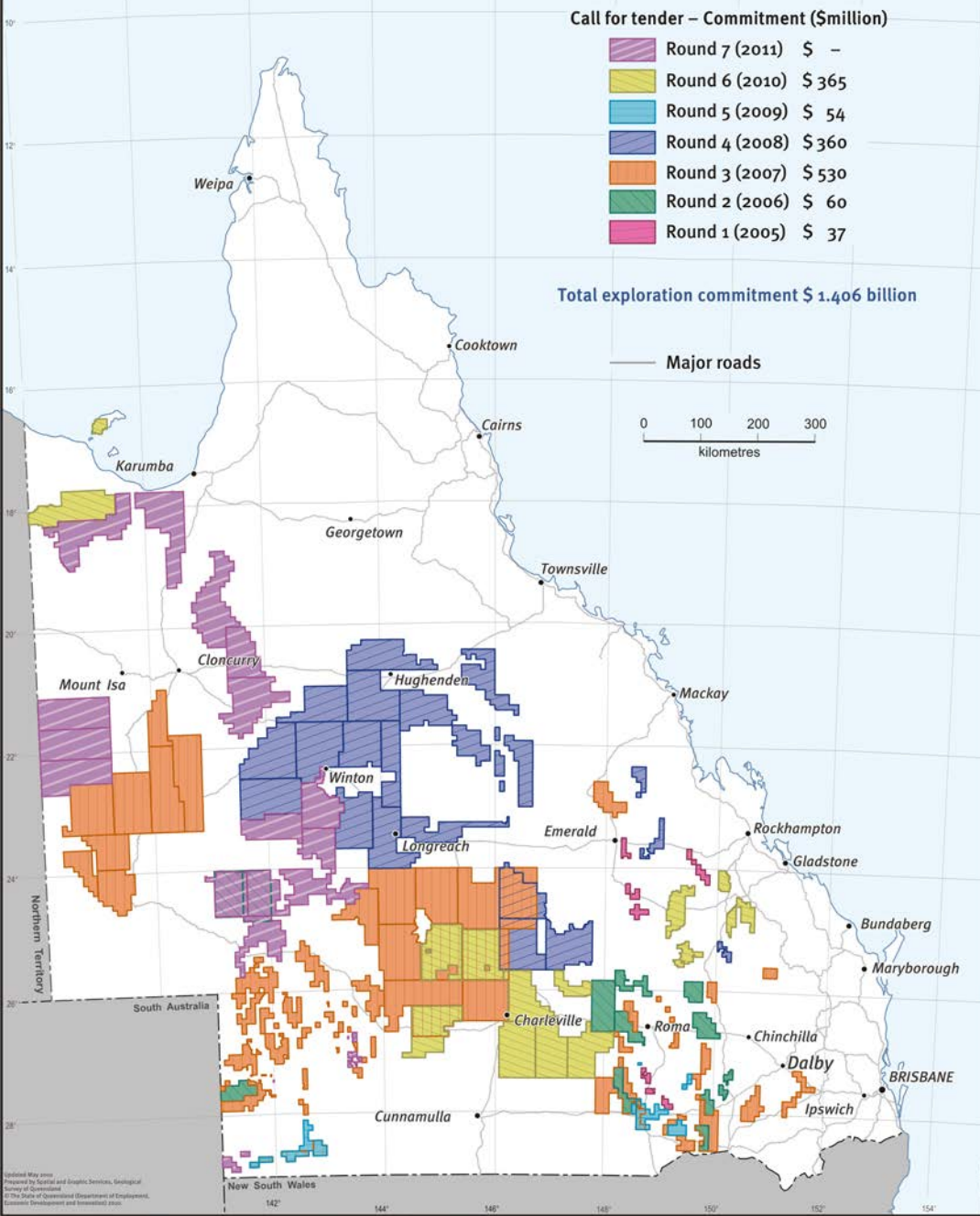
- Collating geoscience information
- Seismic interpretation
- Lithostratigraphic and biostratigraphic interpretation
- Undertaking petroleum system analysis
- Undertaking resource assessments
- Producing syntheses as maps and reports

Coastal Geothermal Energy Initiative - Phase 1

- A ClimateSmart 2050 initiative to investigate additional sources of hot rocks for geothermal energy close to existing transmission lines
- A joint project between the Office of Clean Energy and the Geological Survey of Queensland
- Ten holes now completed and tested a variety of geological settings
- Holes fully cored to ~320m and temperature logged to determine heat flow
- Reporting planned for mid-2012



Historical petroleum tender release areas



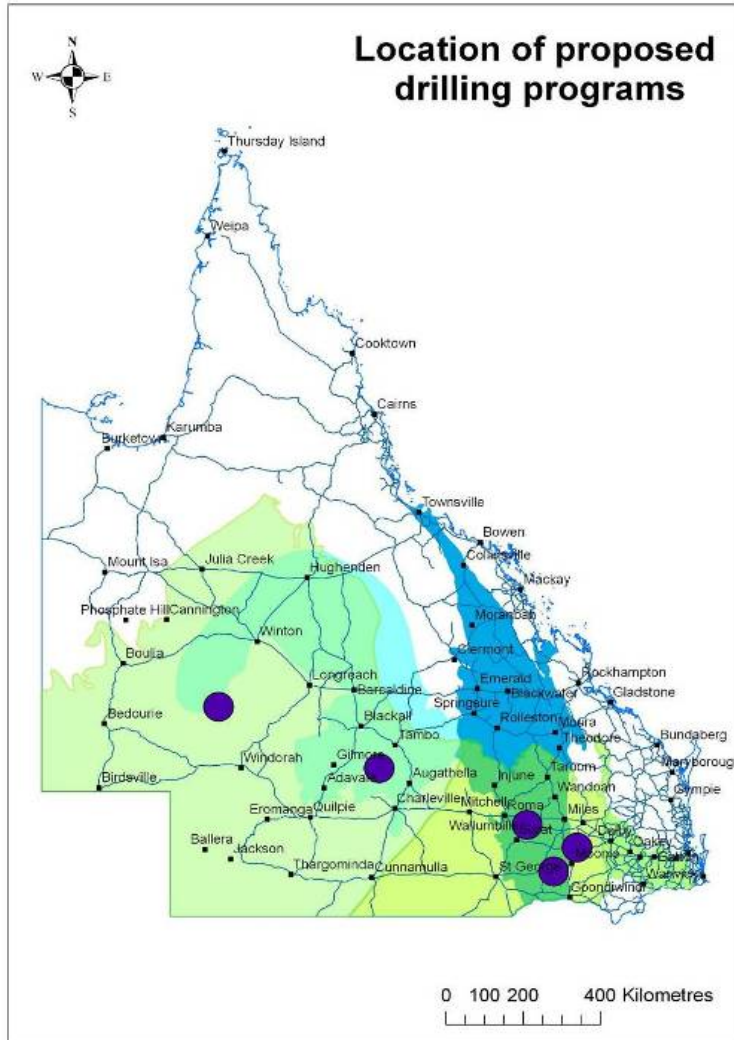
Petroleum Calls for Tenders

- Seven rounds to date
- 114 areas – 415,000 km²
- Advertised internationally
- > \$1.4 billion expenditure bids



Coal seam gas operations south of Dalby. Photo courtesy of Arrow Energy.

Carbon Geostorage Initiative



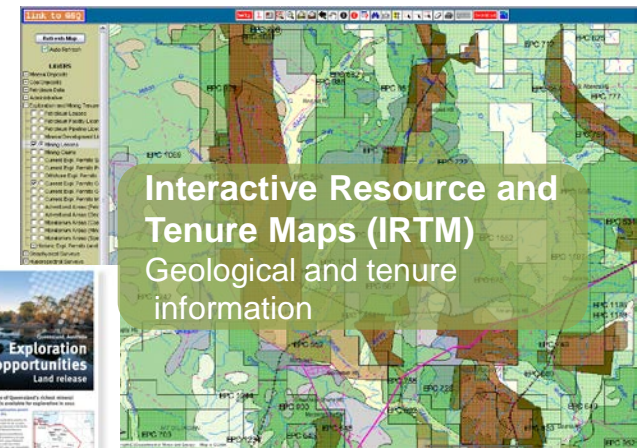
Focuses on the exploration and assessment of potentially suitable sites for geological storage of greenhouse gases through:

- Collating geoscience information
- Geochemical and hydrochemical modelling
- Seismic horizon mapping
- Subsurface fluid flow modelling
- Drilling to assess reservoir properties, seal integrity and containment security
- Producing syntheses as maps and reports

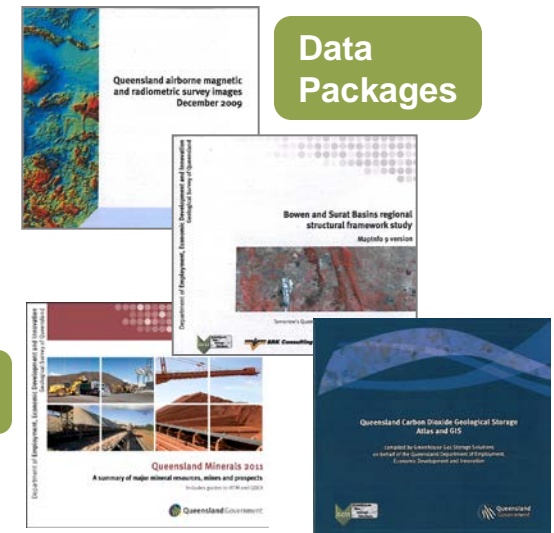
Geoscience Information



Information Brochures



Contact details for local geological and tenure management consultants



Exploration Data Centre



Houses and provides access to a variety of exploration data and support facilities:

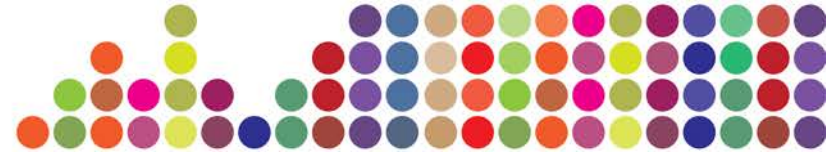
- Drill core and cuttings
- Company exploration reports
- Seismic survey data
- Fieldwork logistical support
- Laboratory services



The Hylogger™ enables the non-destructive logging of mineral composition without sample preparation or removal for the core tray.



Exploration Attraction



Promotes exploration and investment in Queensland's mineral, coal, petroleum and geothermal resources through:

- Information and promotional products
- Domestic and overseas conferences and seminars
- Presentation to delegations and dignitaries
- Queensland Resource Industry Ambassadors
- Mineral land releases
- Collaborative Drilling Grants

Collaborative Drilling Initiative



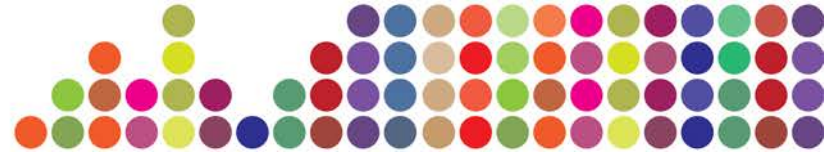
Grants for half the drilling costs up to \$150,000

- Innovative exploration targets
- Targets in under-explored areas
- \$3.52 million paid to date

Round	Applications	Awarded	Status
1	48	22	16 Completed
2	61	26	12 Completed
3	48	20	12 Completed
4	33	11	5 Completed
5	56	21	Current
6	23	9	Current
7	22		Under assessment

As at 18 November 2011

Resource Planning



- Optimises access for exploration and development of the State's geological resources
- Provides resource information and planning advice State agencies, local governments, industry and the community
- Supports land-use planning at all scales as well as site-specific development decisions
- Helps identify and protect extractive material resources

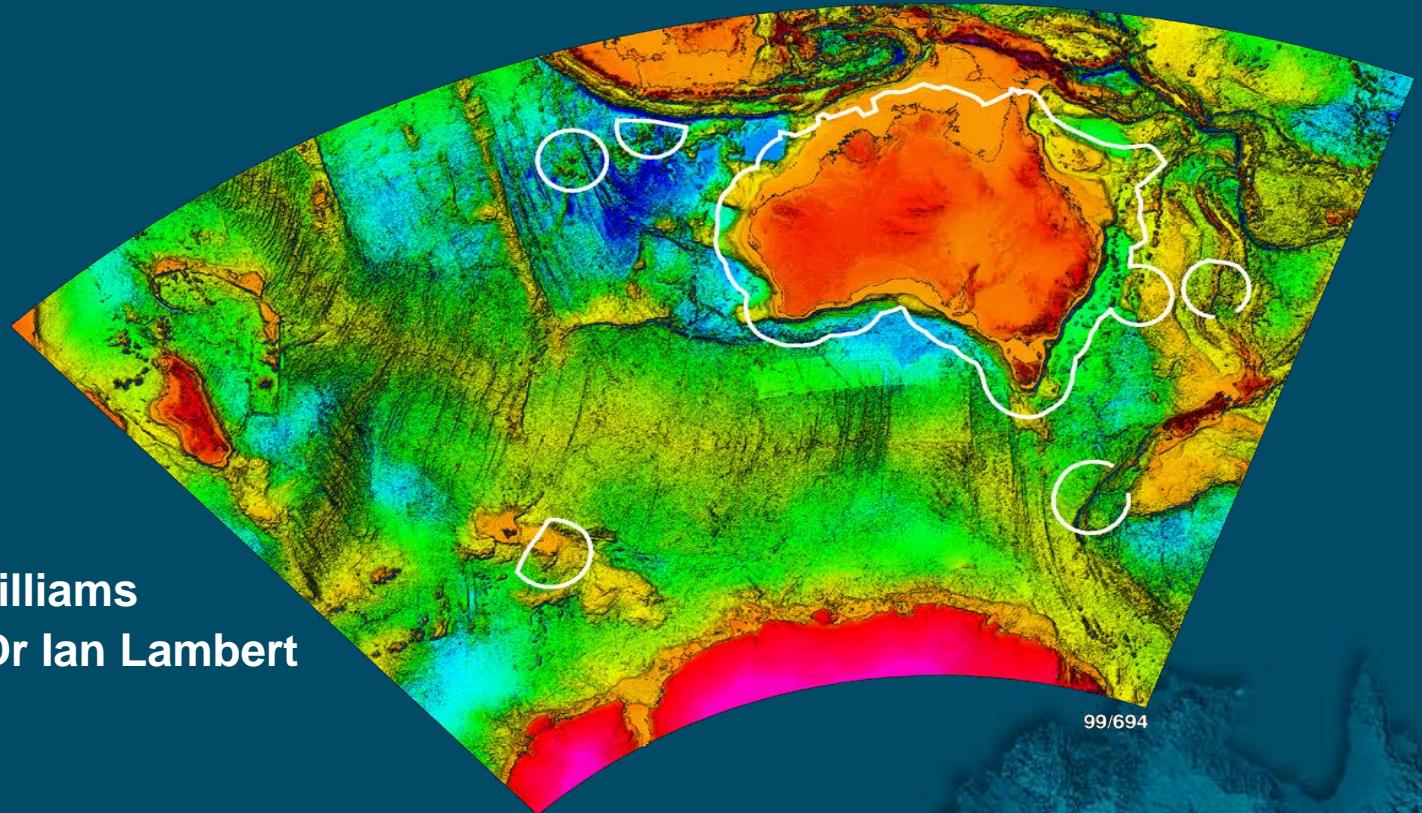


Photo courtesy of Ecoroc Pty Ltd

34th International Geological Congress: AUSTRALIA 2012



Brisbane, 5-10 August, 2012
On behalf of the Oceania region



99/694

President: Dr Neil Williams
Secretary General: Dr Ian Lambert

www.34igc.org

A really important event for the region!

03/153-22
GEOSCIENCE AUSTRALIA



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