



GEODYNAMICS
LIMITED

Geodynamics: Power from the Earth

Three Tickers, Twenty Minutes

*Geoff Ward – CEO and Managing Director
Sydney , June 2013*





IMPORTANT INFORMATION

Disclaimer

Any forward looking information in this presentation has been prepared on the basis of a number of assumptions which may prove to be incorrect and these statements speak only as of the date of this presentation.

This presentation should not be relied upon as a recommendation to buy or sell shares by Geodynamics Limited.

Nothing in this presentation should be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in Geodynamics Limited.

All references to \$ are references to Australian dollars unless otherwise specifically marked.

Competent Persons Statement

The information in this report that relates to Exploration Results, Geothermal Resources or Geothermal Reserves is based on information compiled by Robert Hogarth, who appears on the Register of Practicing Geothermal Professionals maintained by the Australian Geothermal Energy Group Incorporated at the time of the publication of this Report. Robert Hogarth is a full-time employee of the Company.

Robert Hogarth has sufficient experience which is relevant to the style and type of geothermal play under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the Second Edition (2010) of the 'Australian Code for Reporting Exploration Results, Geothermal Resources and Geothermal Reserves'. Robert Hogarth has consented in writing to the inclusion in the report of the matters based on his/her information in the form and context in which it appears.



Geodynamics Limited

- *Australia's largest and most prospective geothermal resource capable of supplying national scale power - Innamincka Deeps Project*
- *Global leader in Enhanced Geothermal Systems industry with successful demonstration of 1MWe Habanero Pilot Plant at Innamincka*
- *Savo Island Project in Solomon Islands is a high quality mid-size project (~20 MW) offering early path to profit in a strong emerging power market*
- *Strong funding position (~\$40 M cash at 30 June 2013) and ongoing support from ARENA through a \$90 m REDP grant*
- *Strong team with extensive geothermal project development experience capable of effectively delivering projects*

ASX Code:	GDY
Market capitalisation:	A\$40.65 m as at May 2013
Number of shareholders:	~16,200
Substantial shareholders:	
The Sentient Group	7.45%
Sunsuper Pty Ltd	7.38%
The Tata Power Company Limited	7.23%





Team and Capability

Geodynamics has capability to effectively develop our portfolio of geothermal projects; the successful commissioning of our 1 MWe Habanero Pilot Plant demonstrates ability to meet key milestones and continues recent record of successful field programs in Cooper Basin and Solomon Islands.



Keith Spence

CHAIRMAN

Mr Spence is Chairman of Geodynamics and is former COO of Woodside Energy. He brings 30 years plus of Oil and Gas development experience to the Company. Mr Spence is Chairman of Clough Limited, a Non-Executive Director of Oil Search Limited and Verve Energy, and Chairman of National Offshore Petroleum Safety and Environmental Management Authority. Mr Spence has served on numerous advisory bodies covering the energy and skills training areas for State and Commonwealth Government



Geoff Ward

MANAGING DIRECTOR & CEO

Mr Ward has over 20 years experience in energy and resources sectors, including 15 years experience in oil and gas industry with Mobil Corporation and Woodside Energy covering senior corporate roles, development of major capital projects and energy markets. Former Director of Azure Capital, an independent corporate advisory firm offering corporate finance and M&A services to companies in the resources and engineering industry. Member of the expert reference panel advising Commonwealth Government on the 2012 Energy White Paper.

Technical Capability:

- *Global leader with most deep hole 250°C geothermal drilling experience*
- *Internal expertise in Geothermal drilling (Team of 6), Geosciences, reservoir analysis and management (Team of 3), Power Engineering (Team of 3), Project and Joint Venture management, and Procurement/logistics*
- *Established relationships with industry and technology partners such as Weatherford Drilling International, Sinclair Knight Merz (SKM), Baker Hughes, Tenaris, Halliburton*



Geothermal Energy

Geothermal has attractive characteristics that offer long term energy security, sustainability and affordability.

- *Low emissions with lowest carbon footprint of available renewable energy technologies*
- *Large resource base capable of supplying national scale power for many decades*
- *Reliable constant power, available 24 hours a day 365 days a year*
- *Reduces dependence on fossil fuels and exposure to rising fossil fuel prices and resource scarcity*



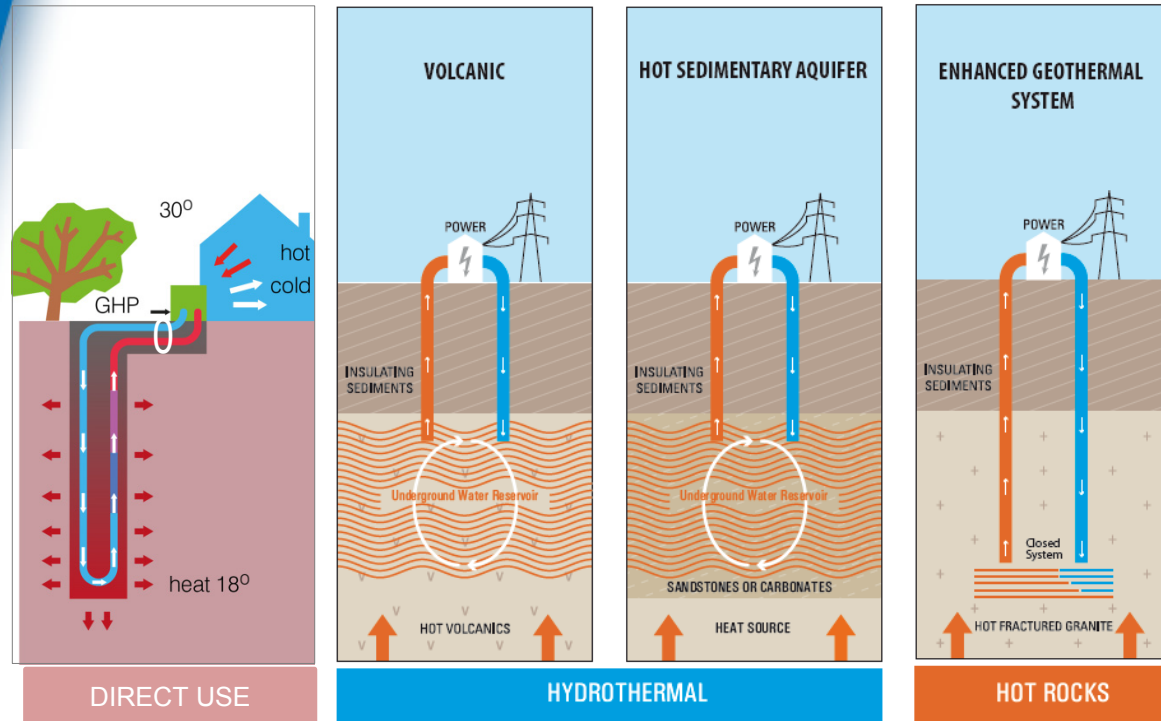


How does geothermal work?

A geothermal project requires:

- A production well to extract hot water from the resource
- Extraction of energy from the hot water for electricity generation
- An injection well so water can be pumped back into the resource, keeping the system in balance
- For the system to work there needs to be a flow path between the injection well(s) and the production well(s)

Geodynamics' portfolio contains both volcanic and enhanced geothermal system projects

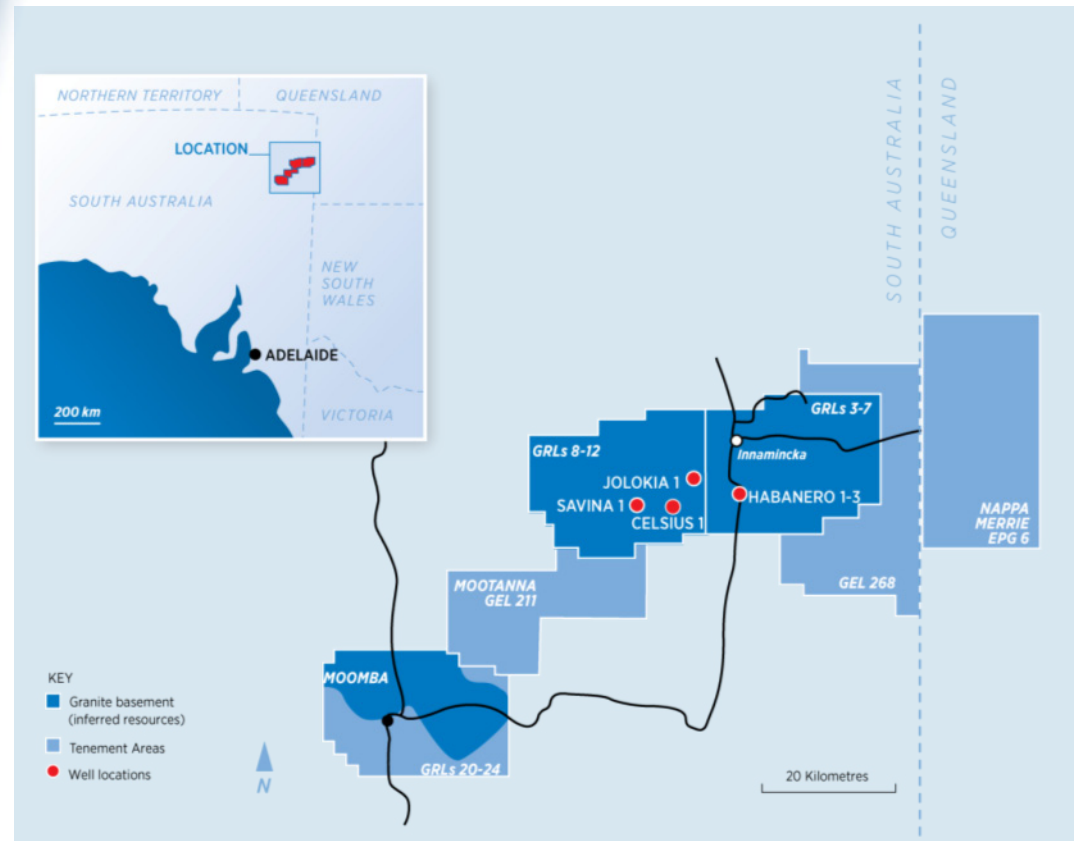




Innamincka Deep

- ~1,200 km² of high heat producing granite in Cooper Basin tenements
- High temperatures of ~240°C at 4,000 m and ~270°C at 4,900 m
- Demonstrated highly productive geothermal system at Habanero ~10 km from Innamincka with flow >40 kg/s
- Potential to supply gigawatt scale over long term

The Innamincka granite resource alone has the potential to make a material contribution to Australia's long term energy supply.

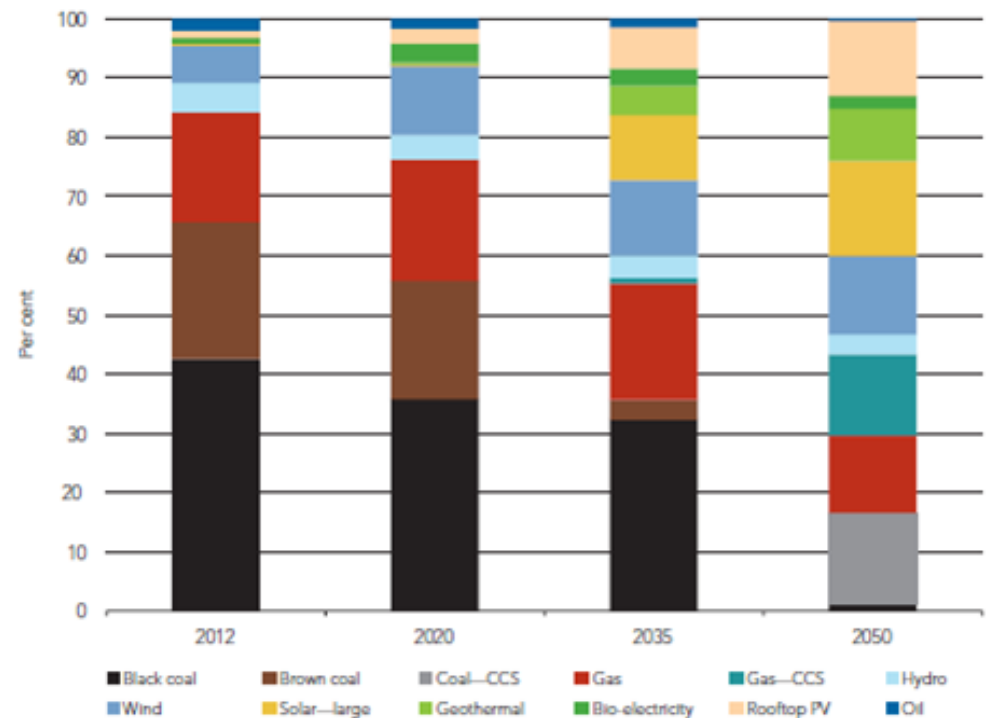




Australia's Energy Future

Long-term Treasury modelling indicates geothermal has the potential to supply 10 – 20 % of Australia's energy needs

Figure 6.1: Electricity generation technology shares to 2050



Source: BREE (2012d).



Habanero Project

Over the past 12 months Geodynamics has achieved significant progress in its Cooper Basin EGS project culminating in the commissioning of the 1MWe Pilot Plant in April.

- Safe drilling of Habanero 4 to 4,204 m and completion of first reverse cementing operation in Australasia
- First open flow tests achieved rates of ~38 kg/s
- Indications of >40 kg/s \Rightarrow Much higher than previous wells flow tests of 25-30 kg/s
- Temperature of 241°C at 4,130m depth; consistent with 220°C + at surface during operations
- Major stimulation resulted in >24,000 seismic events with maximum magnitude of $M_L 3.0$
- Stimulation results indicate increased permeability and potential for higher closed loop flow than previously modelled
- Pilot Plant trial in progress due for completion in August





Habanero 4 Test Program



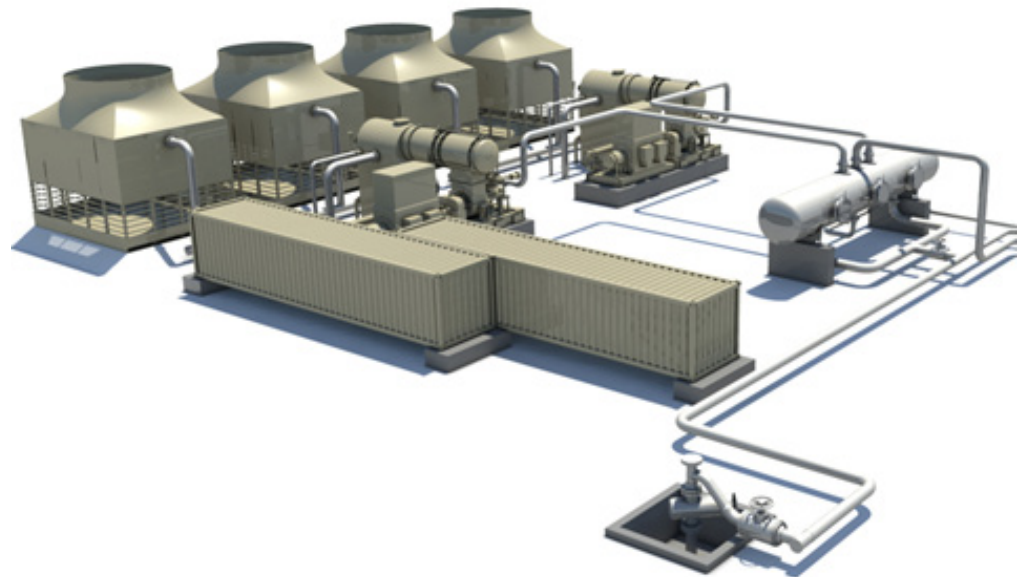
VIDEO CLIP: *Steam flow at Habanero 4*



Habanero Power Station

- 6 well development in established Habanero reservoir
- Lower drilling costs through improved design and improvements identified in Habanero-4 well
- Modular power generation units with proven design
- Growing local customer base:
 - Moomba Gas Plant (Santos)
 - future shale gas producers
- Development time ~ 3 years
- Funding discussions with ARENA

An initial 5 - 10 MWe power station selling to Cooper Basin gas producers would be the first large scale geothermal operation in Australia



Modular well-head generation system
Source: Green Energy Group



What makes a successful geothermal project?

There are a range of market opportunities where geothermal is highly cost competitive and its attractive characteristics are maximised.

Attractive project and market characteristics:

- *High temperature, low cost resource*
- *High local tariff and lack of competition from local gas or coal resources*
- *Growing power demand and shortage of installed generation capacity*
- *Strong regulatory support through renewable generation targets or feed-in-tariffs*
- *Geothermal is particularly attractive as a replacement for high cost imported fuels in remote or island markets*





Savo Island Geothermal Power Project

The project aims to deliver lower end user prices, improved reliability, displacement of diesel consumption and reduced CO₂ emissions, whilst providing an attractive return to investors.

Solomon Islands project characteristics:

- *Savo Island – indications of high temperatures in excess of 260°C at shallow depths*
- *Honiara is currently a high cost diesel market with generated power costing ~A\$0.80 per kWh*
- *Honiara has an average demand of ~8.5MW and demand is rapidly growing*
- *Gold Ridge Mine located 25 km from Honiara uses an additional ~12MW of power - also diesel supplied*
- *Positive engagement with Solomon Islands Government and Electricity Authority indicates strong appetite to develop geothermal project*
- *Strong local support for development of alternate energy supply to replace imported diesel fuel*



Savo Project Summary

Exploration drilling is planned for 2014 to prove a geothermal reserve capable of supporting an initial 20MW project

- *Geodynamics farmed-in to the Savo JV with Kentor Energy in November 2012*
- *Farm-in Stage One completed in April with the finalisation of Initial Resource Assessment and Scoping Study*
- *Inferred geothermal resource of 269 PJ_{th} estimated to be capable of supplying 30 MWe of generation capacity, sufficient to supply Honiara and the nearby Gold Ridge Mine*
- *Environmental and Social Impact Study, engagement with local landowners and negotiations with Solomon Island Electricity Authority have commenced*

Target for electricity production in 2017





Financial Management

Careful financial management has maximised available funds for investment at Habanero, Savo Island and acquisition of further projects.

- *Sale of Rig 100 and 200 assets raised a total of \$26.5 million (GDY share)*
- *Draw down of REDP funding \$20.4 million as at February 2012; anticipate additional \$12 million over completion of 1 MWe Pilot Plant activities.*
- *Undrawn REDP funding of \$57.6 million following completion of 1 MWe Habanero Pilot Plant*
- *R&D Tax Incentive refund claim of \$22.1 million received in April*
- *Internal cost control program; smaller team, lower corporate costs has yielded cost savings >\$10 m per annum*

***Estimated cash in bank of ~\$40 million
at 30 June 2013***



Investment highlights

As Australia's leading geothermal exploration company, Geodynamics has the technical expertise and funds to progress our Cooper Basin and Savo Island projects to the next stage.

- Australia's largest and most advanced geothermal resource with potential to supply gigawatt scale power over 30+ years*
- Successful demonstration of resource potential at 1MWe Habanero Pilot Plant and successful drilling of Habanero-4 well*
- High quality conventional geothermal project at Savo Island offers short term path to profitability in high cost power market*
- Technical expertise and capability to progress Cooper Basin and Solomon Islands projects*
- Strong funding position to deliver forward program*
- Portfolio of additional opportunities under consideration, driven by recent track record, strong technical and financial capability*