

HY-Range Project Prospective Resources

Natural Hydrogen and Helium in South Australia

Disclaimer, legal notice and competent person statement

Disclaimer

This presentation contains projections and forward-looking information that involve various risks and uncertainties regarding future events. Such forward-looking information can include without limitation statements based on current expectations involving a number of risks and uncertainties and are not guarantees of future performance of the Company. These risks and uncertainties could cause actual results and the Company's plans and objectives to differ materially from those expressed in the forward-looking information. Actual results and future events could differ materially from anticipated in such information. These and all subsequent written and oral forward-looking information are based on estimates and opinions of management on the dates they are made and expressly qualified in their entirety by this notice. The Company assumes no obligation to update forward-looking information should circumstances or management's estimates or opinions change.

Competent Person Statement

The information in this report that relates to exploration results and exploration targets is based on information compiled by Andrew Hume, who holds a BSc in geology (Hons). Mr Hume is an employee of Thor Energy PLC. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Andrew Hume consents to the inclusion in the report of the matters based on his formation in the form and context in which it appears.

Glossary

Mscf	Thousand standard cubic feet
MMcf	Million standard cubic feet
Bcf	Billion standard cubic feet
Tcf	Trillion standard cubic feet
t	Metric tonne

Unrisked Recoverable Prospective Resources on RSEL 802

	Hydrogen			Helium		
	1U	2U	3U	1U	2U	3U
RSEL 802 (net)	281	1,071	3,583	25	115	436
less royalty	6	21	72	1	2	9
Go Exploration (net)	275	1,050	3,511	25	113	427
less minority interests	55	208	695	5	22	85
Thor (net) (Bcf)	221	842	2,816	20	90	343
Thor (net) (t)	512,820	1,954,557	6,538,916			

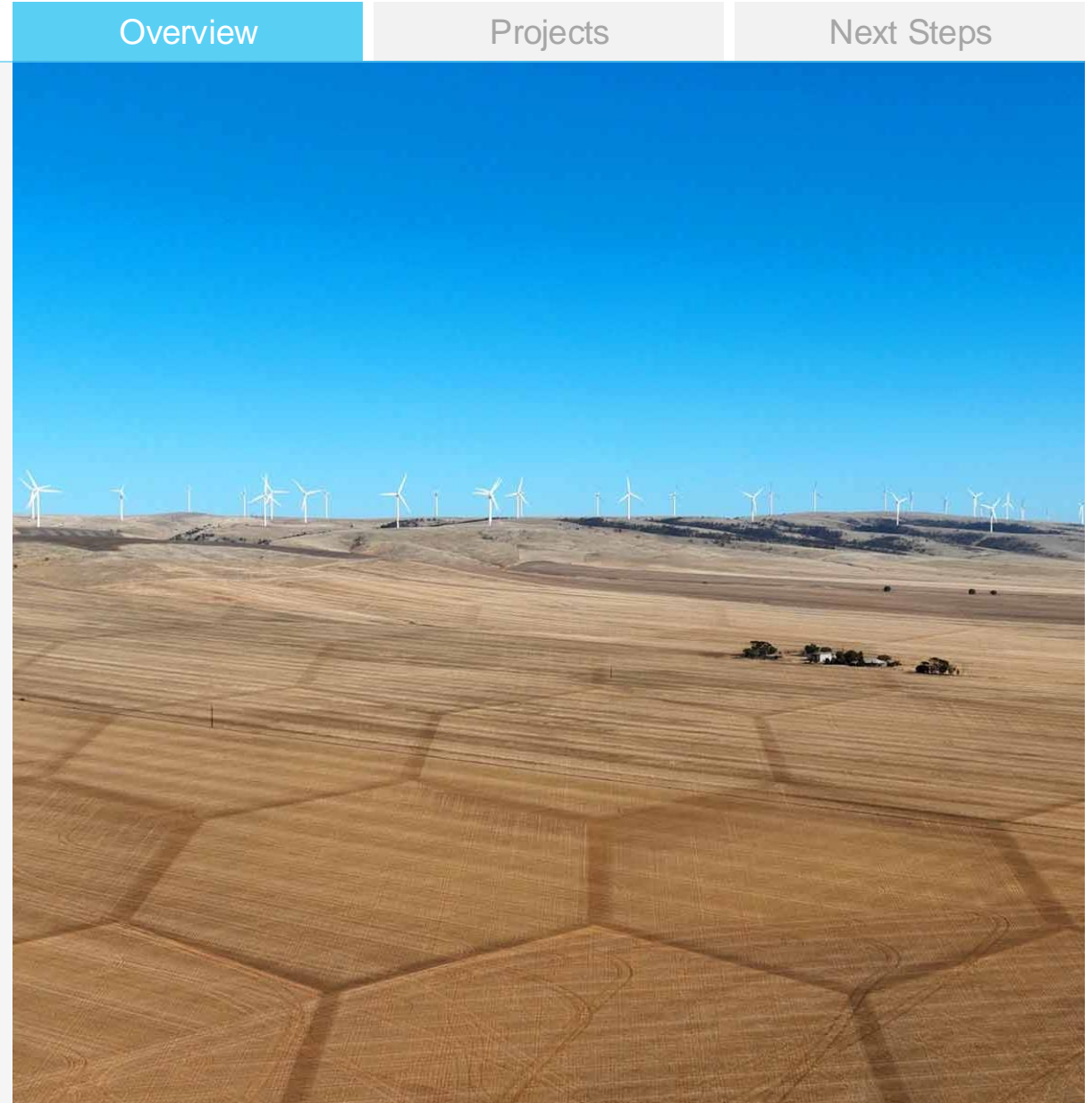
Notes to the table:

1. The estimated quantities of hydrogen and helium that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both a risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially recoverable hydrogen and helium.
2. The natural hydrogen and helium resource estimates have been derived in accordance with the principles of the Petroleum Resources Management System (PRMS). The PRMS specifically applies to petroleum. However, the Oil and Gas Reserves Committee of the Society of Petroleum Engineers (SPE) advised in August 2022 that although the gaseous extraction of natural hydrogen and helium is outside of the scope of the PRMS, the principles can be applied given the similarities in exploration, evaluation and exploitation.
3. The resource estimates are presented on a net entitlements basis and represent Thor's net economic interest in the prospective recoverable hydrogen and helium volumes after deductions for a 2% royalty and minority shareholders interests in Go Exploration Pty Ltd.
4. The prospective resources have been evaluated using probabilistic methods and are presented on an unrisked basis. Totals are calculated using arithmetic summation.
5. Hydrogen mass conversion is 2,321.98 tonnes per billion standard cubic feet (t/Bscf).
6. The estimate of prospective resources in this table are reported as at an evaluation date of 29 March 2025 and are more fully described in the Company's market announcement of 29 March 2025. The Company is not aware of any new information or date that materially affects the information included in that announcement and all the material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

HY-Range Project

Thor Energy plc is an exploration company focusing on natural hydrogen and helium exploration

- Flagship project: Hy-Range, South Australia
- Target resources: hydrogen, helium
- 1 of only 3 granted hydrogen and helium exploration licences in Gawler Craton – Adelaide Geosyncline fairway
- 80.2% owned by Thor Energy
- Excellent access to local hydrogen and power infrastructure
- Government of SA highly supportive of hydrogen and helium exploration activities



Investment Opportunity

THEMATIC

Exposure to industry pivot from manufactured “Green” to Natural Hydrogen, & economically scarce helium

MACRO

Recent significant increase in global investment and exploration activities largely focused on USA & Europe

REGIONAL

Australia commencing its hydrogen journey with a geological and industry bullseye on South Australia

COMPANY

HY-Range is a rare fully granted licence with prime position in South Australia’s hydrogen and helium fairway

POTENTIAL

Huge prospective hydrogen and helium resources independently assessed for HY-Range Project

NEWSFLOW

Fast-track on-ground passive exploration with aim of drilling multiple targets following final well design

TIMING

Early mover advantage, an opportunity to close the gap on USA/European value metrics

Corporate Snapshot

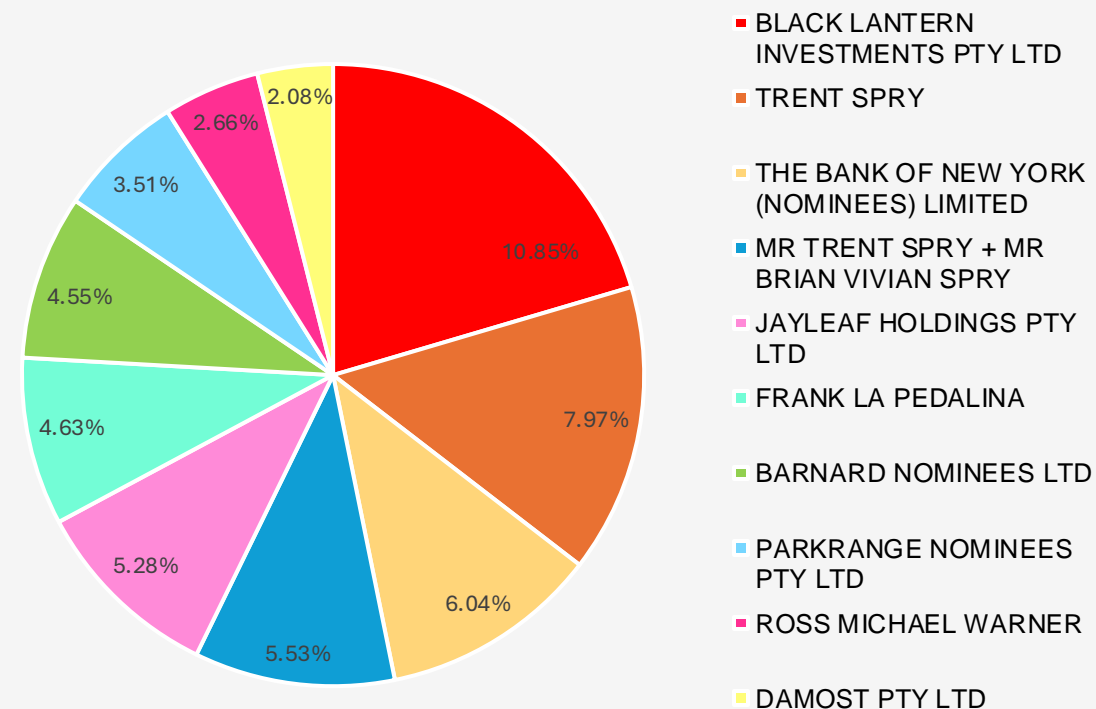
Capital Structure

ASX & AIM Ticker	THR
OTC Ticker	THORF
Share Price price (23.03.25)	1.2c/0.7p
Market Capitalisation	A\$11.7m/£7m
Issued share capital	1,003m
Cash (December '24 Qtr Report)	A\$2.24m/£1.1m
Performance shares	51m
Options (legacy)	148m
Fully Diluted	1,126m

Supportive Shareholder Base

Top 20 – 65.1%	653,523,675
Board & Management	7.7m
Various Ops & Perf. Shares	3c and 5c

Top 10 Shareholders – 53.1%



Thor Energy Team



ANDREW HUME
Managing Director

Andrew has 27 years in Oil and Gas E&P working for Thales, Shell, Murphy, Maersk and TotalEnergies in Australia, Europe, UK and USA.

He has managed identification, maturation, drilling, exploration, appraisal, and development. He has held senior roles leading strategy, projects, programmes, portfolios, assets, and business development.

Andrew holds an MBA and BSc (Hons) Geology.



ALASTAIR CLAYTON
Executive Chairman

Alastair has nearly 30 years in finance with a focus on the mining and exploration industries.

A former Director of Uranium developer ASX100 Extract Resources representing AIM-listed Kalahari Minerals, both of which were sold for ~A\$2.2B IN 2012 Alastair was also a co-founder of ASX-listed Uranium company Bannerman Resources and Universal Coal plc.

Alastair is also currently a Non-Executive Chairman at Metals One plc.



LINCOLN MOORE
Non-Executive Director

Lincoln is highly experienced in establishing and raising finance for mining and agriculture projects.

He is the co-founder and corporate advisor of Firering Minerals plc and Executive Director of Ivory Coast based AIM-quoted, Dekel AgriVision plc.

He was previously Director of Dial Square Investments plc (now Energy Pathways plc) undertaking detailed feasibility for UK hydrogen storage.



TIM ARMSTRONG
Non-Executive Director

Tim is an institutional financial advisor for Prenzler Group and also Non-Executive Directors at Cooper Metals Limited (ASX: CPM).

He previously worked in financial PR in Australia and London, advising numerous private and listed companies in the resource sector on their corporate strategies.

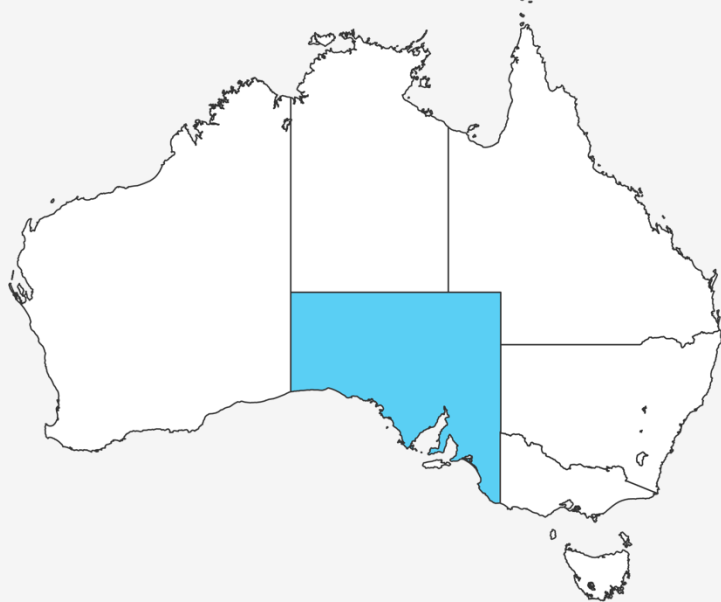
Tim is a former professional cricketer representing NSW, WA and Australia.

Why South Australia?

Exploring for natural hydrogen and helium

HY-Range (RSEL 802) is a world-class hydrogen and helium project in South Australia comprising:

- 1 of only 3 granted hydrogen and helium exploration licenses in Gawler Craton – Adelaide Geosyncline fairway
- A portfolio of 5 other highly prospective licences applications in various stages of grant, offering scope and diversity



Geographic benefits of South Australia

- Greatest concentration of natural hydrogen projects in Australia
- Recent nearby hydrogen and helium tests
- Government of SA supports development with a framework of regulations to abide by
- Local, rapidly growing, industrial demand
- Developing hydrogen export infrastructure



Market Opportunity

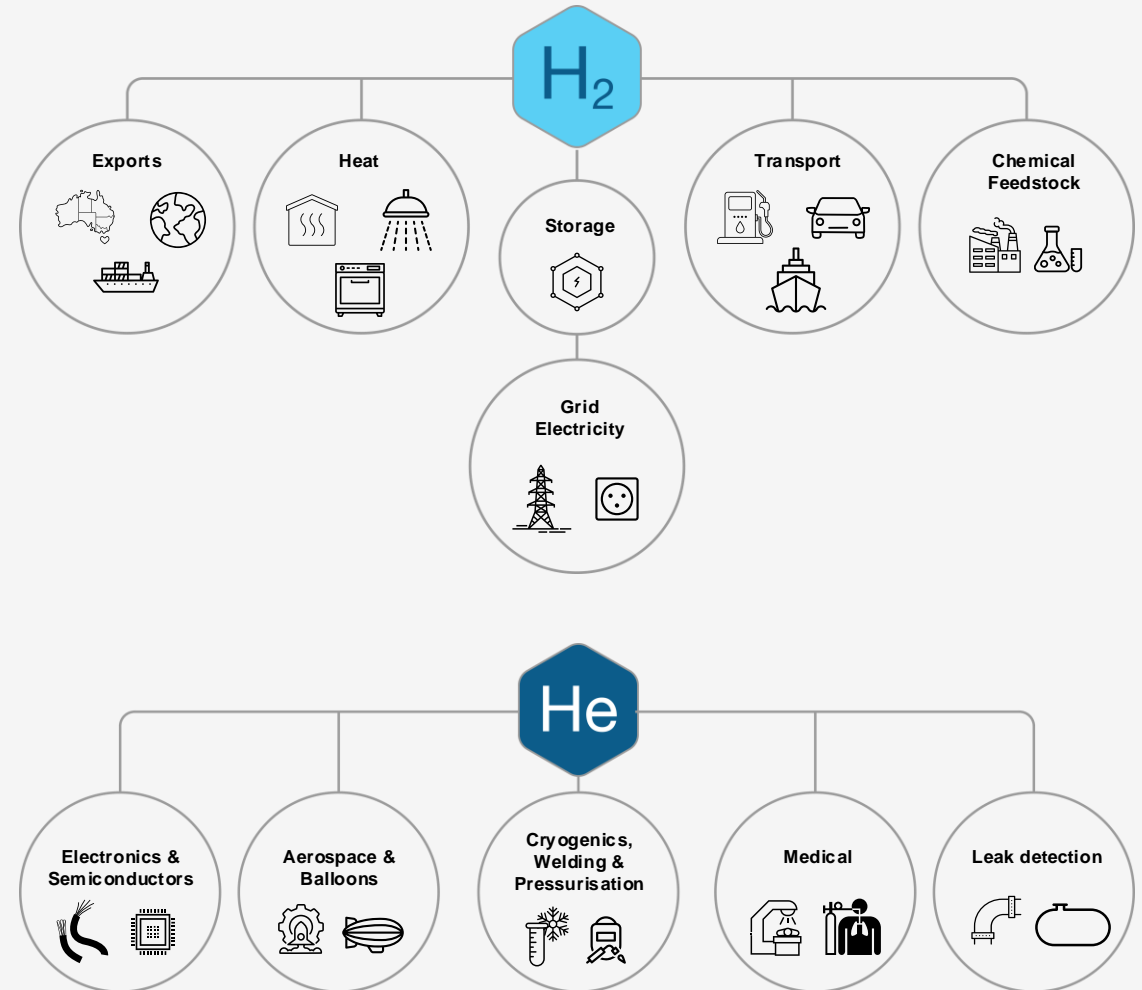
Natural hydrogen:

- Demand projected to reach almost 600 million tonnes pa by 2050*
- No natural hydrogen and little large-scale hydrogen production in Australia
- Market diversity: Clean energy production, ammonia production, steel manufacturing, green-steel, energy storage medium, natural gas blending, and grid power

Helium:

- There is currently high demand and no Australian helium production
- The Australian Government has strategic intent to secure native helium production, and with growing global demand, there is significant domestic and international demand
- Helium Uses: MRI machines, cooling systems, fibre optic cables, weather balloons, hard drives, modular helium reactors

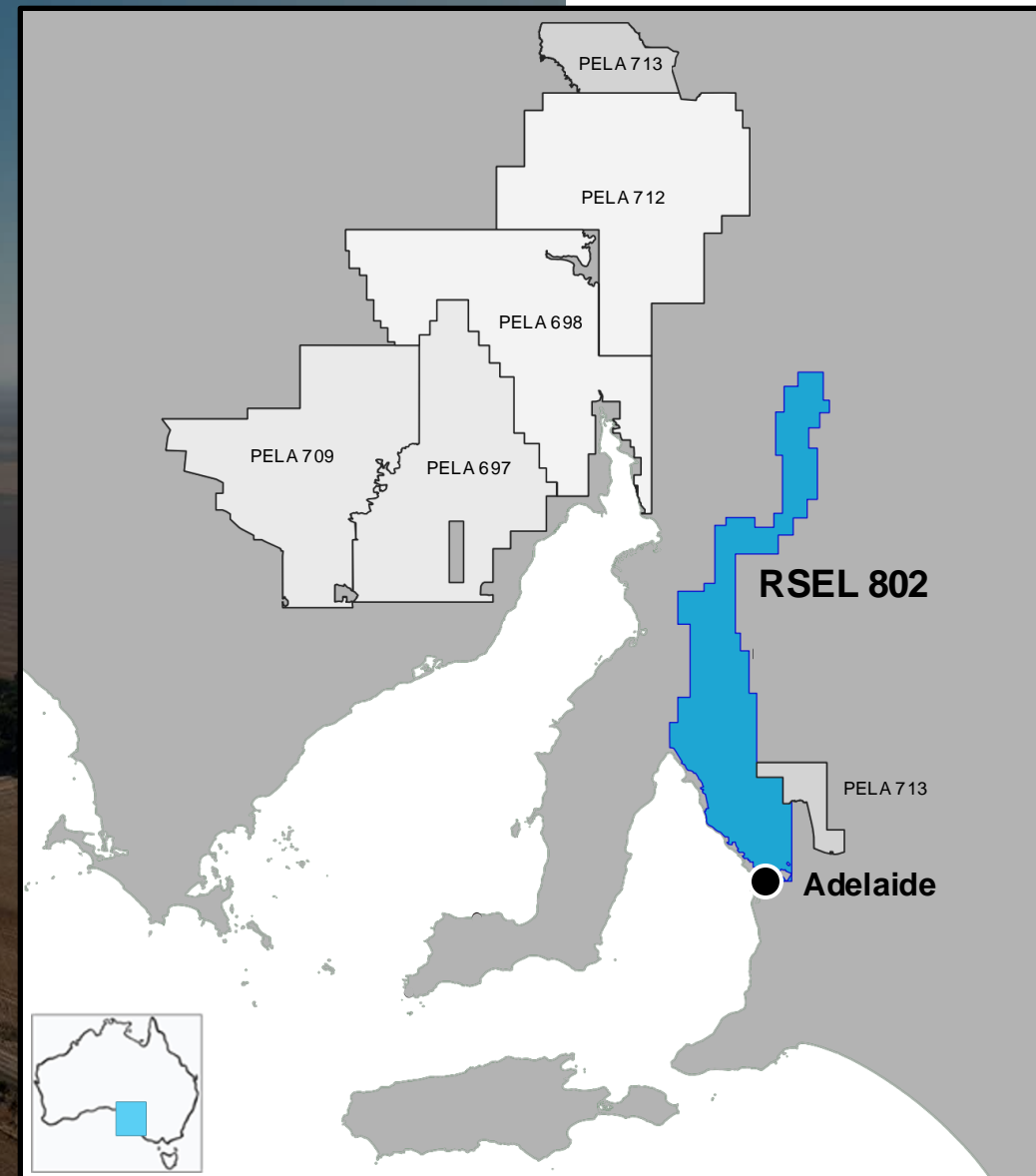
* <https://www.mckinsey.com/industries/oil-and-gas/our-insights/global-energy-perspective-2023-hydrogen-outlook>



HY - Range Licence – RSEL 802

1Tcf Hydrogen 115Bcf Helium P50
prospective on-block resource
estimate

Strategically located close to potential
markets



HY-Range (RSEL 802) - Independent Resource Assessment

Analysis highlights significant resource potential

Unrisked Recoverable Prospective Resources on RSEL 802						
	Hydrogen (Bcf)			Helium (Bcf)		
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RSEL 802 (net)	275	1,050	3,511	25	115	427
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Why is the RISC Advisory's Resource Assessment important?

- World-renowned independent analysts
- Utilise industry standard, adapted, PRMS volumetric approach
- Volumes based on 'conservative' entrapment model, rather than 'flux' approach

A premier location - RSEL 802

Licence RSEL 802

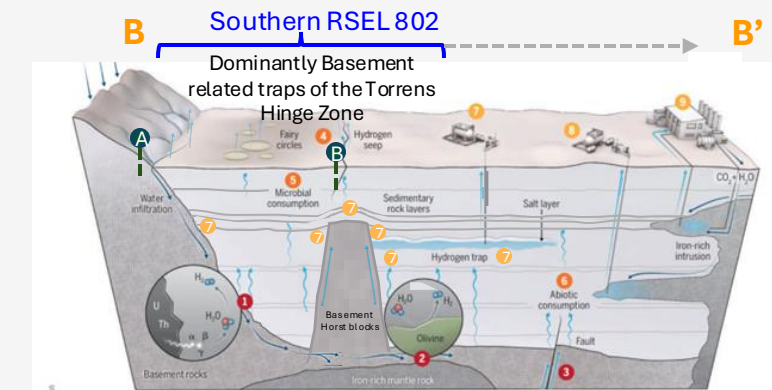
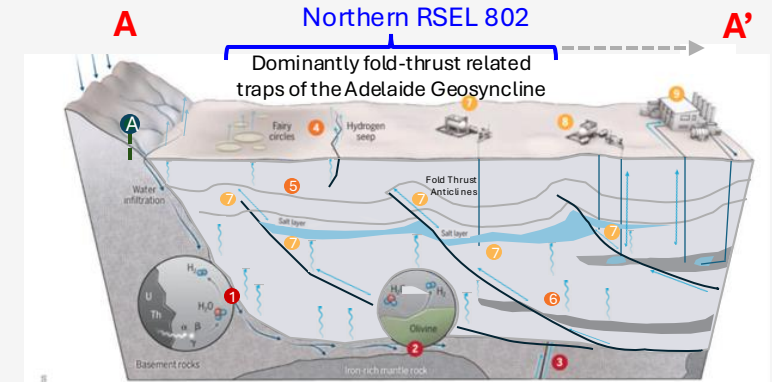
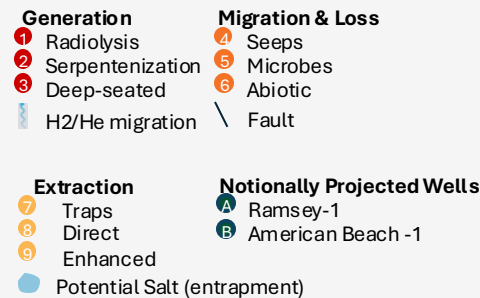
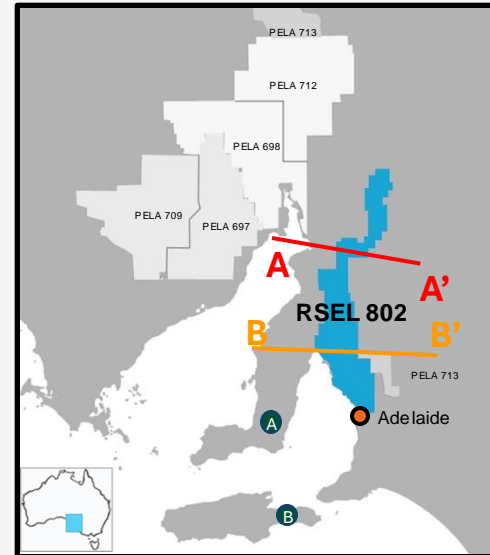
- Hydrogen and helium exploration rights
- Immediately adjacent to Adelaide and other markets

Area of significant geological resource potential

- Torrens Hinge zone and Adelaide fold-belt
- Proximal to Ramsay project
- On trend with American Beach-1 discovery

Significant play diversity and prospect potential

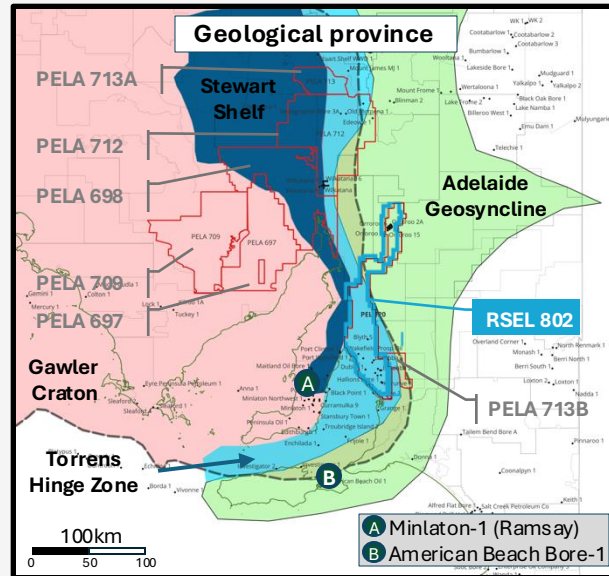
- Regional basement faulting and focal mechanisms
- Basement related trap potential dominant in south
- Adelaidean fold-thrust related trap potential dominant in north



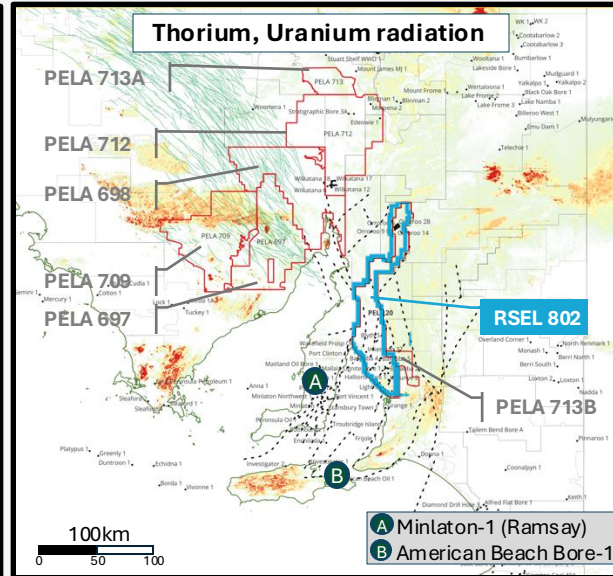
Adapted after Science, Vol 379, Issue 6633.

Rich portfolio with play and H₂ generation diversity

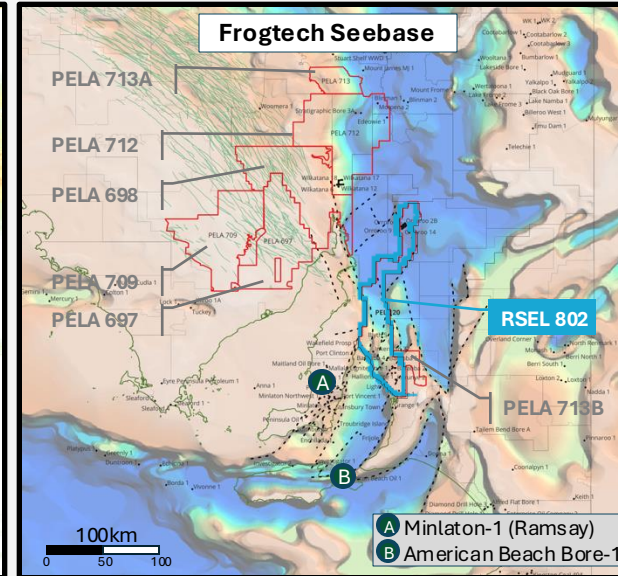
Geological Sweet Spot



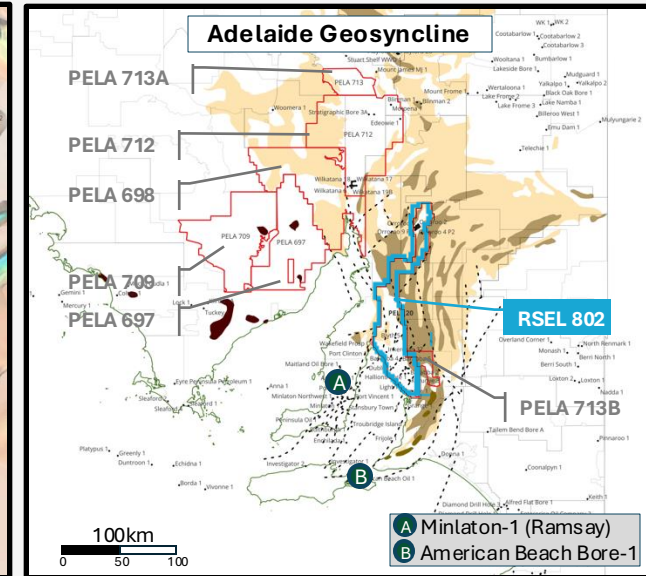
Hydrogen Generation



Migration and Basement Prospectivity



Fold and Thrust Prospectivity



- HY-Range in a potential geological sweet spot, with entire portfolio spanning key hydrogen and helium-prospective geological SA provinces
- HY-Range ideally situated for potential hydrogen source generation, migration, and concentration
- Diverse prospectivity, potential for scale, and relatively low commercialisation costs

Early market entry, poised for success

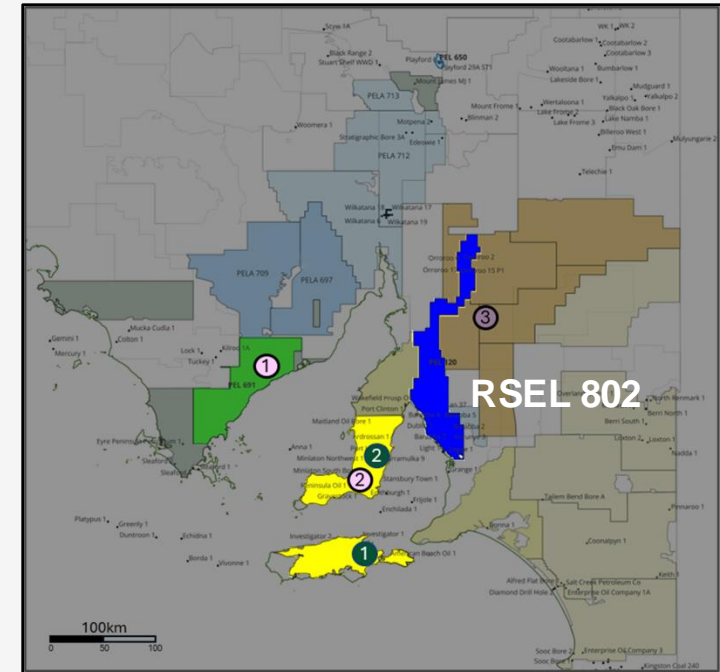
1 of only 3 granted hydrogen and helium exploration licenses in Gawler Craton – Adelaide Geosyncline fairway

Licencing:

- Most of SA acreage is licensed or applications lodged
- Three licenses (RSEL/PEL) awarded in natural hydrogen & helium
- Thor has several PELA's moving through native title consultation
- Supportive Government (local and national) regarding legislation

H₂ and He Shows:

- Recent hydrogen discovery at Ramsay (gold exploration)
- Significant geochemical and remote sensing field activity



HYDROGEN OCCURENCES

- ① American Beach Bore-1
- ② Minlaton-1 (Ramsay)

FIELD DATA ACQUISITION

- ① H2EX
- ② Gold
- ③ 2H Resources

RSEL / PEL

Thor

Gold
Hydrogen

H2EX

2H
Resources

Excellent local distribution infrastructure and market

Hydrogen markets

- SA has invested heavily in hydrogen infrastructure to support local and export markets.
- The strategic location of our licence provides us with unrivalled access to natural gas pipelines, electricity grids and other local infrastructure for commercialisation

Helium markets

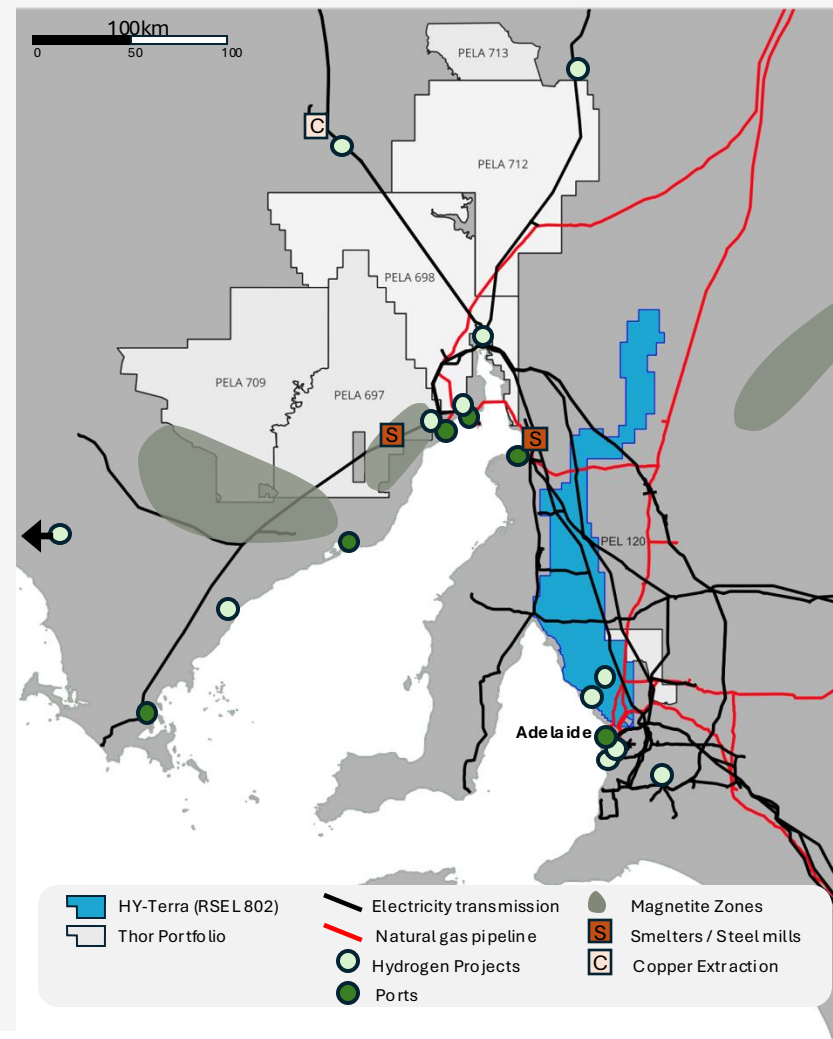
- Australian Government strategic intent to secure native helium production
- Australian usage: 114 MMcf pa (2024)*
- Significant international market for export

* Australia Helium Market Size, Share & Growth Analysis | Report 2025-2034 <https://www.expertmarketresearch.com.au/reports/australia-helium-market>

Gas storage markets

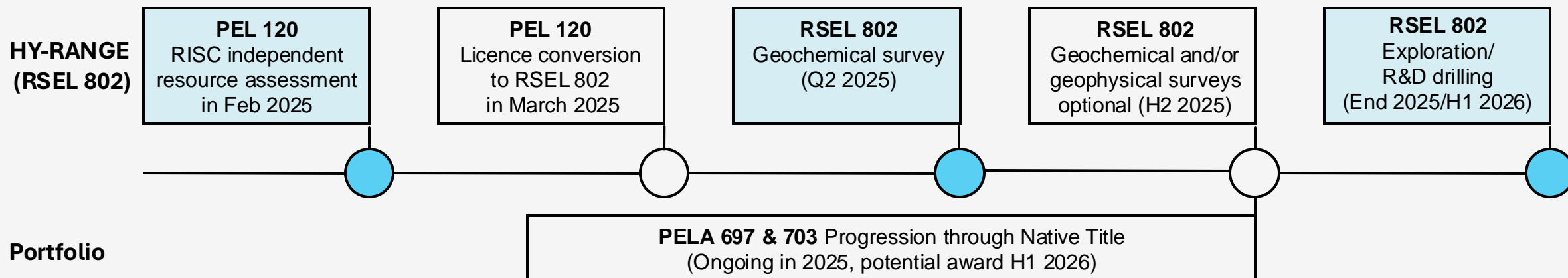
- GSELA 804/805/806 corresponds to area of RSEL 802*
- Hydrogen storage, as strategic or grid-levelling mechanism
- Industrial CO₂ sequestration or natural gas storage

* Section 4(1)(b) of the *Petroleum (Miscellaneous) Amendment Act 2009, Sch 1*. Provides that the Minister “must, on the application by the holder of a [Petroleum Exploration Licence] issue a gas storage tenement that corresponds to the [Petroleum Exploration Licence].” Go Exploration has applied for the Gas Storage Licences described above, which correspond to the area of RSEL 802 (PEL 120).



HY-RANGE Project: Catalysts for Newsflow

Company exploration timeline in 2025/26



Basin wide de-risking by all explorers

- Improving the confidence of basin commerciality
- Higher (US-style) prospect valuations
- Market evolves to showcase development in hydrogen

Project Investment Case



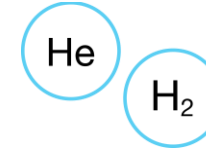
Approved licence

1 of only 3 granted in key SA H/He fairway.



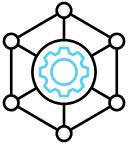
Natural hydrogen and helium focus

Early mover advantage in a growing sector



Highly prospective hydrogen and helium project

Significant resource potential, independently confirmed



Excellent local infrastructure

Network in SA to move the gas, and consumers willing to purchase



Favourable jurisdiction

Part of a consolidated hydrogen community in SA



Experienced Board and management team

Specialised and newly created team to maximise investment opportunity

Thank You



AIM / ASX: THR

OTCQB: THORF

Andrew Hume
Managing Director

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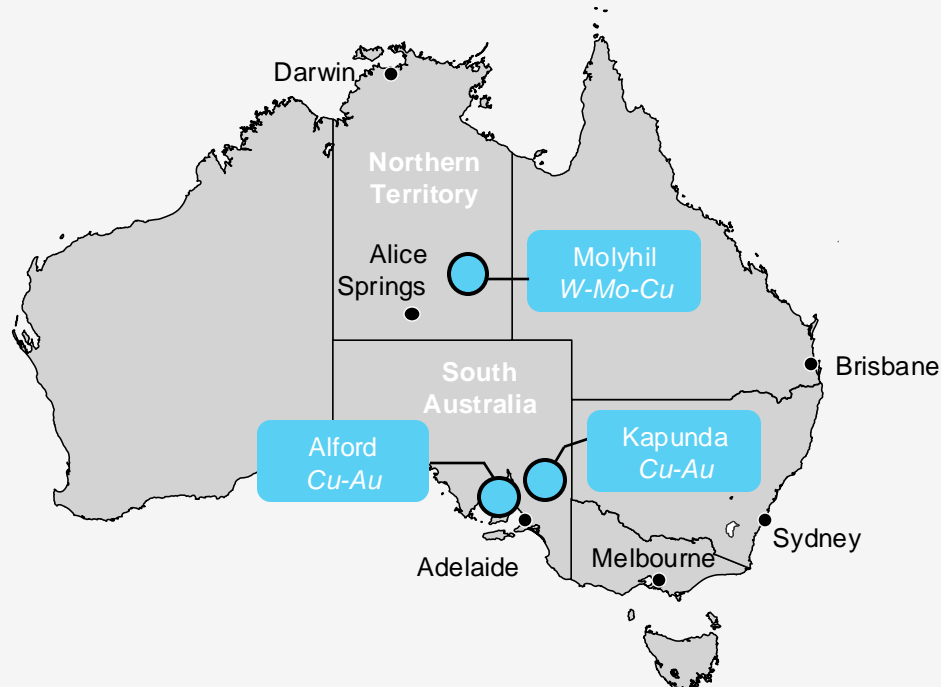
A wide-angle photograph of a wind farm. Numerous white wind turbines are spaced out across a series of rolling, dry, brown hills under a clear blue sky. The foreground is a flat, dry field with sparse vegetation.

Appendices to Follow

Other Minerals Portfolio as of March 2025

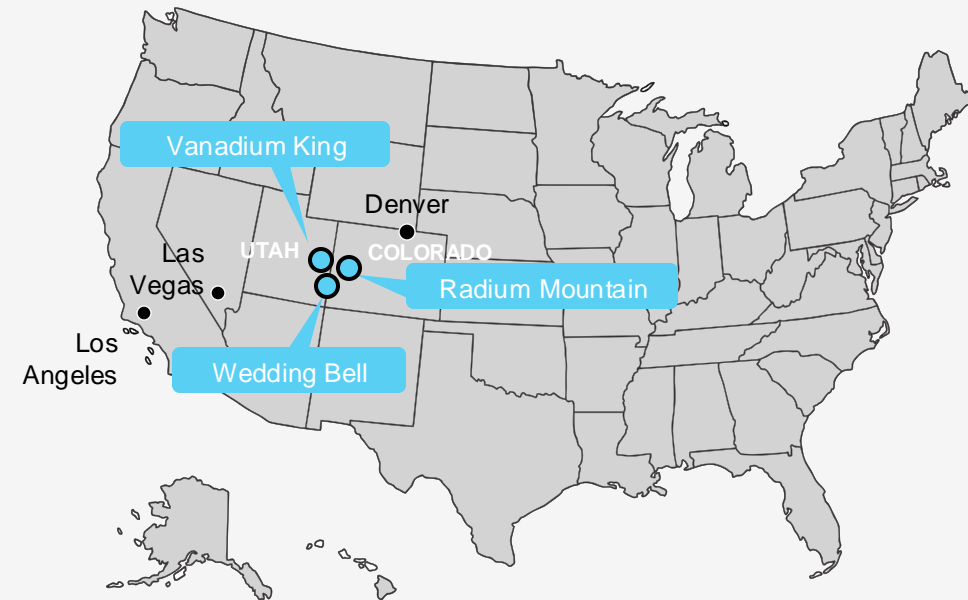
Australia:

- Alford – Copper, gold, rare-earth minerals
- Kapunda – Copper
- Molyhil – Tungsten (JV with Investigator Resources)



USA:

- Targeting uranium and vanadium in Uravan Mineral Belt
- 3 projects in Utah and Colorado
- 100% owned by Thor Energy



Thor Hydrogen and Helium Portfolio, South Australia

PELA 698, 712 – SECOND BIDDER

Applications (2022) for two new exploration permits

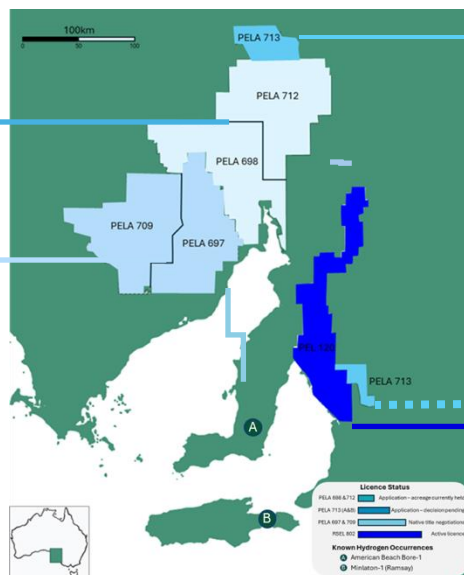
- Acreage currently held by other parties
- Multiple potential hydrogen sources in granitic, mafic, and deep crustal processes

PELA 697 & 709

2 PELA's approaching award (native title discussions)

- Extension of granitic source believed to source the Ramsey project
- Received notice from (SA Gov) of progression to Native Title negotiations

Geological Zone	RSE L 802	PELA 697	PELA 709	PELA 698 (App)	PELA 712 (App)	PELA 713 (App)
Gawler Craton	✓	✓	✓	✓	✓	✓
Stewart Shelf				✓	✓	✓
Torrens Hinge Zone	✓				✓	✓
Flinders/Adelaidean	✓				✓	



Rich and diverse acreage spanning all key geological provinces, prospective for natural hydrogen and helium

Several licences close to the Torrens Hinge zone, a potential nexus for hydrogen generation and migration

Rich hydrogen generation potential from numerous sources

PELA 713(A&B)

Application (2022) for 2 new exploration sub-permit multiple potential hydrogen sources in granitic rocks, mafic intrusions, and deep crustal faults

- PEL713-A accesses Gawler, and PEL713-B accessing Flinders ranges H2 generation potential

RSEL 802 (formerly PEL 120) 'Hy-Range'

Currently in year 5 of work program

- Hydrogen, Helium & Gas Storage licence
- On trend American Beach-1 (Kangaroo Island) discovery, & proximal to the Ramsay project
- Includes high olivine content Kimberlites

Hydrogen Generation mechanism	RSEL 802	PELA 697	PELA 709	PELA 698 (App)	PELA 712 (App)	PELA 713 (App)
Deep-seated	Low to Mod	Low	Low	Low	Low to Mod	Low to Mod
Radiolysis	Mod	Mod to High	High	Mod	Mod	Mod
Mafics / Serpentinization	Mod to High	Very High	High	High	Mod	Mod

Additional Information

Resource summary



RISC probabilistic prospective resources assessment for RSEL 802 leads. The resources are estimated on the basis of the entrapment model and that hydrogen occurs in a free gas phase.

	GIIP (Bcf)			Unrisked									Risked									POS
				Hydrogen Resources (Bcf)			Hydrogen Resources (t)			Helium Resources (Bcf)			Hydrogen Resources (Bcf)			Hydrogen Resources (t)			Helium Resources (Bcf)			
	P90	P50	P10	P90	P50	P10	P90	P50	P10	P90	P50	P10	P90	P50	P10	P90	P50	P10	P90	P50	P10	
Lead A	23	109	387	10	50	185	24,149	116,563	429,567	0.9	5.4	22.5	0.62	3.01	11.10	1,448.92	6,993.81	25,773.99	0.05	0.32	1.35	6%
Lead B	21	101	358	10	47	172	22,059	107,972	399,381	0.9	4.9	20.8	0.57	2.79	10.32	1,323.53	6,478.33	23,962.85	0.05	0.29	1.25	6%
Lead C	40	191	675	18	88	324	42,028	203,406	752,322	1.7	9.3	39.2	1.09	5.26	19.44	2,521.67	12,204.33	45,139.32	0.10	0.56	2.35	6%
Lead D	18	87	309	8	40	148	19,203	93,111	343,653	0.8	4.3	18.0	0.50	2.41	8.88	1,152.17	5,586.69	20,619.19	0.05	0.26	1.08	6%
Lead E	23	112	395	11	51	189	24,613	119,118	438,854	1.0	5.5	23.0	0.64	3.08	11.34	1,476.78	7,147.06	26,331.27	0.06	0.33	1.38	6%
Lead F	31	105	319	14	49	157	32,043	113,545	364,551	1.2	5.2	18.9	1.19	4.22	13.56	2,768.54	9,810.28	31,497.21	0.11	0.45	1.63	9%
Lead G	188	642	1,946	85	298	956	196,904	691,950	2,219,814	7.6	32.0	117.0	7.33	25.75	82.60	17,012.51	59,784.52	191,791.95	0.66	2.76	10.11	9%
Lead H	186	634	1,924	84	295	945	194,814	684,985	2,194,272	7.5	31.6	115.0	7.25	25.49	81.65	16,831.95	59,182.66	189,585.14	0.65	2.73	9.94	9%
Lead I	14.1	67.5	238.0	6.4	31.0	114.0	14,860.7	71,981.4	264,705.9	0.6	3.3	13.8	0.4	1.9	6.8	891.6	4,318.9	15,882.4	0.0	0.2	0.8	6%
Lead J	77.3	264.0	800.0	34.9	122.0	393.0	81,037.2	283,281.7	912,538.7	3.1	13.1	48.0	3.0	10.5	34.0	7,001.6	24,475.5	78,843.3	0.3	1.1	4.1	9%
Arithmetic sum	621.3	2,312.9	7,351.0	280.7	1,070.6	3,583.0	651,710.5	2,485,913.3	8,319,659.4	25.3	114.6	436.2	22.6	84.4	279.7	52,429.3	195,982.1	649,426.6	2.0	9.0	34.1	

Note: Hydrogen mass conversion is 2,321.98 t/Bscf.

Thor Energy Plc acquisition of Go Exploration

- **Thor acquisition for 80.2% of Go Exploration Pty Ltd**
- Go Exploration owned 100% of the HY-Range Project
- The deal closed on 15 February 2025
- Settled in ~A\$3.5m shares, no cash paid
- Vendors are industry players taking a long-term view on natural hydrogen and helium