



Investor Update

Energy & Helium for the 21st Century

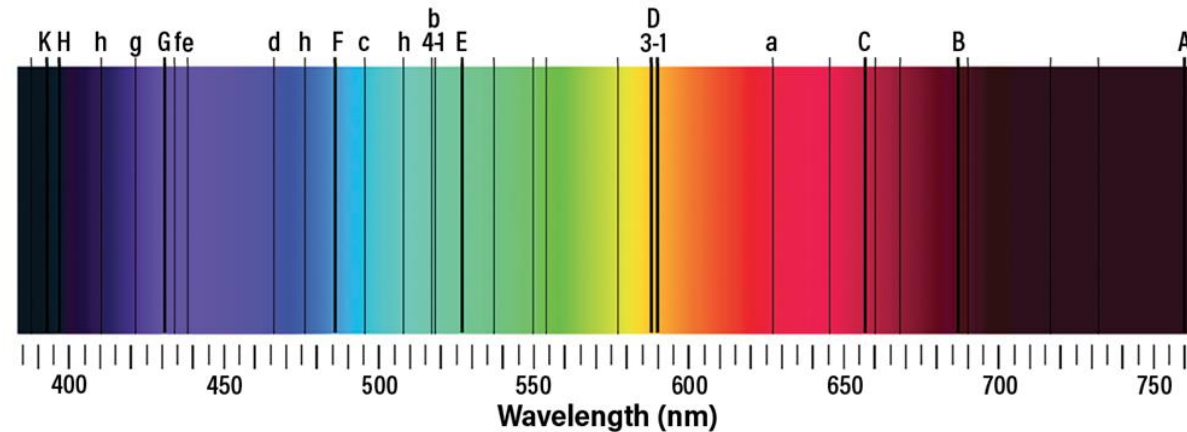
August 2024

What's in a name?



- Why D3 Energy?
 - “**D3**” First evidence of Helium was obtained in August 1868 when French Astronomer, Jules Jansen observed a solar eclipse through a prism, where he noticed a bright yellow spectral line emanating from the chromosphere of the sun – at the time this was thought to be sodium since it was proximate to the D1 and D2 Fraunhofer lines
 - Later that year, English astronomer Norman Lockyer observed a yellow line in the solar spectrum (which he named the **D3 Fraunhofer Line**) which he concluded was caused by an unknown element in the sun. This element was named helios after the Greek name for sun. Helium was subsequently not seen on Earth until 1895
 - “**Energy**” because we are fundamentally a natural gas exploration Company. Gas is badly needed in South Africa to provide energy supply security and is a major focus for the South African Government as part of the country's energy transition

THE SUN'S SPECTRUM



Breaking down the Sun's light by wavelength allows astronomers to identify the elements it contains. This portion of the solar spectrum shows fingerprints of several Elements including hydrogen, helium, sodium iron and calcium

Corporate structure

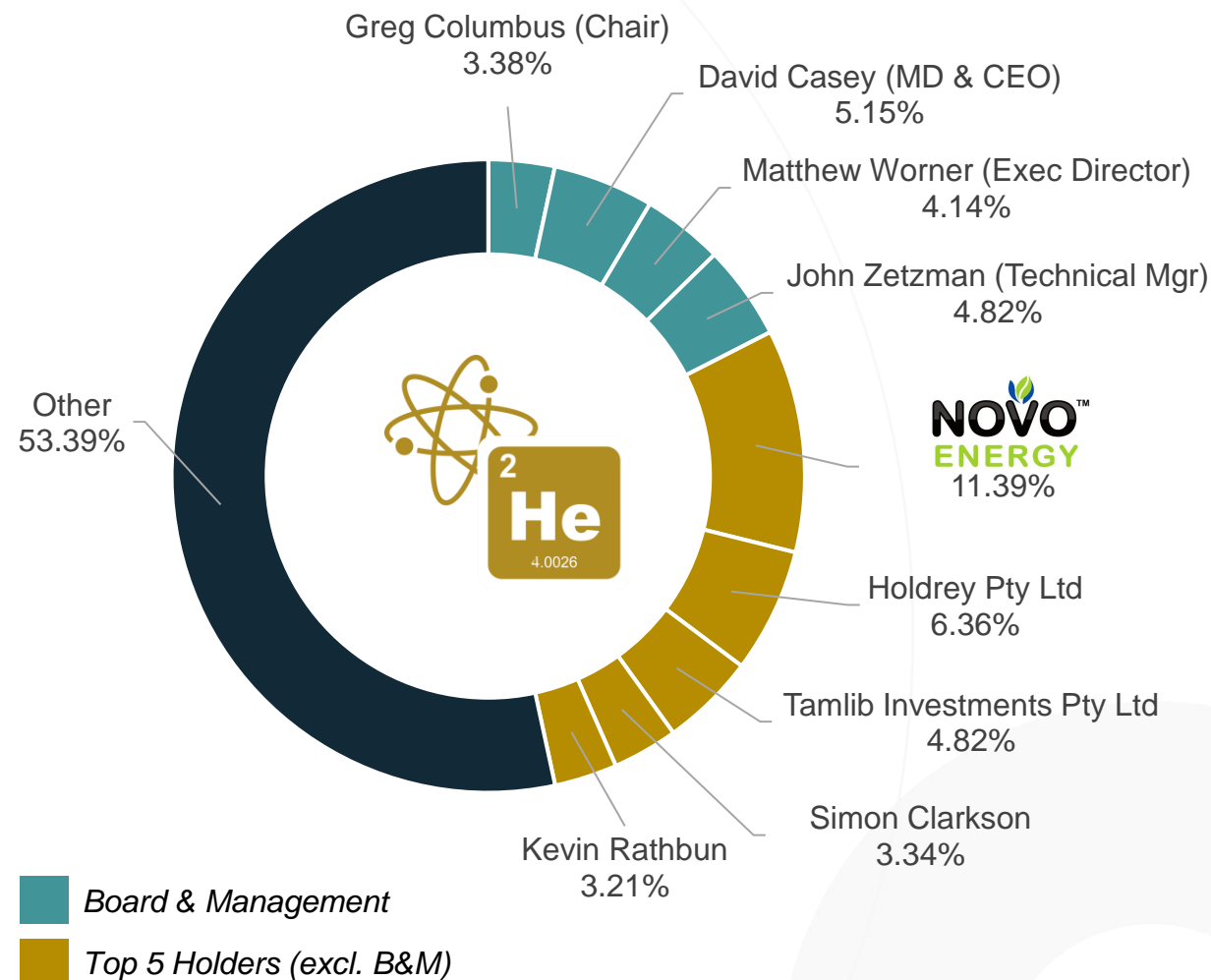
(as of 14th Aug 2024)

120.8m Shares on issue	\$0.17 Share price (@ 14 Aug 2024)
\$20.5m Market Cap	\$8.6m Cash (30 Jun 2024)

Enterprise Value (EV) \$11.9M

Shares	
Tradeable	79,475,006
Escrowed	41,320,000
Total Shares (undiluted)	120,795,006
Vendor Performance Rights	2,500,000
Advisor Options (\$0.30 May 2028)	4,000,000
Management & Consultant Options (\$0.30 May 2027)	6,225,000
Management & Consultant Performance Rights	8,820,000
Total Shares (fully diluted)	142,340,006

Major Shareholders



Why D3 Energy?



Defined **LARGE** contingent resource adjacent to existing producer, including 'regenerating methane'

- 2C Contingent Resource of 22.4BCF Helium and 475 BCF Methane adjacent to Renegen's already-producing Virginia field
- World class measured helium concentrations of 5% and as high as 9%
- The methane is biogenic and continually regenerating; classified as renewable by Petroleum Agency of South Africa



Simple, quick appraisal and development plan

- Proven production from new & historical gold exploration boreholes with second-mover advantages
- Expedited plan to confirm commercial production on existing resource and apply for Production Right by end 2024 early 2025



Large exploration upside

- Current independent Contingent resource only covers ONE of 4 permits
- Only small percentage of acreage has been appraised; historical gold exploration boreholes flowing measurable gas identified in other permits



Attractive market outlook for helium

- Prices at record levels and predicted to continue to increase
- Regarded as a "Critical Mineral" with global demand exceeding supply



Strong local demand for methane

- Demand significantly exceeds supply in energy-starved South Africa
- D3's largest shareholder, NOVO Energy, is a South African gas retailer



Low-cost drilling driven by experienced team

- Shallow very low-cost wells and with low very low operating expenditure
- Experienced team with proven track record of building energy companies from scratch



Portfolio



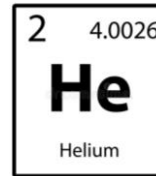
Assets



- Four permit areas totalling 442,750 acres in the Free State South Africa

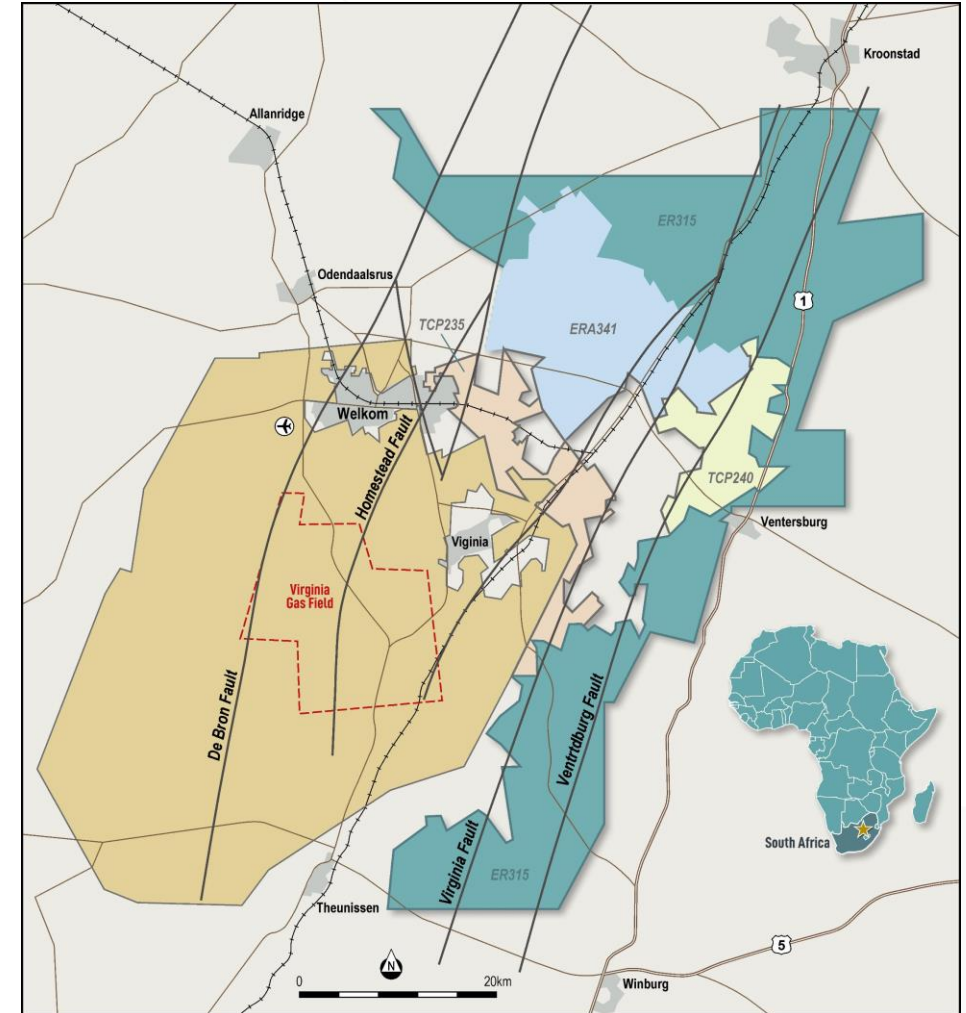


Permit	Area (acres)
ER315	294,986
ERA341	81,535
TCP235	36,843
TCP240	29,386



- Prospective for both natural gas (methane) and helium
- Confirmed **free flowing** gas production rates from historical gold exploration boreholes
 - 9 boreholes currently flowing with 3 wells at measurable rates
 - Bloemskraal boreholes have potentially been flowing gas at these rates since the early to mid 1980's
- World class helium concentrations averaging over **4% but as high as 9%**
- Methane concentrations of 80% to 90% (higher after He removal) can be used for onsite power generation and CNG/LNG operations in energy starved South Africa
- Adjacent to ASX Listed Renegen which has an operational cryogenic helium and LNG plant (~20km to west)

This is appraisal NOT exploration!



Map of D3 Energy current acreage and application areas (100% D3 Energy)



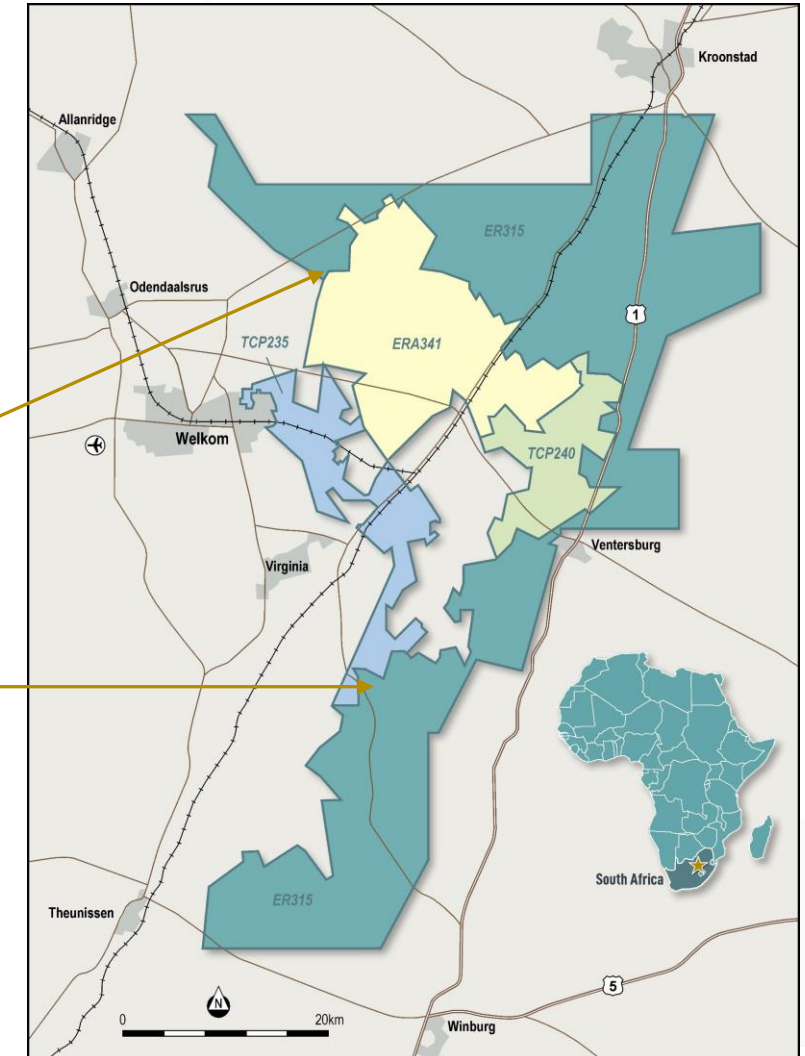
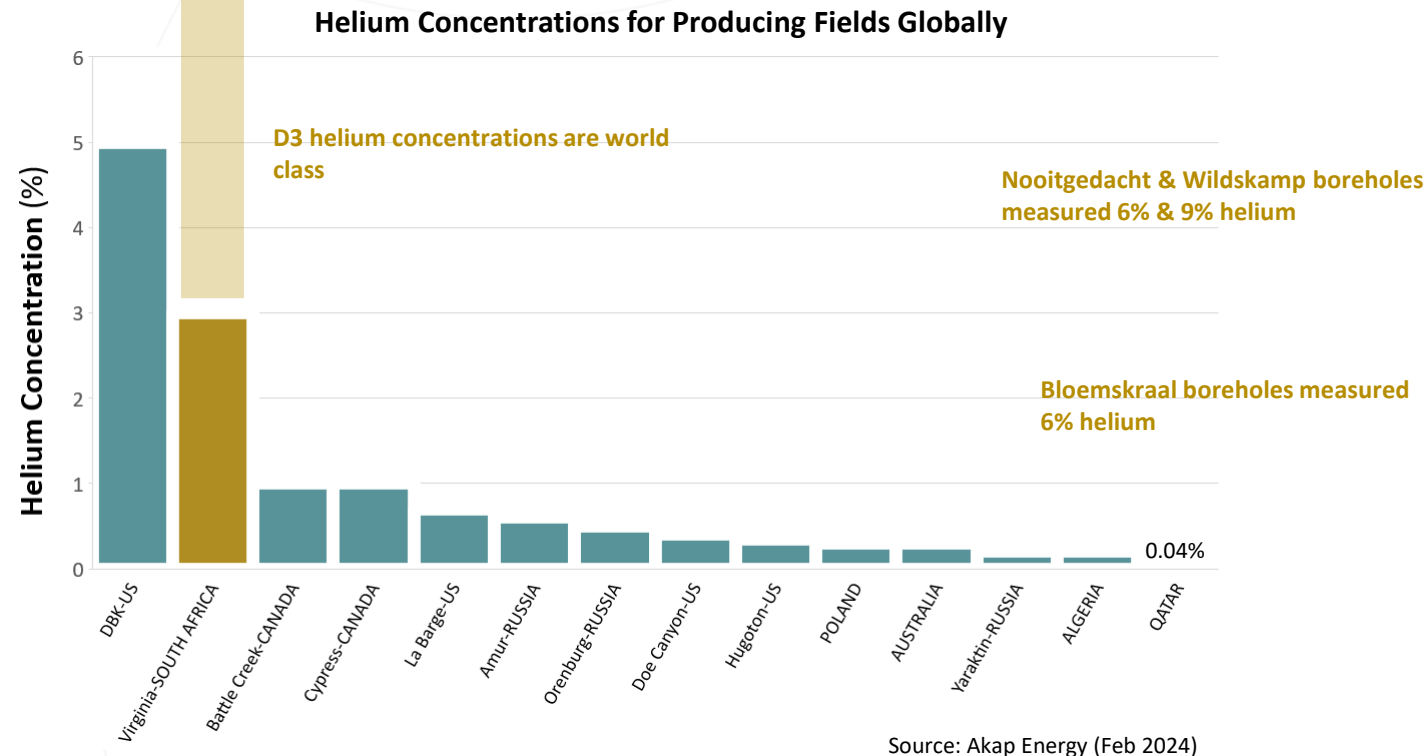
Exploration Right 315 (ER315)



ER315 - Helium



- ER315 alone covers an area of close to 295,000 acres which dwarfs many north American projects
- ER315 helium concentrations also compare very favourably to main producing fields globally



Map of D3 Energy current acreage and application areas (100% D3 Energy)

ER315 has some of the best helium concentrations in the world

ER315 - Independently Certified Resource



- D3 Energy engaged Sproule to review and independently certify both a Prospective Resource and Contingent Resource for ER315
- Sproule has undertaken the Reserve and Resource reporting for Renergen's Virginia Gas Project
- **Initial exploration work undertaken by D3 Energy has produced outstanding Contingent and Prospective Resource estimates on a shoestring budget**
- Next step beyond listing will be to upgrade Contingent Resource to Reserves and Prospective Resource to Contingent Resource

Contingent Resource (BCF)	1C	2C	3C
Recoverable Gas Resource	336.65	547.45	858.03
Recoverable Methane	291.88	474.64	743.91
Recoverable Helium	13.803	22.445	35.179

Prospective Resource (BCF)	1U	2U	3U
Recoverable Gas Resource	228.44	661.32	1875.35
Recoverable Methane	198.06	573.36	1625.93
Recoverable Helium	9.366	27.114	76.889

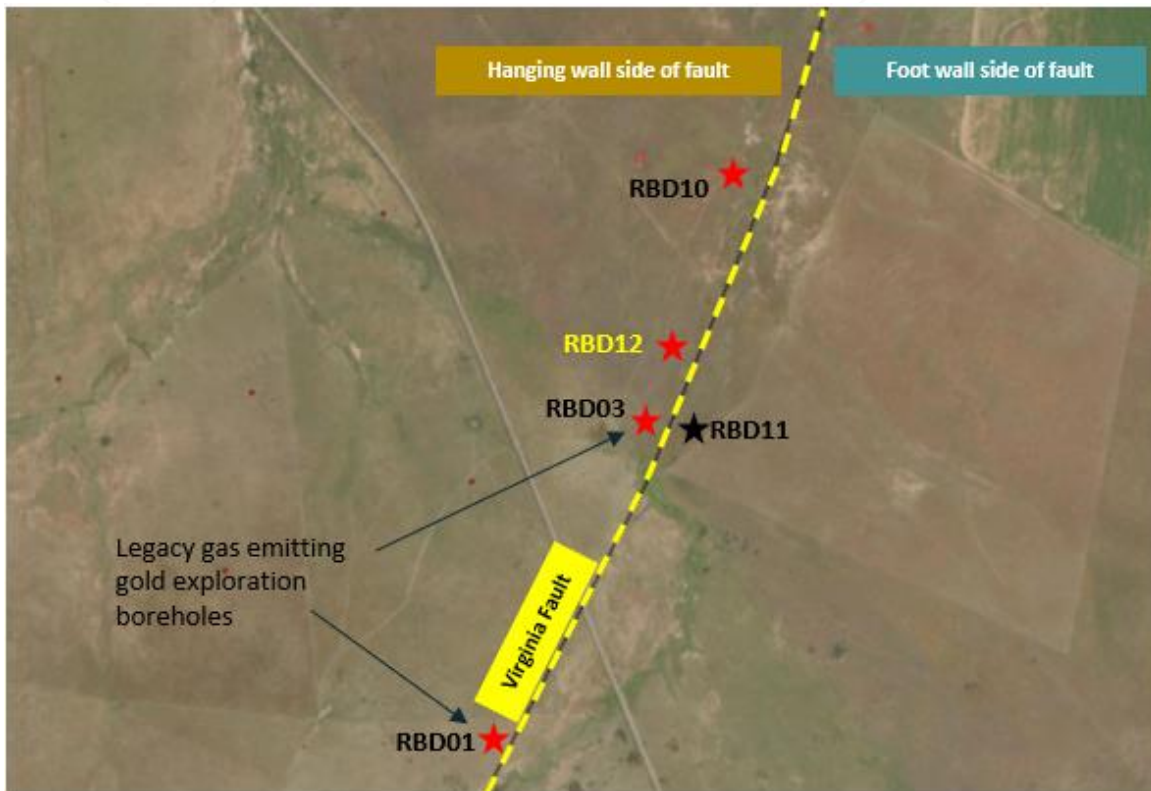
Resource volumes as stated from the Sproule independent evaluation of ER315 with an effective date of February 12, 2024.

- **Numbers compare positively to Renergen at similar stage of development and Contingent Resource category dwarfs other ASX listed Helium players**

ER315 – drilling programme



- Outstanding results from initial drilling and testing programme with world class helium concentrations of 5.1%
- RBD03 a legacy gold exploration borehole drilled in 1983 flow tested over a 16-day period averaging 147Mscfd



- This is almost twice the rate previously recorded with older less accurate equipment and has potentially been flowing since it was drilled over 40 years ago
- RBD10 flowed gas at an initial stabilised flow rate of 126 Mscfd for a 36-hour period, although this is expected to increase in line with RBD03 on the back of utilising new more fit for purpose and accurate metering equipment
- RBD11's lower flow rate supports the "hanging wall" geological model, allowing for better targeting of future wells kicking off with RBD12 after testing of RBD10

With world class helium concentrations and very low drilling (capex) and operating (opex) costs the currently measured production rates have confirmed this as an exceptional opportunity in a "proven" producing province

An analogue next door...

Success story right next door



- D3 Energy's project is adjacent to the Renergen (RLT) Production Right, which was the first Production Right of this kind to be issued in South Africa
- RLT is producing both LNG and helium at its Virginia Gas Project
- **Members of D3 were intricately involved and were instrumental in identifying opportunity for Renergen's predecessor**
- ER315 shares many important geological features and conditions with RLT's project providing increased confidence for D3 Energy
- D3 Energy drilling cost estimates of ~A\$250,000 per well appear achievable based current drilling programme



Renergen Limited together with Mahlako Gas Energy Propriety Limited (MGE) is pleased to announce the conclusion of an investment in Tetra4 Proprietary Limited (Tetra4). The investment will provide an injection of R550 million into the Company and its subsidiaries within 20 business days from conclusion of the procedural conditions precedent, which funds will contribute to the further development of the Virginia Gas Project, and in return MGE will own 5.5% of the equity in Tetra4 once all the investment proceeds have been fully invested for the development of Phase 2.



Renergen helium and LNG project wins 'Strategic' status

By Anthony Wright on Dec 14, 2022 | 0 | Translate

NEWS | HELIUM

South African gas exploration company Renergen has seen Phase 2 of its Virginia Gas Project reach 'Strategic' status after it was designated a Strategic Integrated Project (SIP) by the South African government.



World / Africa


A company bought gas rights to this land for \$1. Helium means it could be worth billions

By Neil Lewis, CNN

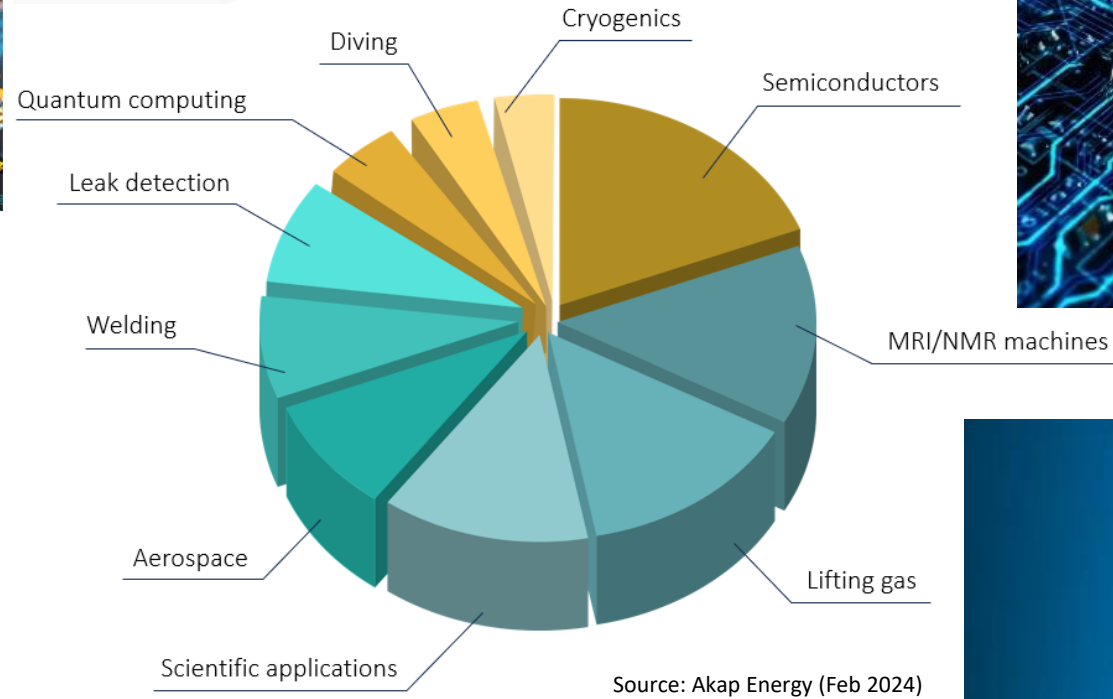
© 5 minute read · Published 4:07 AM EST, Thu January 4, 2024

Mahlako paid ~A\$45M for a 5.5% stake in Renergen representing a significant premium to current valuations for both RLT and D3 Energy...

What is Helium & what's it used for?

A horizontal teal line with a small teal circle in the center, located below the title.

Helium – What's it used for?



Helium is a critical resource for the 21st Century

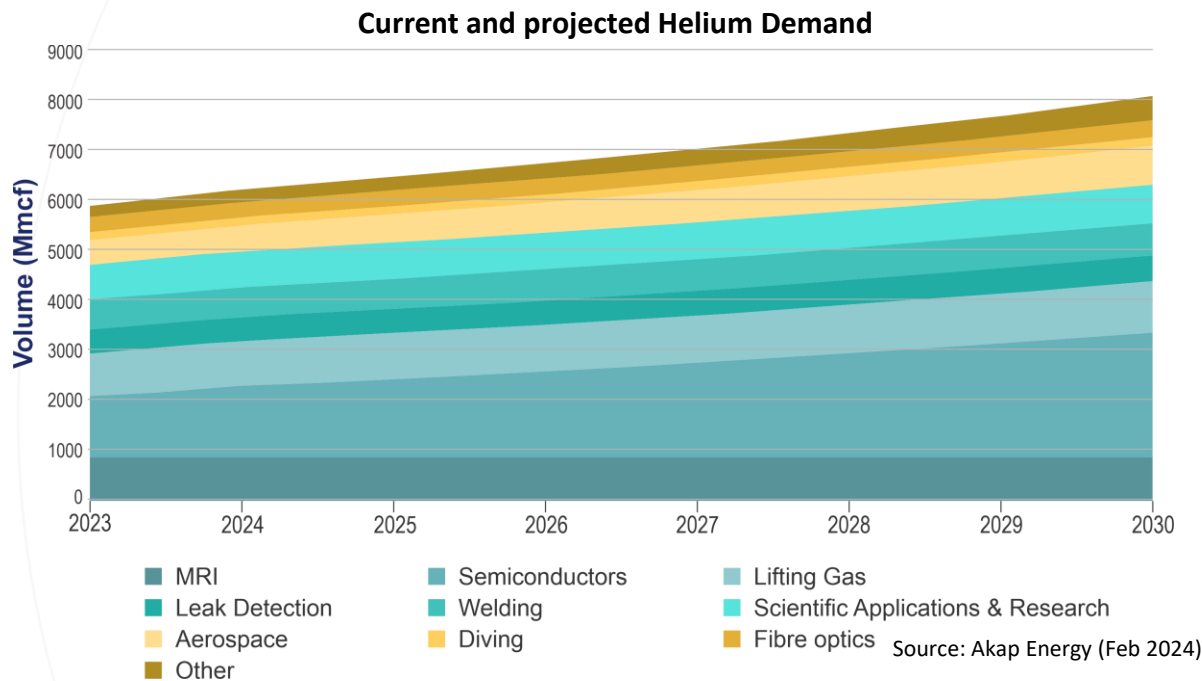
How much do we use?



Global Helium supply and demand



- **Classic case of demand outstripping supply**
- Current demand growth of around 5-6% is **double** expected supply growth
- Total market expected to grow from 6BCF to just over 8BCF in 2030
- Tightening supply will have an obvious effect on price



Helium is critical for our hi-tech world...



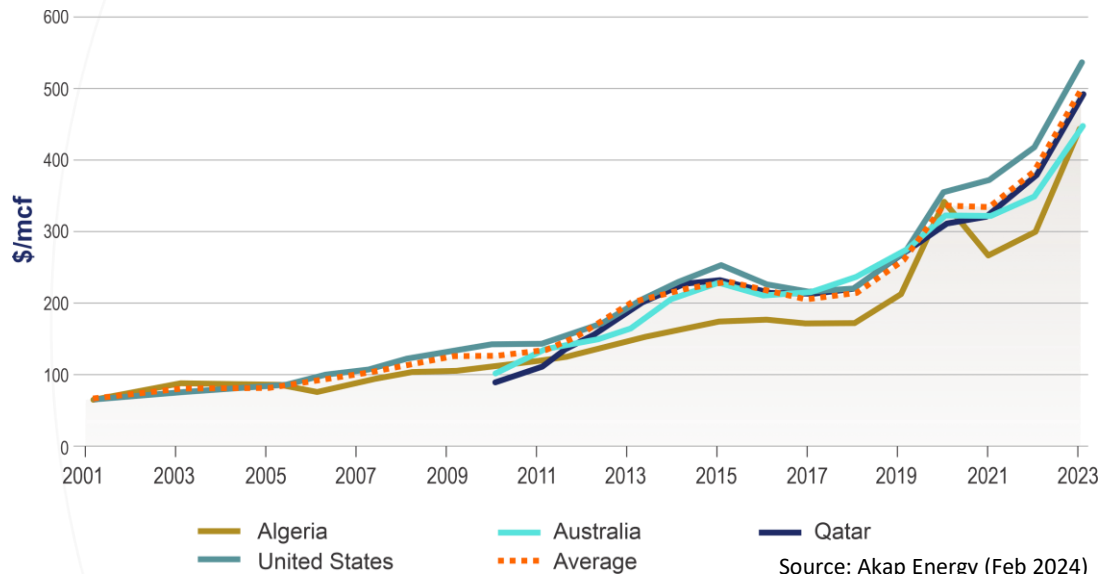
So what's its worth?

Helium pricing



- The cost of helium is at record levels and is predicted to continue to increase
- Prices over last 5 years have increased at 18% p.a
- US spot pricing was between US\$1,000 and \$2500/mcf in 2022

Global Helium Export Prices by Region (US\$/mcf)



PR Newswire®

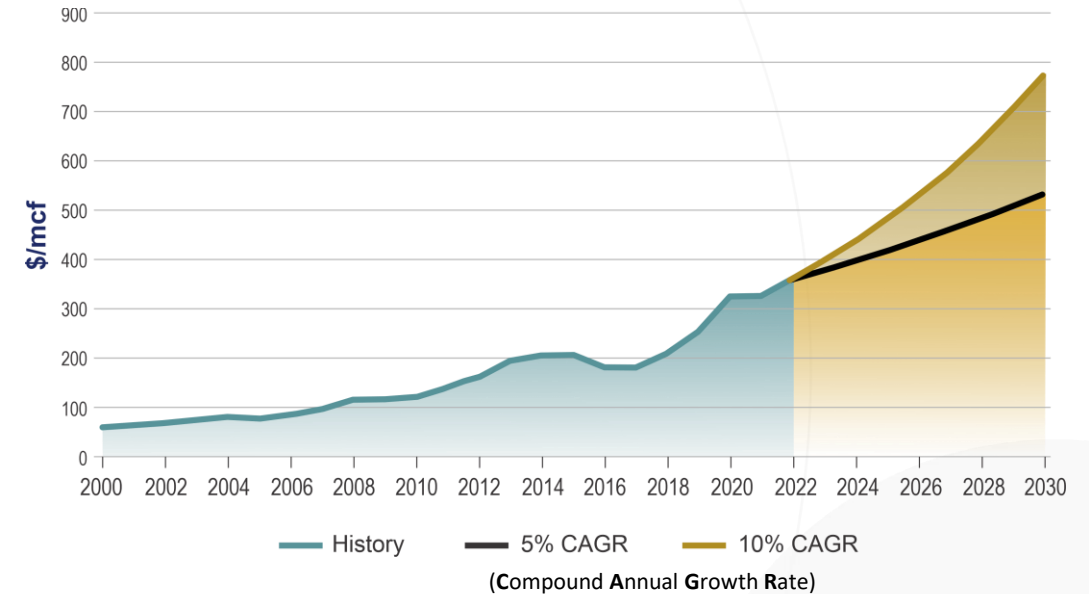
Helium Prices Are Set To Soar As Supply Shortage Looms

NEWS PROVIDED BY

[Oilprice.com](https://oilprice.com) →

16 Feb, 2022, 08:00 ET

Estimated Helium Import Pricing (US\$/mcf)



A 15% CAGR would see a US\$1,150/mcf price in 2030 more in line with current spot gas prices



D3 Energy is not just
about Helium!



It's not just Helium...and South Africa needs it



- ER315 and adjacent permits also have significant prospectivity for:

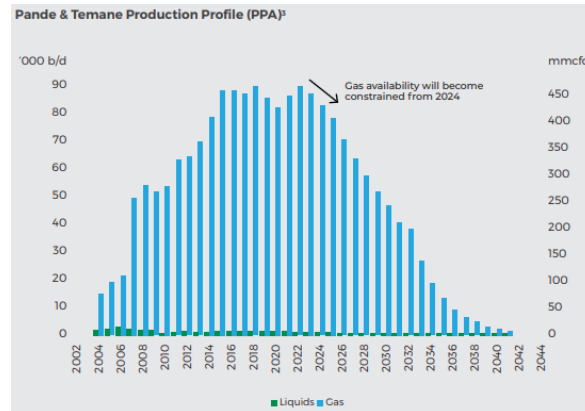
- deep basin biogenic gas (methane)
- coal seam methane
- conventional sandstone reservoirs



- South Africa currently imports gas via pipeline from the Pande & Temane fields in Mozambique with significant and growing shortfalls expected from 2024

Current gas availability will become constrained from around 2024. Sasol and various sources indicate, on the assumption that no further progress can be made on the various projects, that gas supply will reduce from mid-2024 by some 15% per annum. This will be due to the expected drop in pressure at Sasol's Pande and Temane fields.

Source: Annual Report IGUA-SA (2020)



There is an increased reliance on gas energy in South Africa. IGUA-SA now estimates that gas demand in 2030 will be 718PJ/a. This represents an increase of 20% compared to IGUA-SA's estimate a year ago that set gas demand in 2030 at 595PJ/a – an overall increase in gas demand of 123PJ.

Source: Annual Report IGUA-SA (2023)

South Africa has a gas demand that significantly outstrips supply due to failed energy policies.

GAS SUPPLY SINCE 2015



190PJ/a

Supply remained unchanged with no additional molecules becoming available in South Africa

GAS DEMAND IN 2022



350PJ/a

Demand at present from the power conversion, private power, industrial, petrochemical and logistics sectors.

Source: Annual Report IGUA-SA (2021/2022)

Gas demand and growth vastly exceeds current dwindling supply of approximately 185PJ/a...

- D3 Energy is ideally placed to not only meet this shortfall but to help South Africa transition more broadly to a more balanced, cleaner and lower emissions energy market



D3 has established
strategic partnerships

NOVO Energy – www.novoenergy.co.za



- NOVO Energy (**NOVO**) is an integrated energy and technology company and licensed gas trader and **major D3 Energy shareholder**. NOVO has a focus on:
 - Procurement and development of methane rich gas sources
 - Establishment and ownership of gas infrastructure (CNG/LNG/Pipelines)
 - Provision of turnkey customer solutions (industrial, NGV, power generation and feedstock)



D3 and NOVO are working towards
initial offtake agreements

Timelines



The next 12 months...



ACTIVITY	2024								2025					
	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Drilling RBD12					➡									
Production testing RBD12						➡								
Production re-testing RBD10				➡										
Production testing RBD03			➡	✓										
Production testing RBD01					➡									
Long term production testing						➡	➡	➡						
Seismic planning and approvals		➡	➡	➡	➡	➡								
Seismic acquisition & interpretation							➡	➡	➡	➡				
Drilling Nooitgedacht well/s							➡	➡						
Phase 2 drilling & testing programme (5 wells)									➡	➡	➡	➡	➡	➡



Disclaimers



D3 Energy Limited



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Resource Information

Please refer to the D3 Energy Limited Prospectus dated 5 March 2024 (as supplemented by a supplementary prospectus dated 10 April 2024 and a second supplementary prospectus dated 17 April 2024) for Contingent Resources and Prospective Resources presented in this announcement. D3 Energy confirms that it is not aware of any new information or data that materially effects the information contained in the Prospectus and that all material assumptions and technical parameters underpinning the estimates contained in the Prospectus have not materially changed.

Competent Person's Statement

The Contingent and Prospective Resource Statement in this announcement is based on and fairly represents information and supporting documentation prepared by independent consultants Sproule with an effective dated 12 February 2024 and which forms part of the Company's Prospectus dated 5 March 2024 (as supplemented by supplementary prospectus dated 10 April 2024 and a second supplementary prospectus dated 17 April 2024). The Contingent and Prospective Resource Statement has been included in this announcement under the approval of Mr David Casey, Managing Director/CEO of D3 Energy Limited, who is a member of the Australasian Institute of Mining & Metallurgy (AusImm) and a lifetime member of the Society of Petroleum Engineers (SPE) with over 30 years' experience in the energy industry. Mr Casey confirms that as at the date of this announcement, there is not change to information or additional information, since the date of 12 February 2024, that would materially change the estimates of Contingent and Prospective Resources quoted.

Prospective Resources

The estimated quantities of petroleum that may be recovered by the application of a future development project(s) relate to undiscovered accumulations. Those 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 hydrocarbons.



d3energy.com.au

Tel: +61 2 8072 1400

Email: admin@d3energy.com.au

Web: www.d3energy.com.au