THE PRIMARY HELIUM COMPANY

Helium One

Strategic resource in an expanding market

March 2022 Investor Presentation

AIM:HE1

helium-one.com

Helium One

A Globally Significant Resource To Resolve A Supply Constrained Market

- **4,512km²** licence area in Tanzania, 100% owned, with high-grade surface seeps up to **10.6%He**
- An established **working helium system** identified

De-risked basin with multiple prospective intervals and identified helium shows

- Expanded portfolio with new leads developed from extensive **subsurface database** and Phase II Seismic
- **Experienced management** with a track record of success
- **Low CAPEX development** of strategic size resource in increasingly business friendly jurisdiction
- Clean, **low-carbon**, sustainable source not associated with hydrocarbons

Capital Structure	AIM:HE1
Sector	Industrial Minerals
Cash (31 Dec)	USD $9.7m
Shares	615,993,183
Options	75,659,832
Market Cap (11 Mar)	£63m
Avg Daily Volume	6,660,000

Helium One share price and volume since listing

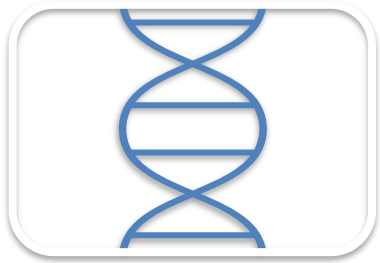
Helium Demand

High-Tech, High-Value, High-Growth applications

- Unique properties for a range of high-tech applications
- Lowest boiling point of any gas
  - -272°C : 1°C above absolute zero
  - High specific heat capacity and low viscosity
- Smallest molecular size
  - Essential for a pure environment
  - Purging and leak detection

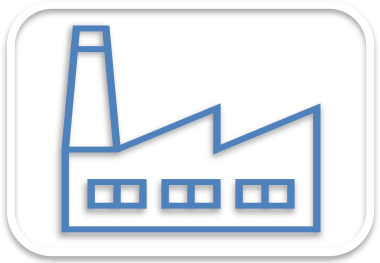
Broad range of high-value end uses: Cannot be substituted and difficult to recycle

- Key growth sectors in healthcare, computing and high-tech manufacturing
- Rapid demand growth - expected to grow from 6Bcf to 8.5-10Bcf by 2030



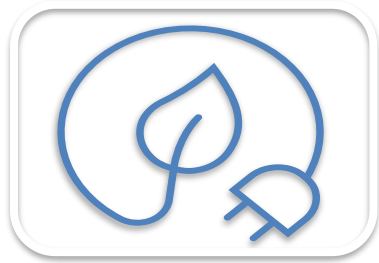
Medical

- MRI Scan
- Assisted Breathing



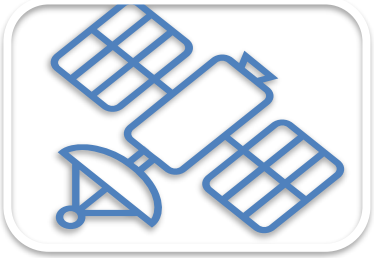
Manufacturing

- Semi-Conductors
- Fibre-Optics



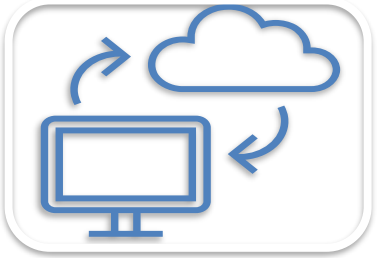
Energy

- Nuclear Fission
- Nuclear Fusion



Space

- Rocket Purging
- Leak Detection



Computing

- Data Centres
- Quantum Computing

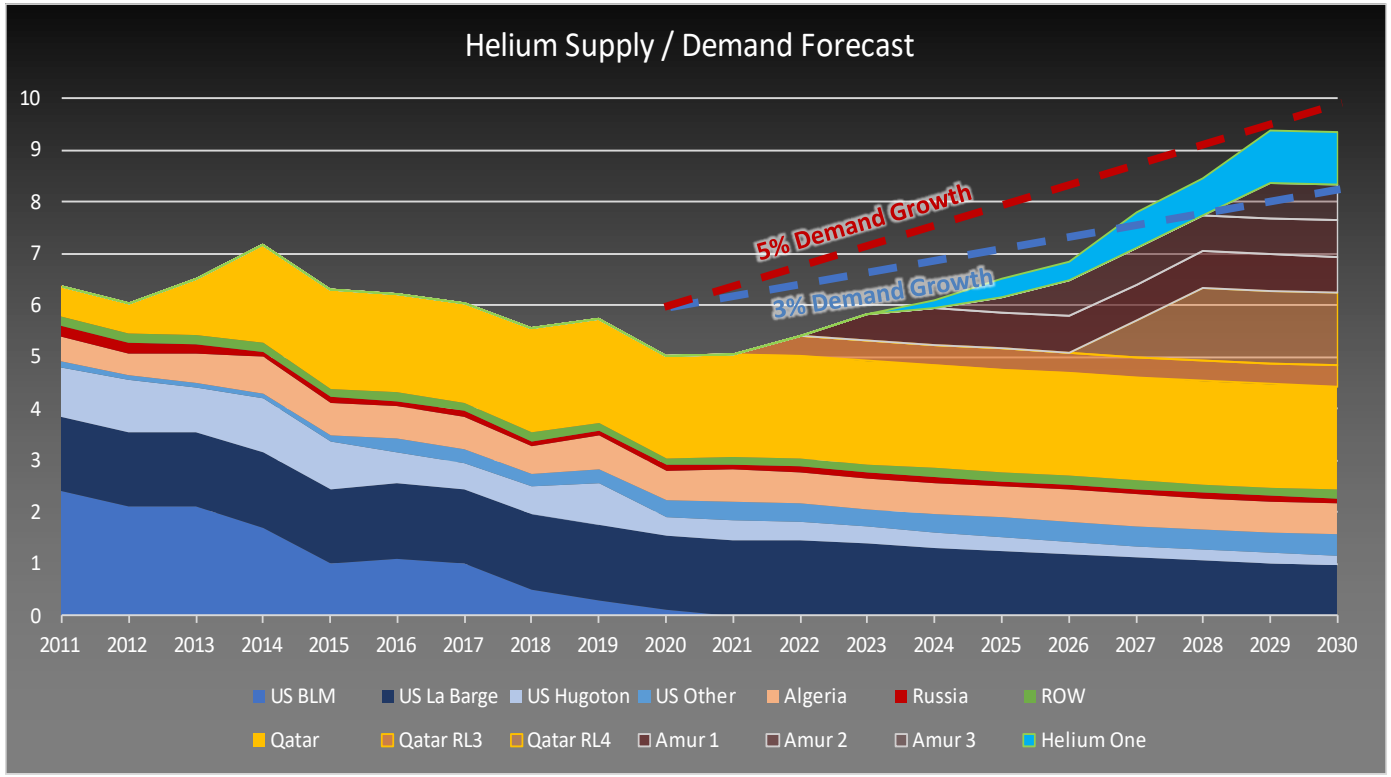
Helium Supply

Ongoing Supply Crisis

- Inelastic supply as by-product of hydrocarbons with concentrations typically 0.04-0.35% He
- Short term - Closure of US Federal Reserve in 2019 triggered a supply shock
- Medium term - ~2 Bcf of new supply from Russia in question
- Long term - structural deficit associated with the transition to green economy

No end in sight for current supply shortages

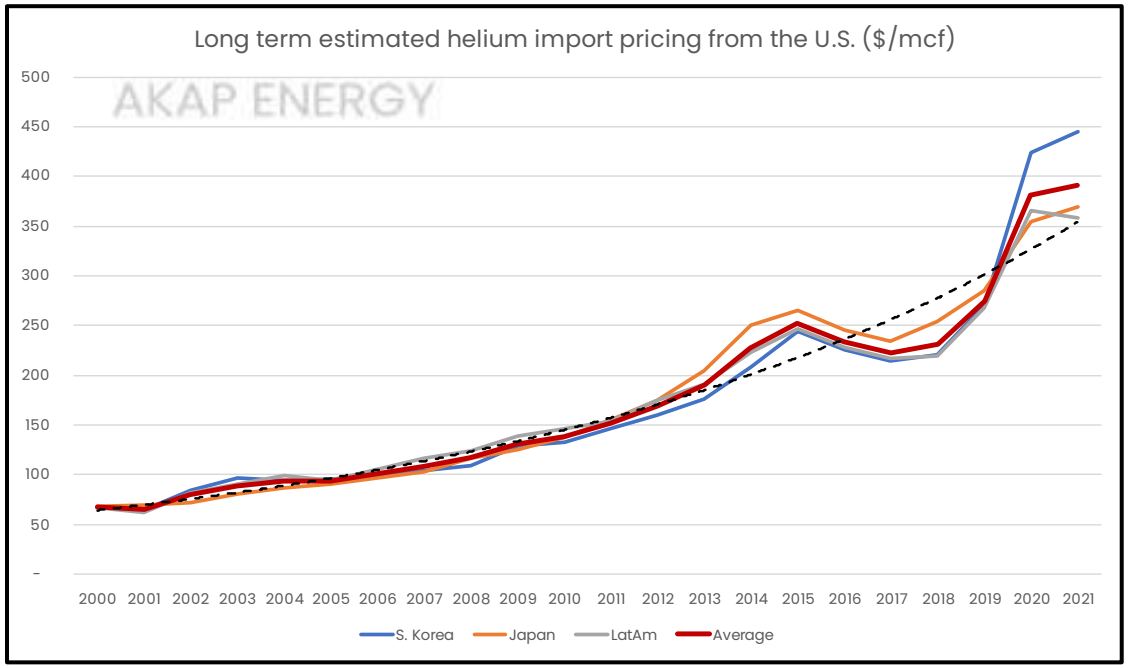
- New primary helium projects are required to meet demand growth

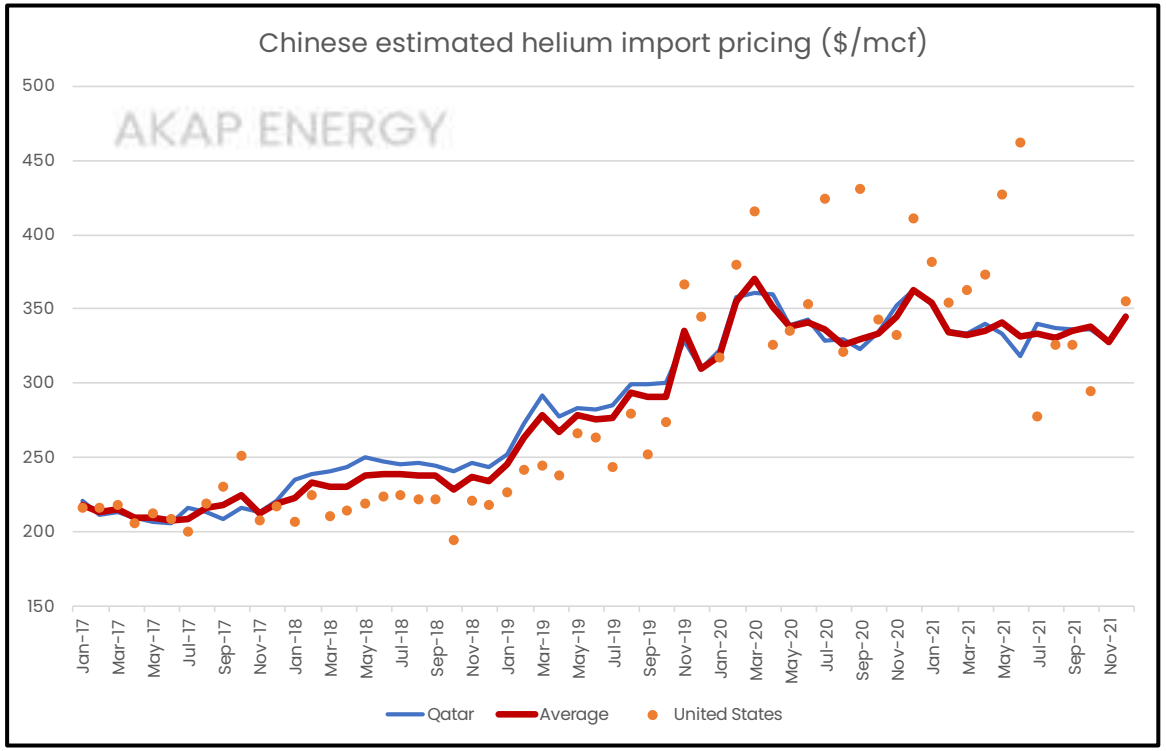


Helium Pricing

Sustained Demand Lead Price Increase

- Long term price growth of **8% CAGR** based on sustained demand growth
- **Rapid price growth** 2019 onward in response to ongoing supply crisis caused by closure of US Federal Reserve



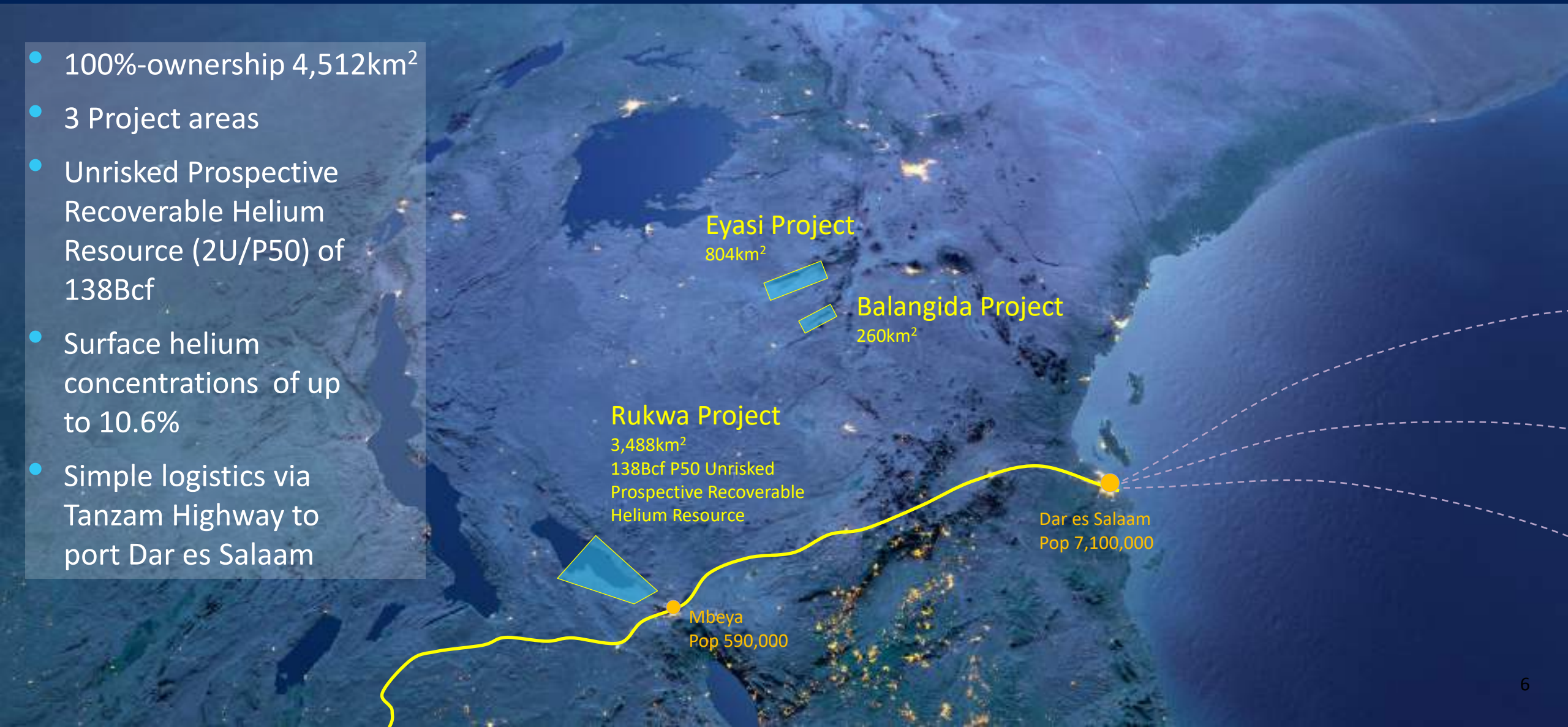


- China bulk contract import price increased from ~$200/Mcf in 2017 to **~$350/Mcf** in 2021
- 'Short contract' price from USA up to **$450/Mcf**
- Lisbon plant, Utah, currently sells helium for domestic USA market at **$605/Mcf**

Primary Helium Assets

Developing a Strategic Resource

- 100%-ownership 4,512km^2
- 3 Project areas
- Unrisked Prospective Recoverable Helium Resource (2U/P50) of 138Bcf
- Surface helium concentrations of up to 10.6%
- Simple logistics via Tanzam Highway to port Dar es Salaam



East Africa Rift

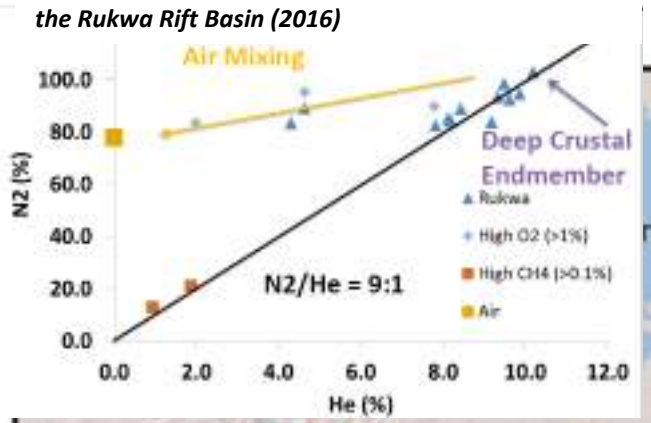
High Grade Helium in a Unique Geological Setting

- Circa 700,000 Bcf helium develop in Tanzanian Craton released by hot fluid when basement is broken by rifting
- Helium One has secured acreage within the 'Goldilocks Zone' for helium release across three separate rift basins: Rukwa, Eyasi and Balangida

Primary Helium 50x – 200x higher grade than current production with no associated greenhouse gasses

- Abundant surface helium anomalies identified from a multispectral satellite spectroscopy study; indicating widespread charge and migration

Laboratory measurements of sampled seeps from the Rukwa Rift Basin (2016)



Adapted from Danabalan and Gluyas (2021)

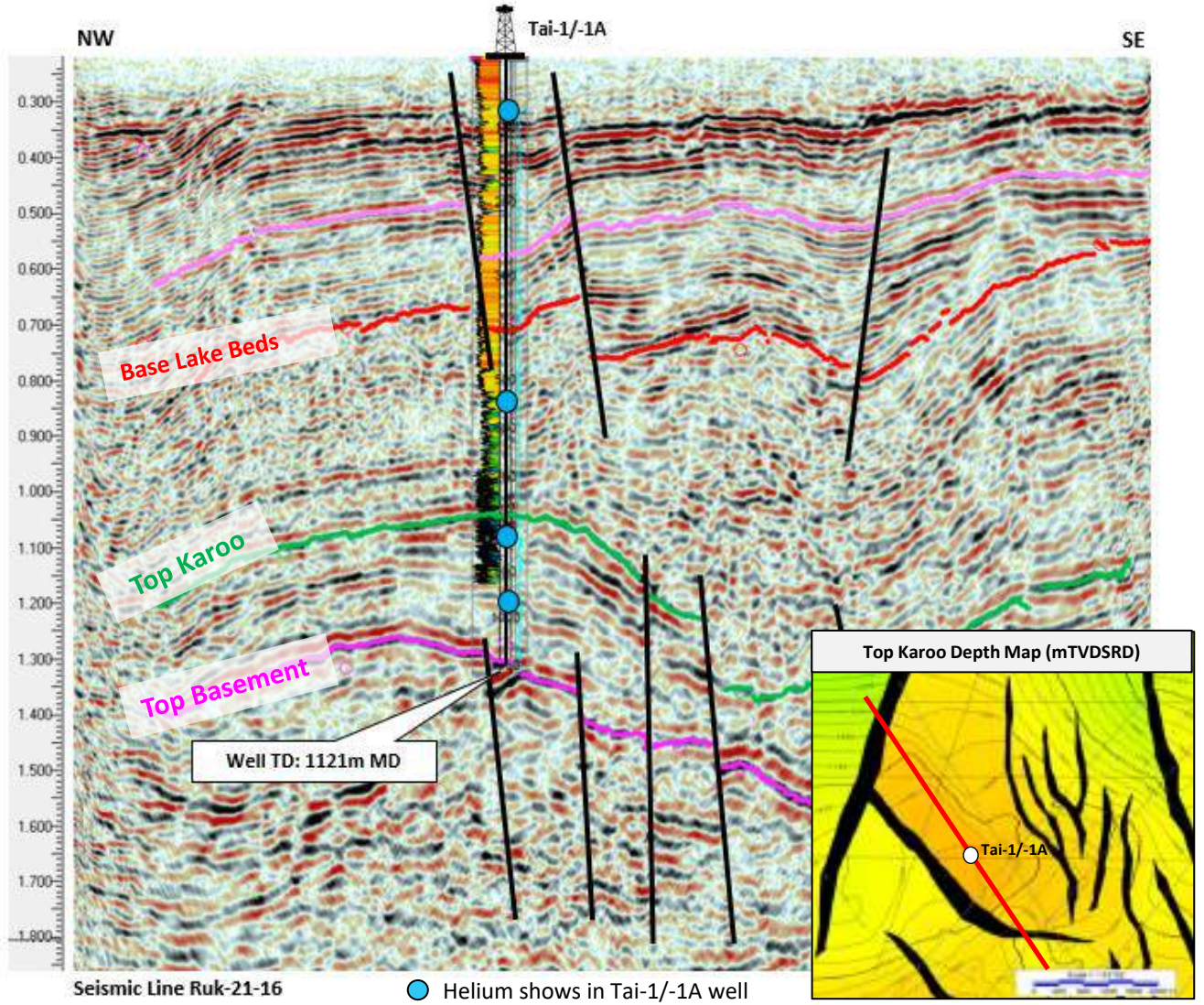
A Working Helium System

Evidence of Subsurface Helium in the Rukwa Rift Basin

- 2021 drilling campaign provided proof of concept and de-risked a number of play concepts
- Tai-1/1A encountered multiple intervals with helium shows:
  - **Lake Bed Fm:** 2.2% He in mud from 70m
  - **Red Sandstone Group:** He 1000x above background
  - **Karoo Group:** multiple untested shows
- Excellent quality reservoir units
- Good quality sealing units
- A working helium system with multiple plays

Excellent results from 2021 encourage further drilling and exploration

Seismic section illustrating the Tai-1/-1A well drilled in the Rukwa Rift Basin in 2021

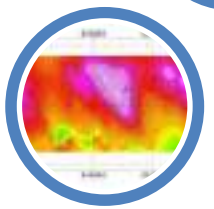


Growing Subsurface Database

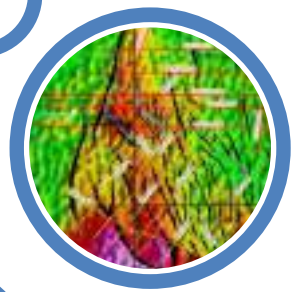
Supporting the Identification of 2022 Drilling Targets

- Helium One use an integrated matrix of geological datasets in subsurface interpretation and decision making
- Integrated datasets assist in the prioritisation of subsurface targets to be tested in 2022 drilling campaign

Multispectral Satellite Spectroscopy: Remote sensing data demonstrating multiple near surface helium anomalies

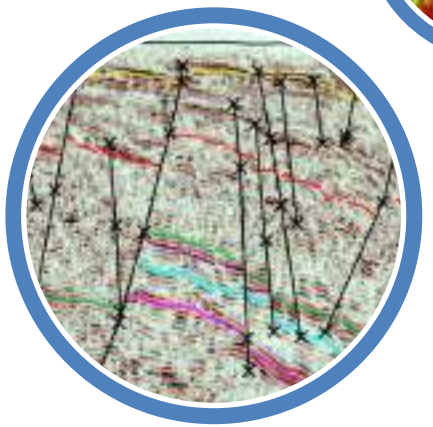


Electrical Resistivity Tomography: Ongoing survey to identify near surface anomalies in top 200m



Airborne Gravity Gradiometery: Maps basin / basement contact to identify structural highs and migration conduits

2D Seismic: Powerful tool to identify stratigraphic data and structural closures from 200m to basement



QEMSCAN: Provides information on reservoir, seal, mineralogy, and grain size distribution to correlate drill data to seismic interpretation

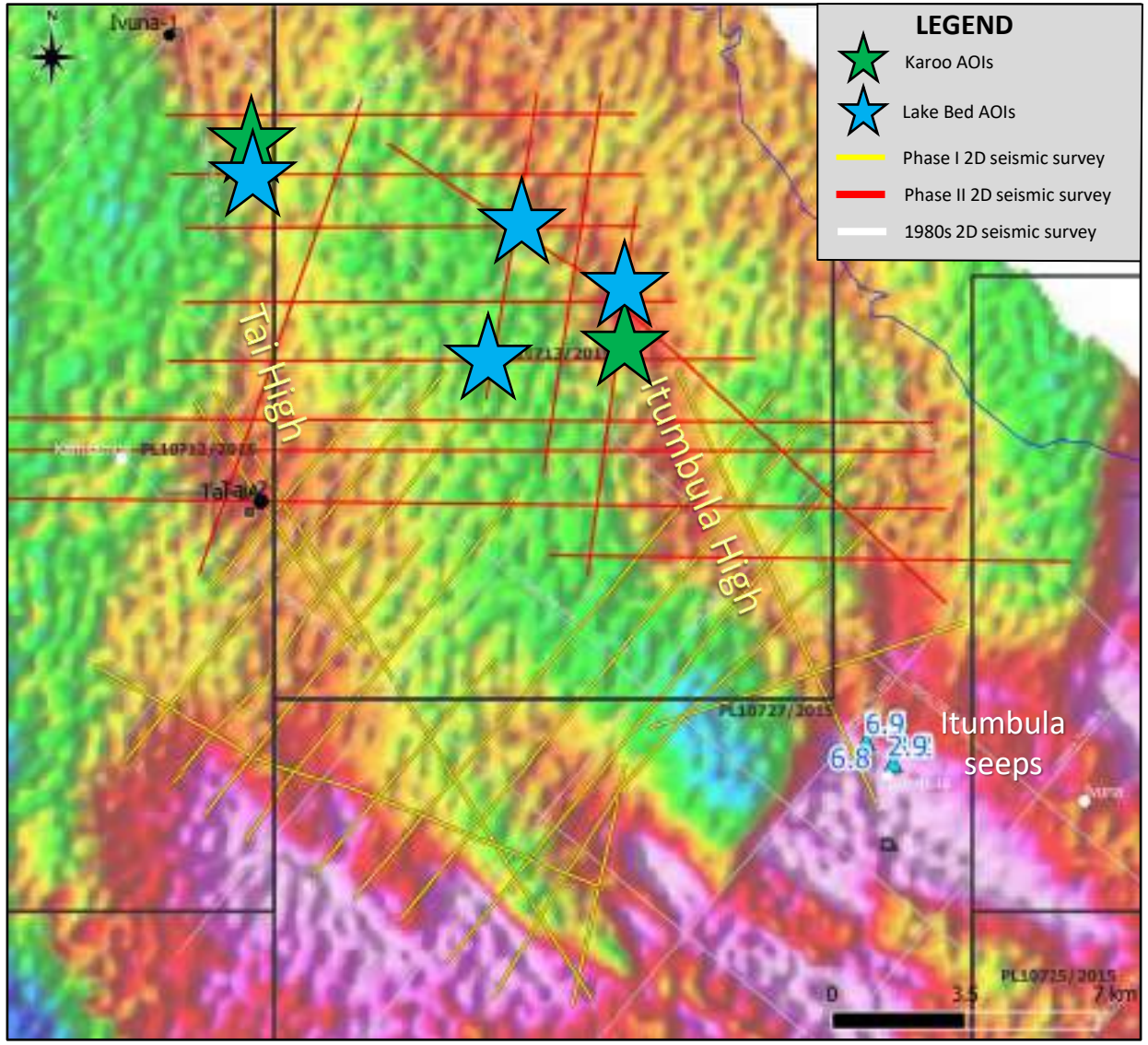
Phase II 2D Seismic

Expanded Prospectivity

- 220 line kilometre 2D seismic completed 25th December 2021
- Imaged northern extensions of known structural highs that act as a charge focus for helium migration

Multiple areas of interest identified in a previously unsurveyed part of the Rukwa Rift Basin

- New prospects and leads will be additional to current resource base and prospect portfolio
- Ongoing interpretation to progress these areas of interest to leads and prospects integrating multiple data sources from AGG, MSS, and QEMSCAN

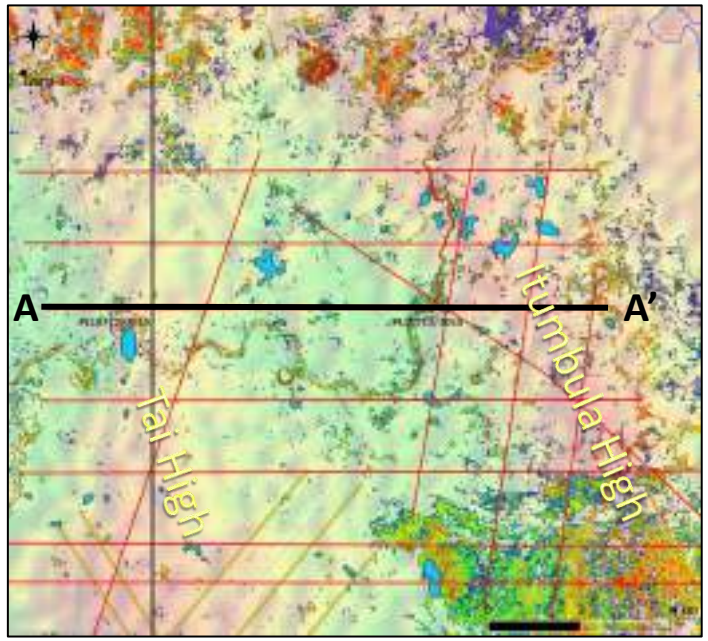


Seismic Example

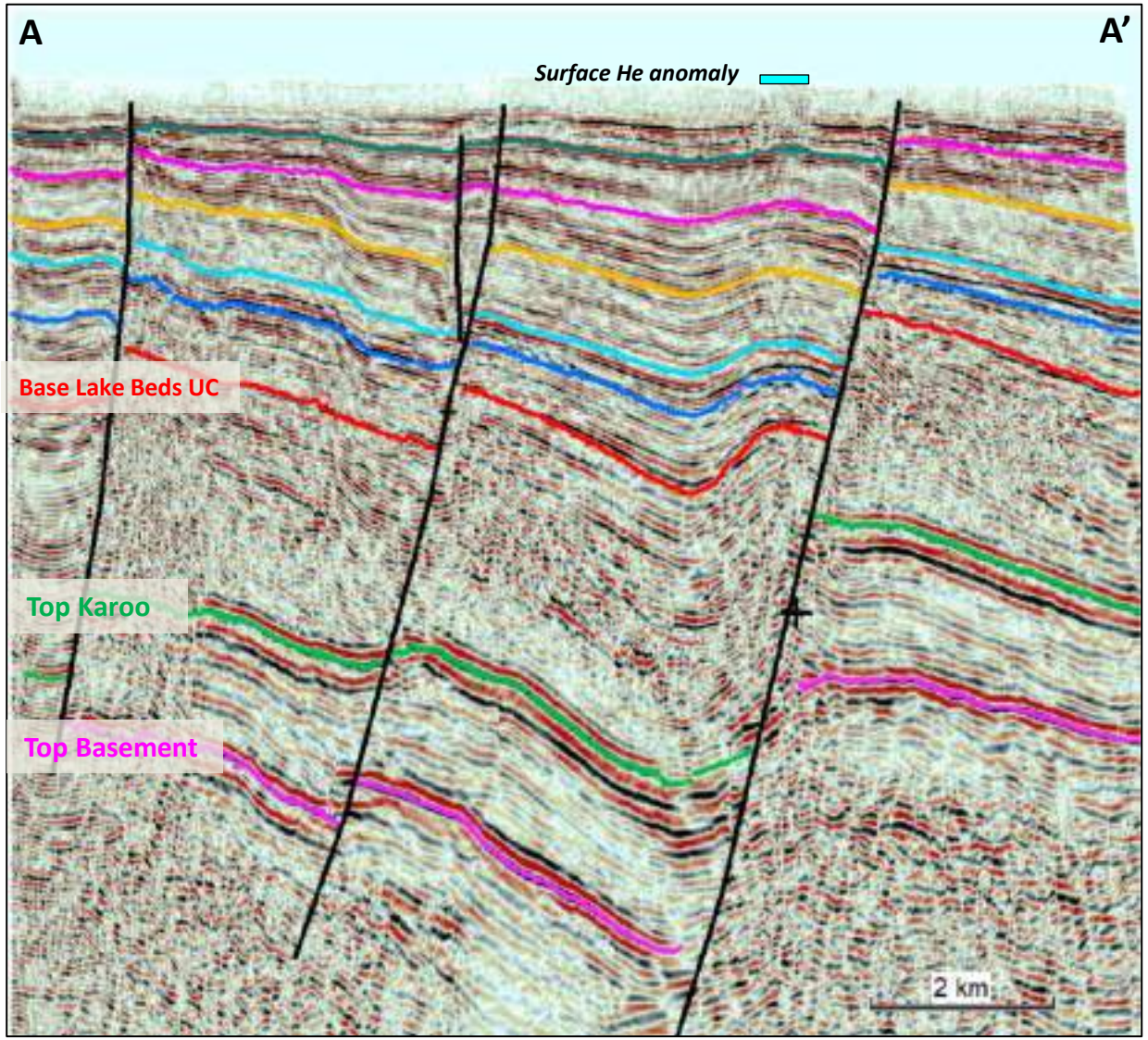
Area of interest with potential stacked Lake Bed sequences

- Potential for multiple stacked pay within the Lake Bed Formation
- Concurrent surface helium anomaly identified by MSS

One of several areas identified on the Phase II 2D Seismic currently being evaluated



MSS helium anomalies overlain on FTG Map



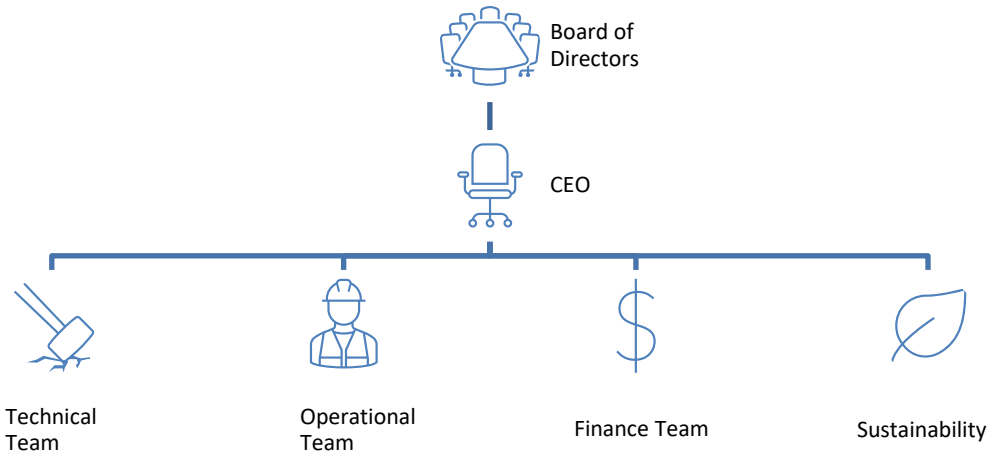
Strengthened Management

Experienced Technical and Operational Specialists

- Cost-effective exploration requires a **highly skilled team** of industry specialists

Helium One has built a strong management team with experience in delivering successful exploration

- **Technical Team:** Geologists and Geophysicists with deep experience of gas exploration in rift valley settings
- **Operational Team:** Managers and Engineers with detailed knowledge of project development and implementation
- Supported by **Board of Directors** with 140 years of Resources sector experience, including a sophisticated knowledge of operating in Africa
- Directors and Management incentivised with **share options**, with appropriate vesting criteria, to **align all interests**



A Clean and Sustainable Source

Primary Helium Not Associated With Hydrocarbon

1,000 litres of helium from Qatar North Field requires the production of 2,500,000 litres of hydrocarbon

- Majority of helium is currently sourced as a low-grade byproduct with hydrocarbon
- As we transition towards a green economy, production of hydrocarbon will reduce
- Helium One focusses on primary helium associated with Nitrogen carrier gas

Helium One can produce carbon-neutral helium

SUSTAINABLE DEVELOPMENT GOALS

Long term training and employment opportunities

Helium sourced with minimal environmental impact

Helium critical to next-gen technologies

Multi-generational economic growth

Helium without associated hydrocarbon dependency

Sustainable Communities

Multi-Generational Project for Growth and Development

Helium One is working to bring long term opportunities to the Songwe Region

- Partnership with University Dar es Salaam in providing technical and academic skills transfer
- CSR programme providing assistance for local schools within Rukwa basin
- Preference given to indigenous companies and local workers in employment during exploration

Large scale resource allows multi-generation development, education and employment opportunities in remote part of SW Tanzania

Low CAPEX Development

Low-Cost / High-Margin Operation

- Ease of processing high grade bimodal gas

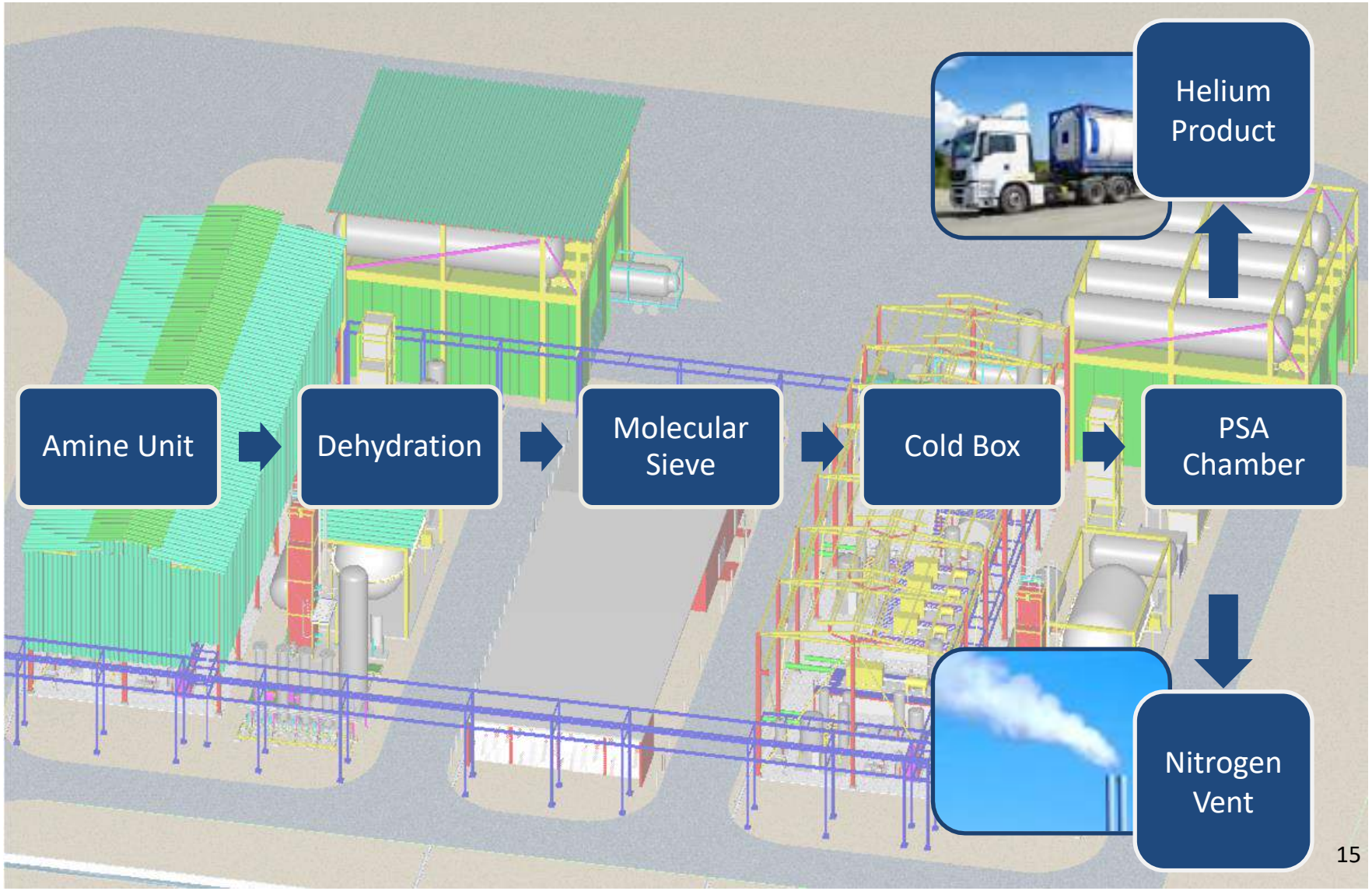
CAPEX $50m per module

350,000 Mcf/yr

OPEX $15-$20/Mcf

Price $350/Mcf

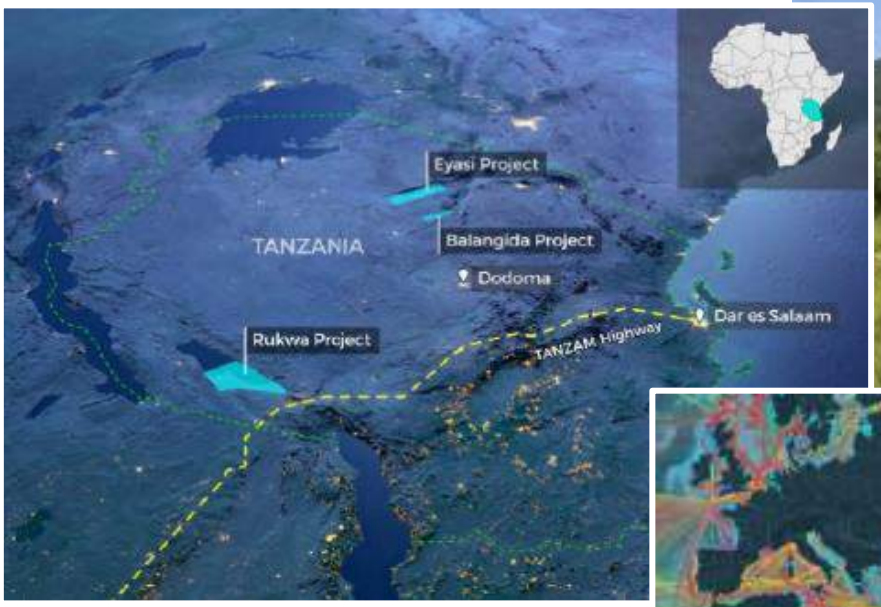
- Debt finance - ~1yr payback
- Scalable production with additional modules to produce 1Bcf/yr
- Clean process – low /no CO_2 nitrogen vent to atmosphere



Simple Logistics

Established Route to Market

Right: Tanzam Highway near to Rukwa



Above: Route of the Tanzam Highway

Right: Freight shipping routes from port of Dar es Salaam to China, Far Eastern and European Markets

- Simple logistics utilising existing infrastructure
- Trucking of liquid helium in ISO containers: One truck per day
- Upgrade existing Momba Road from site to Tanzam Highway: 130km
- Tanzam Highway, paved carriageway connecting Lusaka (Zambia) to port Dar es Salaam: 850km
- Helium ISO containers loaded into container ships for transport to China, Far Eastern and European markets

Tanzania

A Supportive Business Orientated Jurisdiction

- Pro-business agenda under Tanzania's first female leader President Samia Hassan
- GDP $62.4Bn growing 5.8%pa (2022 est)
- Demonstrated improvements to regulatory process
  - Simplification of business taxes
  - Streamlined award of mining licences

Government cites helium as a key commodity to empower growth in mining sector

- Helium classed as an Industrial Mineral under Mining Act
  - 3% Royalty
  - 16% Government Free Carry

A Transformational Opportunity…

Strategic Resource

De-Risked Basin

Experienced Management

High Margin Operation

Part of the Green Transition

Feeding the Digital Revolution

… Advancing Towards Discovery

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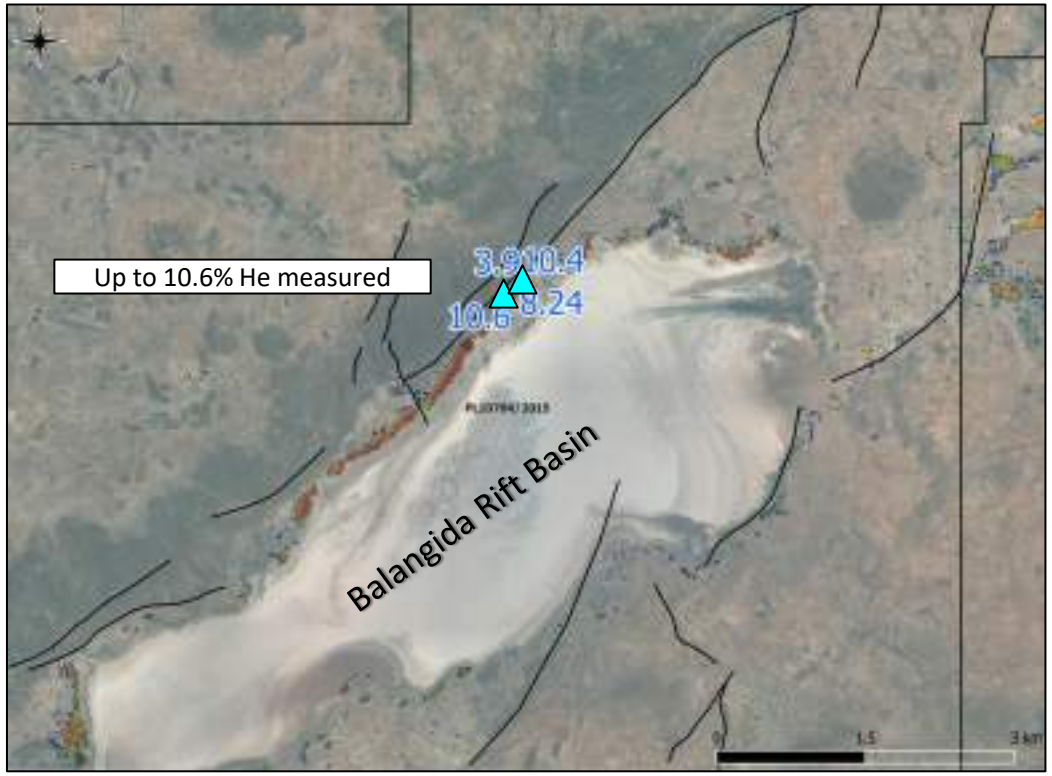
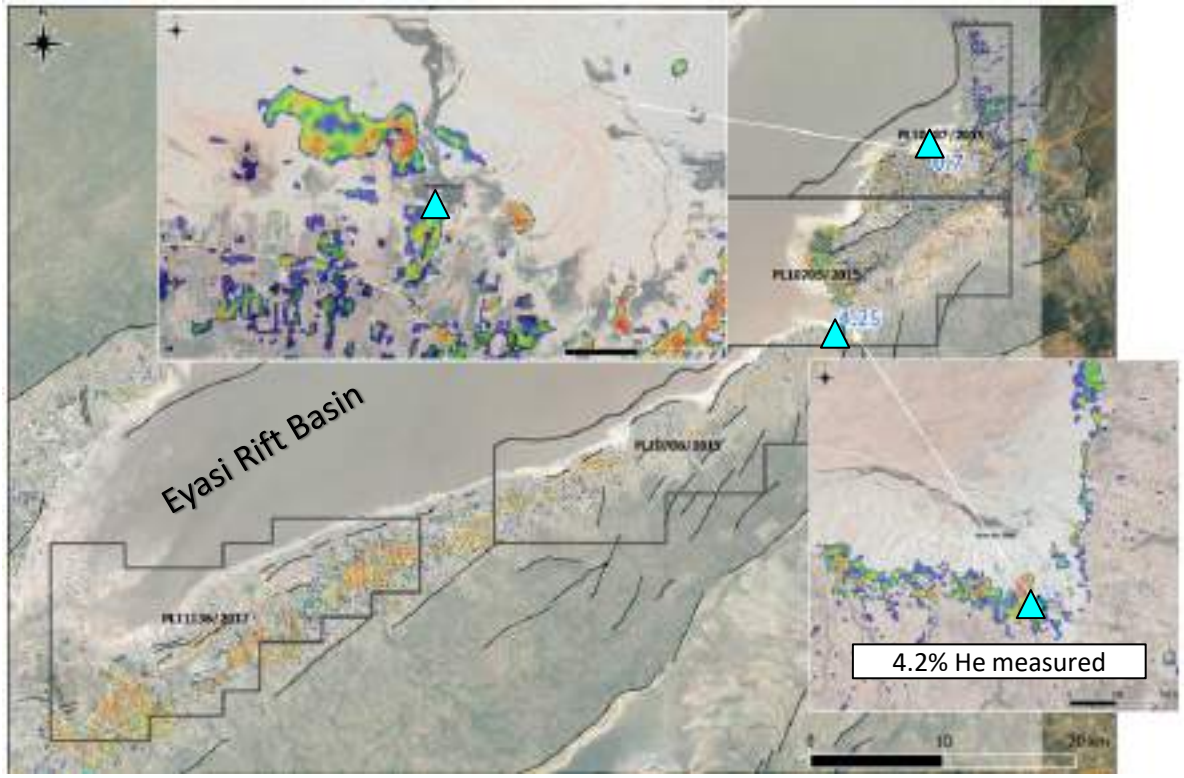
Pipeline - Eyasi and Balangida

Initial exploration underway



Remote sensing helium anomalies strongly correlate to samples helium seeps in the Balangida Rift Basin



Remote sensing helium anomalies strongly correlate to samples helium seeps in the Eyasi Rift Basin

- Previously sampled helium seeps with highest grade in portfolio
- Multiple MSS anomalies correlate to existing seeps and identify new objectives
- Building subsurface database through purchase of Airborne Gravity Gradiometery (AGG) dataset
- Planning initial 2D Seismic survey

Technical Team

Deep Geological Knowledge of Gas Exploration in Rift Settings

Lorna Blaisse
Principal Geologist

Skilled Petroleum Geologist with over 15 years' experience in African exploration and appraisal.

Extensive geological knowledge of the East Africa Rift, including operational experience in the Albertine Rift Basin, Uganda and the Termit Basin, Chad.

Mark Beeson
Consultant Geophysicist

Over 40 years' experience as a geophysicist with oil and gas exploration and production companies all over the world, including as founder investor and Chief Geophysicist of African focused explorer Delonex Energy

Owen Hughes
Senior Operations Geologist

Geological Manager with 35 years' of experience in design and delivery of geological data acquisition plans for exploration, appraisal and development well drilling.

Veteran African operator with experience in multiple exploration basins

Sam Girling
Principal Geophysicist

An E&P geophysicist with 25 years' exploration, appraisal and development experience from a variety of basins worldwide, including Africa, Mediterranean, North Sea, Middle East, India and the Far East.

Operational Team

Experience in Delivering Successful Exploration Programmes

Colin Ivory
COO

40 years' experience in gas exploration conducting drilling programmes in diverse settings in East and West Africa.

Extensive experience of design and implementation of safe, fit-for-purpose and cost-effective exploration operations.

Chris Eyre
CFO

Financial Executive based in Tanzania with >15 years' experience in senior positions across East and Southern Africa.

Previously FD for Tata East Africa region and Financial Controller heading South African office for commodity trading group Traxys.

Mike Williams
Drilling Superintendent

Senior Petroleum Engineer with >20 years' diverse experience working in a variety of well engineering and well test roles in remote locations

Previous lecturer in Drill Engineering at University of Portsmouth

Anna Rabin
Sustainability Manager

Market intelligence and stakeholder relations expert with >10 years' experience advising clients in the mining and oil and gas sector on stakeholder engagement and compliance.

Previously Stakeholder and Sustainability Manager for ASX listed Strandline Resources.

Board

Highly Experienced Team Focused on Delivering a Successful Helium Project

Ian Stalker
Non-executive Chairman

45+ years of experience in mine development and operations in Europe, Africa and Australia.

Has raised over $700m for natural resources projects in Africa.

David Minchin
CEO

15+ years of experience as geologist and managing director with focus on bringing projects through exploration and development.

James Smith
Non-Executive Director

30+ years of experience as a senior oil and gas executive.

Has held senior positions at Chevron Corporation, PanOcean Energy and as VP Exploration at Orca Exploration.

Robin Birchall
Non-Executive Director

20+ years of experience in the financing and management of resource companies.

Currently CEO of Giyani Metal in Botswana.

Russel Swarts
Financial Director

30+ years of experience as a chartered accountant and finance director.

Experience of multiple CEO and CFO positions

Sarah Cope
Non-Executive Director

20+ years of experience in investment banking and as Nomad / Broker advising small and medium size companies.