



**OREXPLORE**  
TECHNOLOGIES

# Orexlore Investor Presentation

November 2022

Perth | Stockholm



[www.orexplore.com](http://www.orexplore.com)

# Who we are.

- A commercialisation-stage mineral scanning technology company, established in Sweden and headquartered in Perth, Western Australia
- Aiming to transform the mining industry with a next generation non-destructive scanning technology to extract insights from drilled core in a faster, more sustainable way, improving decision making across the mining value chain
- Primed to capitalise on global mega-trends; surging metals demand; increasingly difficult exploration; slow resource to reserve conversion; project and operating pressures; and accelerating ESG drivers



## Fast

industry leading

**Drilled to insight**

*remote analysis within 15m*



## Mobile

exploring with you

**Anywhere in the world**

*rapidly transportable containers*



## Sustainable

scan core

**Transport information**

*save time, money and emissions*

# Corporate Structure | ASX: **OXT**

Well funded to execute product commercialisation strategy, while ensuring financial discipline.

## Capital Structure

Shares on issue  
**103,664,196**

Performance rights  
**8,293,136**

Share Price (02.11.22)  
**\$0.080**

Market Cap (02.11.22)  
**A\$8.81m**

Q3 Revenue (30.09.22)  
**~A\$684k**

Cash position (30.09.22)  
**~A\$8.94m**

**No debt**

## Led by Experienced Board & Management

**Alan Bye**  
Non-Executive Chairman

**Brett Giroud**  
Managing Director

**Kent Swick**  
Non-Executive Director

**Stefan Sädbom**  
Non-Executive Director

**Stuart Carmichael**  
Non-Executive Director

**Frank Campagna**  
Company Secretary

## Top Shareholders<sup>1</sup>

Circle 5 Management Pty Ltd.

Kent Jason Swick

Castle Point Funds Management Ltd.

Other top 10 holders (combined)

## % Shares on Issue

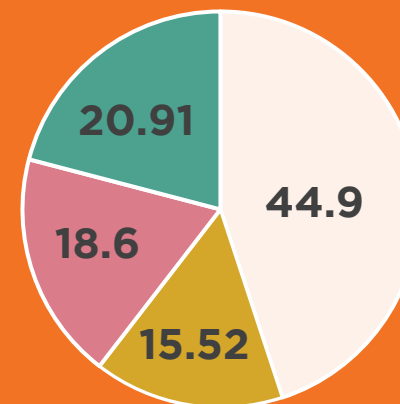
19.00%

11.91%

8.56%

16.80%

## Shareholder Structure



Public & Other

Institutions

Board & Key Personnel

Corporations (Private)

<sup>1</sup> As at Nov 2022  
Source: S&P Capital IQ



# X-ray Powered Core Insights.



Fast



Non-destructive



Human - Machine



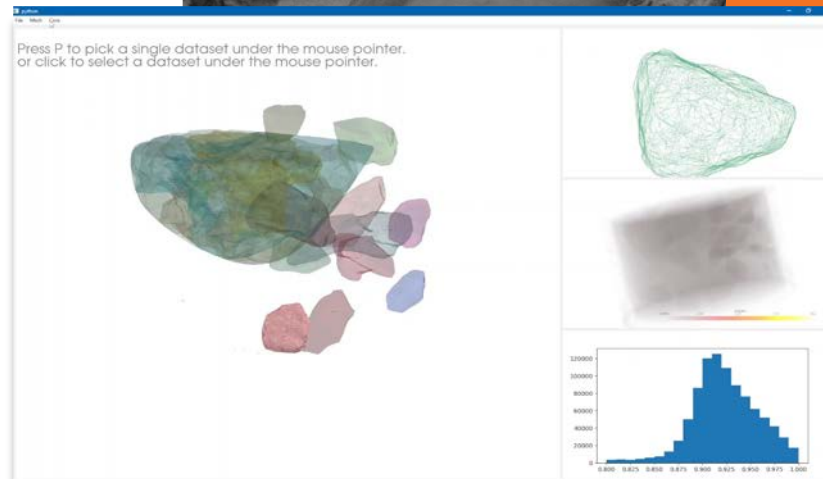
Multi commodity



Value Creation

## True 3D scanning unlocking transformational products

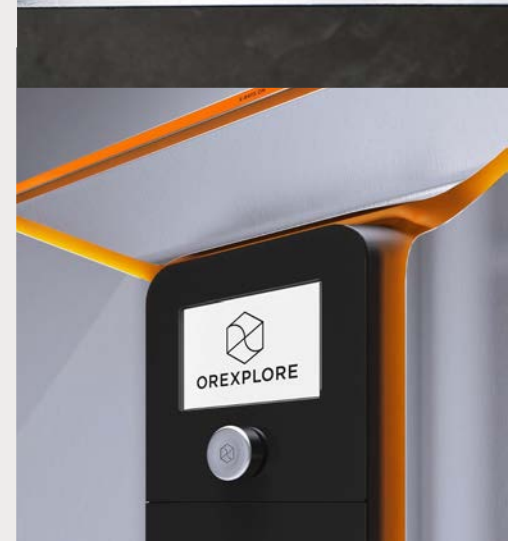
- The Geocore X10 scans through the core creating a unique 3D data set that powers a suite of new products across the mining value chain from exploration to closure.
- The technology platform enables geologists and mining professionals to analyse remote site core within 15 minutes of placing it in the machine.
- Improving exploration outcomes, unlocking ore-bodies, accelerating resource to reserve conversion, and saving time and resources within customer's operations.
- A sustainability enabler to advance precision mining and support the ESG transition.







# Technology offering.



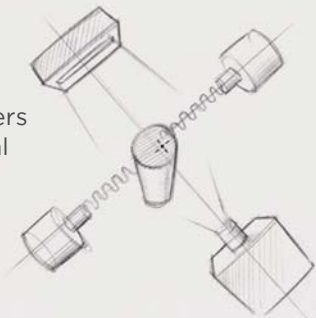
## GeoCore X10 ®

### High Energy X-ray Source

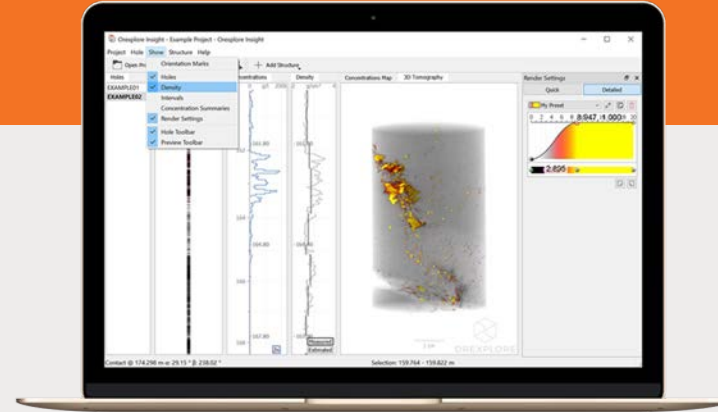
XRT (X-ray transmission) CT provides 'through-the-core' structural 3D imaging used to estimate potential elemental composition, geological structure, texture & density.

### Spectrometers

XRF Spectrometers provide elemental detection at the core's surface.



- **Fast:** scans four x 1m cores at a time, in less than 15 minutes per metre.
- **Versatile:** non-destructive scanning of both core & non-core (chips etc.) material.
- **Easy:** requires minimal skill set to operate. One technician can operate up to 3 machines.



## Insight software platform

Orexplor's software system, **Orexplor Insight®**, provides users with the ability to interact and analyse the scan results obtained from the GeoCore X10®. It allows for 3D-visualisation of the core and the ability to further analyse the resource and physical information, providing rich capability to understand, interpret and extract key information contained within the sample such as:

- Geological structures
- Lithology / texture
- Density - high resolution
- Rock mechanics & physical characteristics e.g. RQD
- Particle detection
- Detected elements
- Emerging geochemistry

# Life of mine coverage.



## Exploration

### Targeting tool

Mineralisation indicators and vectors guiding campaigns.



## Resources & Reserves

Accelerating developments & acquisitions

3D field information supporting accelerated conversion and techno-economic reviews.



## Extraction Economics

Matching methods to deposits

Mine design and process selection through rock characterisation e.g. ore sorting.



## ESG

Environmental management

Acid drainage and waste impact monitoring.



## Operations

Production & Analysis

Optimising core sampling and dynamic grade control.





# Business Model.

**Fast**

**Mobile**

**Sustainable**

## Laboratory Scanning

- Core transported to Perth or Stockholm laboratories
- Initial customer test ground to leverage into site deployment
- Typically, lower volumes of several metres to 1,000 metres per engagement
- Product development with clients

## Site Scanning

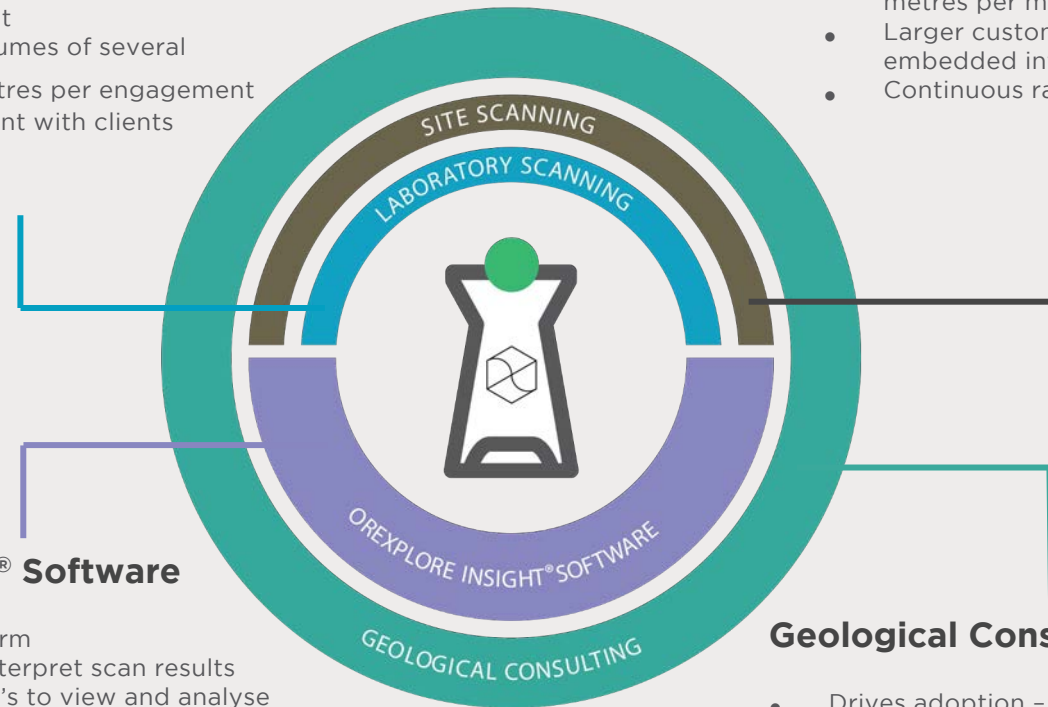
- Machine transported to customer site
- Medium to high volumes of over 1500 metres per month (resolution dependent)
- Larger customers with machines embedded into site workflows
- Continuous rapid scanning

## Orexplore Insight® Software

- User interface platform
- Visualises easy-to-interpret scan results
- Enables remote SME's to view and analyse rapid field results
- Supports the analysis of structures, faults, fractures, fabric, density and lithology
- Illustrates detected elements and emerging 3D modelled geochemistry
- Ongoing machine learning / human analysis platform development

## Geological Consulting

- Drives adoption – “Geo to Geo” selling of transformational technology
- Supports customer integration into site processes and workflows
- Working with customer champions to articulate and promote value within the customers organisation
- Identifies and develops new Products





# Recent Progress.

## Commercialisation.

**Market traction** – exploration targeting, resource to reserve, operations efficiencies

**OZ Minerals Contract** – ~\$2.35m commercial field deployment supporting resource to reserve acceleration

**Product development** – ore sorting, environmental management

**Sales** – building product, commodity and geographic pipeline and Latin American sales team

**Marketing** – customer engagement and industry leadership



**“Orexplode allows us to understand sulphide deportment and mineral association throughout drill core and waste materials in a truly unique manner.”**

Manager - Hellas Gold





# Oz Minerals.

## \$2.35m Contract

- Orexlore is collaboratively working with Oz Minerals to accelerate the traditional resource to reserve approach – connecting unique field data to remote study teams
- The system is unlocking new insights on orebody knowledge to drive operational configurations that maximise value
- Scanning and analysis of approximately 30,000m of drill core and samples on-site
- Creating a new paradigm of rapid ore body assessment





# Recent Progress.

## Capabilities.

**Operations** – operations and maintenance team supporting field deployments

**Delivery systems** – remote operations and support systems

**Finance & governance** – new project and finance systems and processes supporting financial management and operational revenue and cost tracking

**Functions** – fit for purpose functions focused on commercialisation

**Data Science Team** – rapidly building data products from unique 3D data sets

**Teams** – high performance engineering, geology, sales and R&D teams driving commercialisation pace







# Recent Progress.

## Technology.

**HQ machine** – now scanning up to HQ core size ~ +40% market

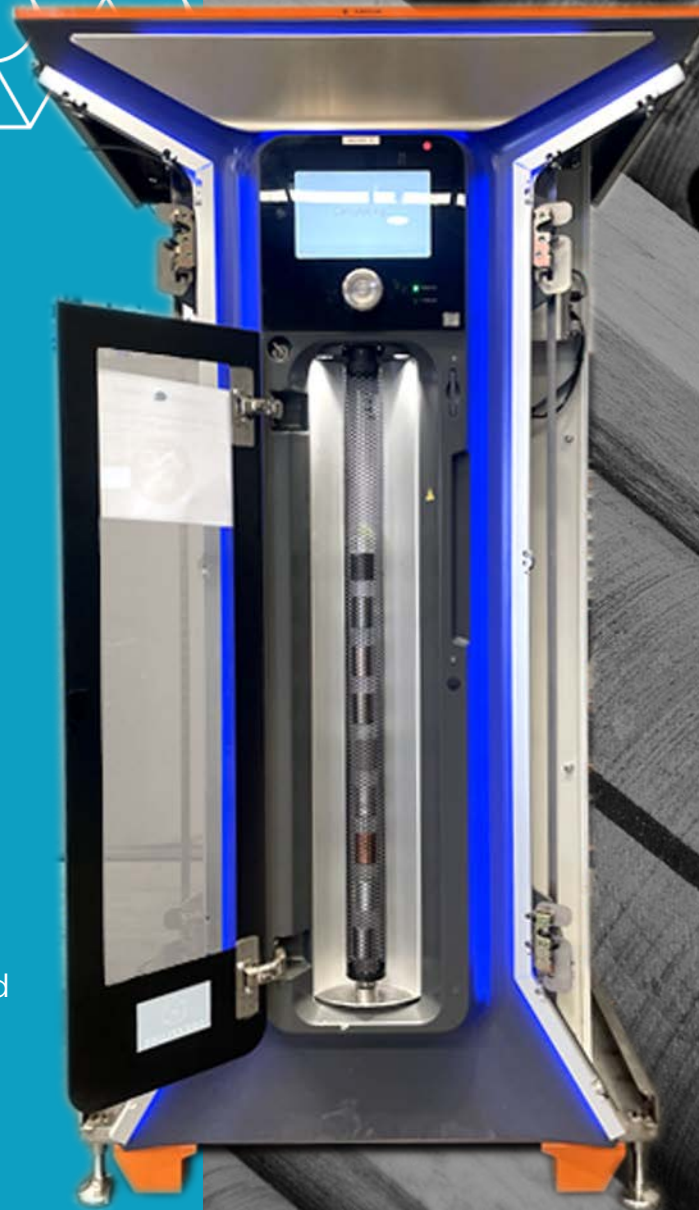
**Core engine** – data science and physics team advancing main system

**Orexplre Insight®** – new functionality driving product delivery and enabling machine learning

**Fleet** – upgraded capabilities including functionality, QA and speed

**Manufacturing** – improving supply capacity through design evolution and supply chain flexibility

**Future horizons** – advancing next generation sensors



# Strategic Priorities.



## Commercialisation.

**Revenue** – commercial field deployments and laboratory scanning

**Sales** – growing pipeline across commodities, geographies and customers

**Adoption** – solving pain points and demonstrating transformational technology value

**Financial discipline** – robust financial management



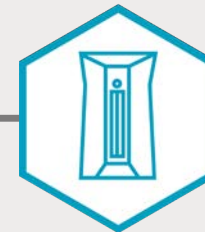
## Capabilities.

**Operations and Engineering** – delivering reliably enables effective scale

**Business Development** – focused customer targeting

**Machine Learning** – computer assisted core analysis

**Reliable logistics** – reliable deployed fleet



## Technology.

**GX10** – increased core size, functionality and capability

**Insight®** – advancing features and performance of 3D analysis

**Products** – R&D conversion through data-geo science & engineering

**R&D** – next generation sensing

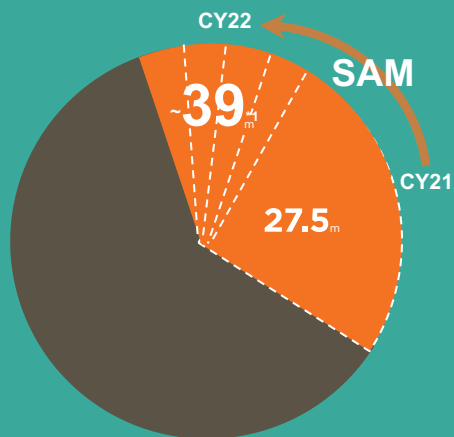




# Increasing Market.

Drilled core market

107.8<sup>CY22</sup>  
Million Metres



**Precious Metals**  
Gold



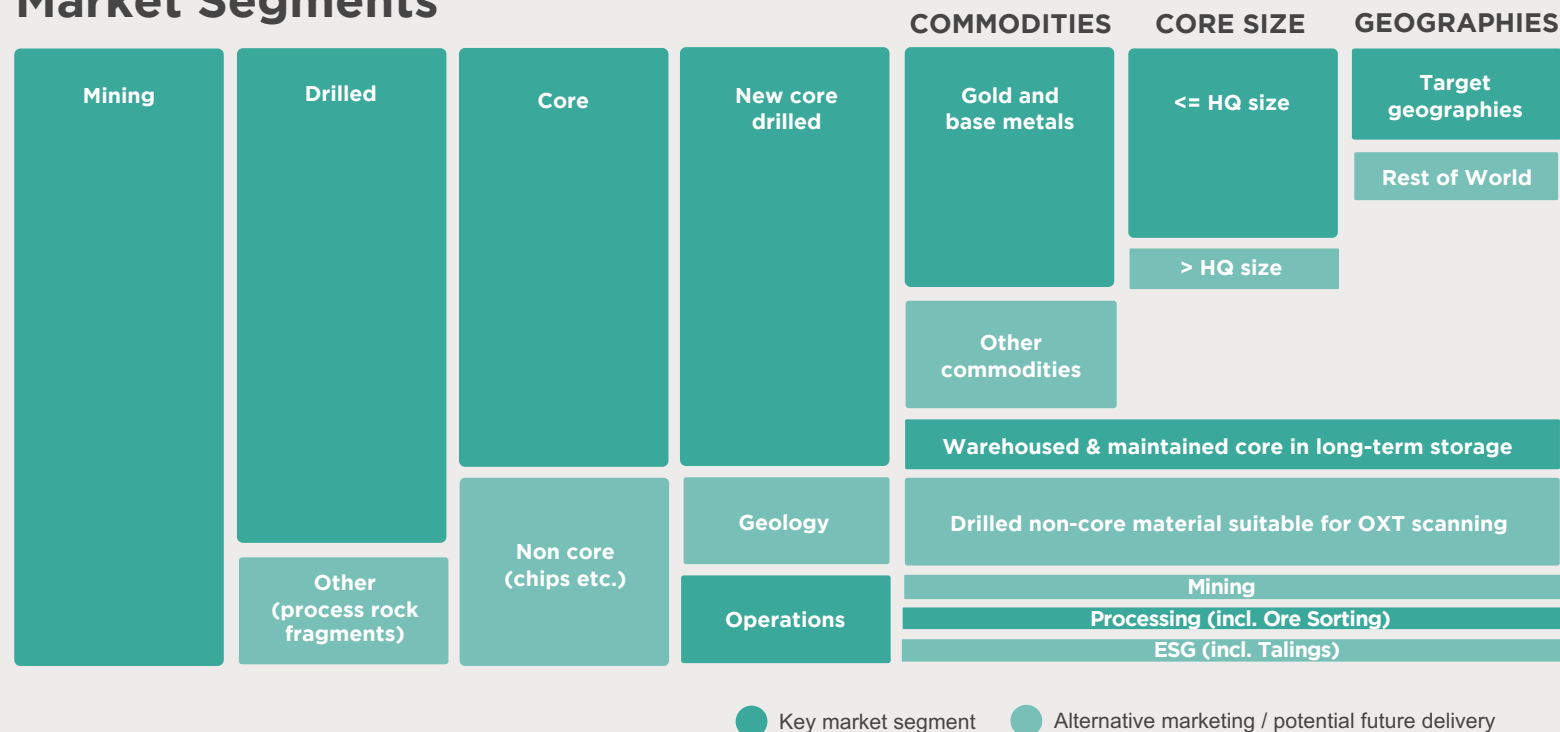
**Base Metals**  
Nickel, Copper, Zinc, Lead



\*1 - CY22 HQ machine development has unlocked ~ 40% uplift in Serviceable Available Market (SAM)

See Table 7 (p27) of Minex Consulting report \*2 - total available drilled core (all sizes) of 107.8 million metres for 2022 - of which 58.3 million metres are NQ size or less. Additional 49.5m metres above NQ consist of a combination of HQ and PQ style of which a course estimate is that 60% of this is HQ/HQ3.

## Market Segments



## Current focus



**Australia**



**Europe**



**Latin America**

\*2 - Source: Minex Consulting - Independent Technical Report - On the available global drilling market - see Orexplorer Prospectus 22 November 2021 - Annexure C - available at [www.Orexplorer.com](http://www.Orexplorer.com)

# Key Investment Highlights.



Fast



Non-destructive



Human - Machine



Multi commodity



Value Creation



## Transformational Technology

**Through the core** – true 3D scanning powering unique products

**Non-destructive** – full digital model - drill once & collaborate

**Fast in the field** – < 15m/m then remotely available to SME's

**Human-Machine analysis** – Insight® user platform enables machine learning powered SME analysis



## Traction

**Contracts** – \$2.35m Oz Minerals; Lab scanning and product development with growing customer base

**Pipeline growth** – through targeted outreach

**Product adoption** – exploration targeting; resource to reserve, sample selection, ore sorting, acid drainage

**Skilled deployment team** – seasoned delivery team

**Global outreach** – Latin American sales and global core



## Scalable business model

**Rapidly deployable mobile fleet**

**Fast build - long life**

**Simple operation and remote support**

**Excellent machine economics**

**Well funded to execute**



## Attractive growing market

**Growing global demand**

**Increasing market** – HQ capability, products, historical core





**Across the value chain** – exploration – projects – operations

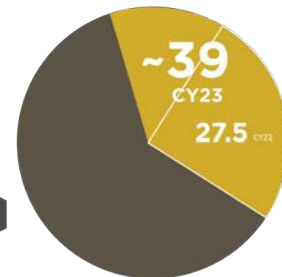
**Multiple commodities**

**Global transition enabler** – digital, automation, workforce, ESG, energy



**Drilled core market**  
**107.8** cy23  
Million Metres

     
Precious Metals Base Metals





# Contact.

Reach out to Orexploré to learn more about our potential.

[info@orexplore.com](mailto:info@orexplore.com)

**Perth | Stockholm**

[www.orexplore.com](http://www.orexplore.com)



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# Appendix.



# Global mega trends.



## Digital Transformation

- Technology enabled business model evolution
- Productivity
- Industry 4.0



## Workforce Evolution

- Skills shortage
- Remote knowledge
- Transitory workforce
- Tech decision support



## Business

- Mining techno-economics
- Increasing global competition
- Doing more with less
- Risk quantification and control



## Automation

- Manufacturisation of mining
- Human-machine collaboration
- Autonomous systems & vehicles



## Metals Demand

- Energy transition
- Rare earths
- Electric vehicles
- Developing nations



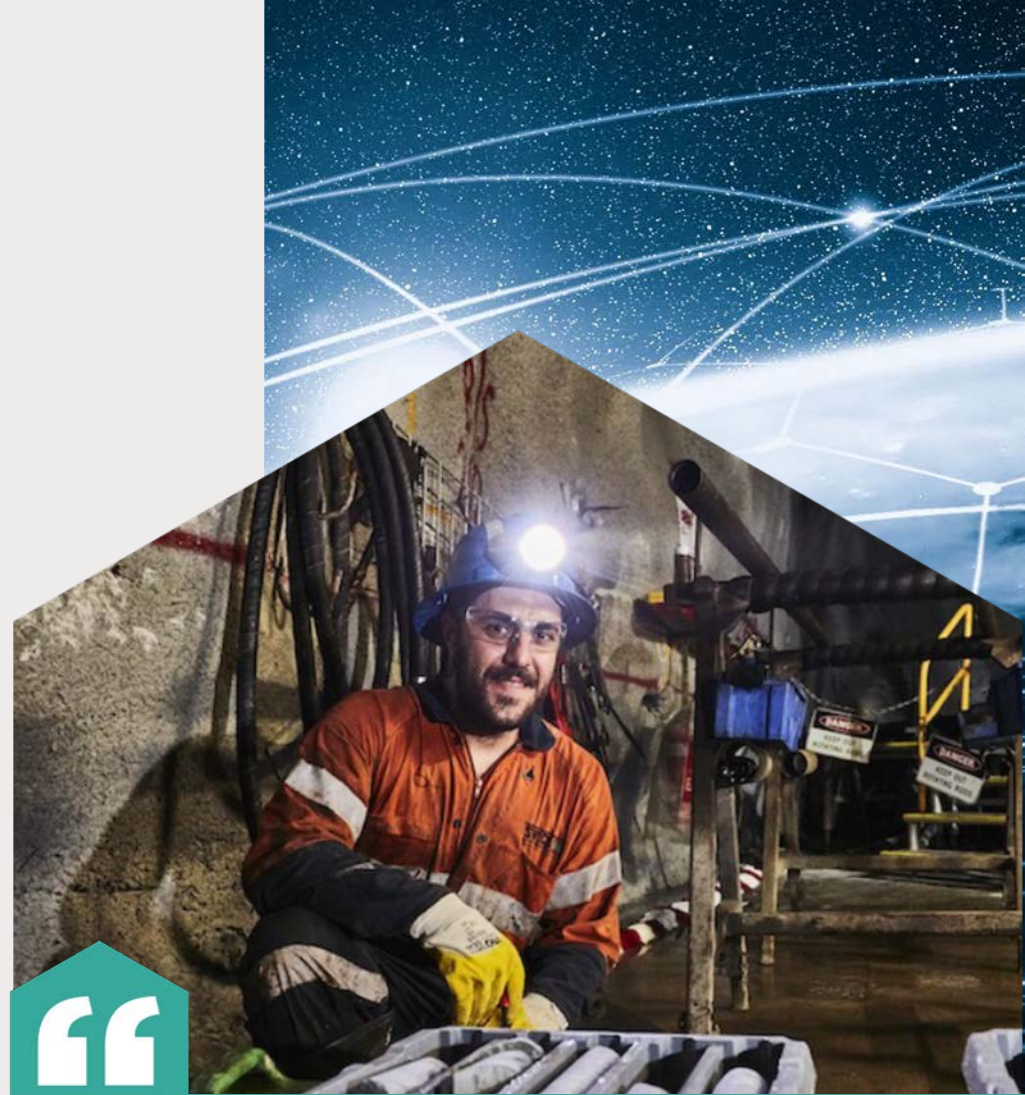
## Sustainability

- Ethical investment
- Social value
- Emissions targets
- Natural environment
- Global targets



## Accelerating Value Chains

- Business models synchronising to accelerating markets
- Rapid reconfiguration to service market opportunities



**“Technology powered decision support is vital to capture value through these global transitions. Orexploré’s drilled to insight time connects geologists to ore bodies within hours of drilling.”**

Brett Giroud – Managing Director



# Mining transitions.



**Digital Transformation**



**Sustainability**



**Business**



**Automation**



**Metals Demand**



**Workforce Evolution**



**Accelerating Value Chains**



## Exploration

- Diminishing discoveries
- Campaign efficiencies
- Pressure to become a producer quickly



## Stakeholders

- Continually expanding
- Accelerating expectations
- Demonstrating leadership across domains – ESG, Carbon



## Operations

- Productivity pressures
- Skills shortages & changing ways of working
- “Do more with less”



## Projects

- NPVs under pressure
- Challenging techno-economics
- Technology adoption
- Evolution of engineering



## Corporate

- Evolving business models
- Global competition
- Complex dynamic value chains
- Synch to accelerating markets
- Access to capital



**Orexplore provides traction through transitions**

- Decision support
- Operational transformation
- Corporate value
- Risk and Sustainability

# Your challenges, our solutions.

**✗ Diminishing exploration returns**



## **Exploration** **Targeting tool**

Mineralisation vectors derived from mineral indicators, alteration states, and rock characterisation.

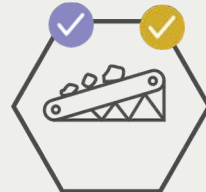
**✗ Slow resource to reserve conversion**



## **Resources & Reserves** **Accelerating developments & acquisitions**

Unique 3D insights from the field supporting accelerated conversion and techno-economic reviews.

**✗ Mining blind**



## **Mining** **Don't mine blind**

Operationally embedded units for grade control improvements to assist dynamic mining decisions.

**✗ Project techno-economics**



## **Project Economics** **Matching plants to deposits**

Ore sorting and rock characterisation to “best fit” process plant design with orebodies to drive NPVs.

**✗ Production efficiencies**



## **Operations** **Production & Analysis**

Optimising core sampling and analysis through pre-filtering and driving operational efficiencies

**✗ Assay delays & costs**



## **ESG** **Environmental controls**

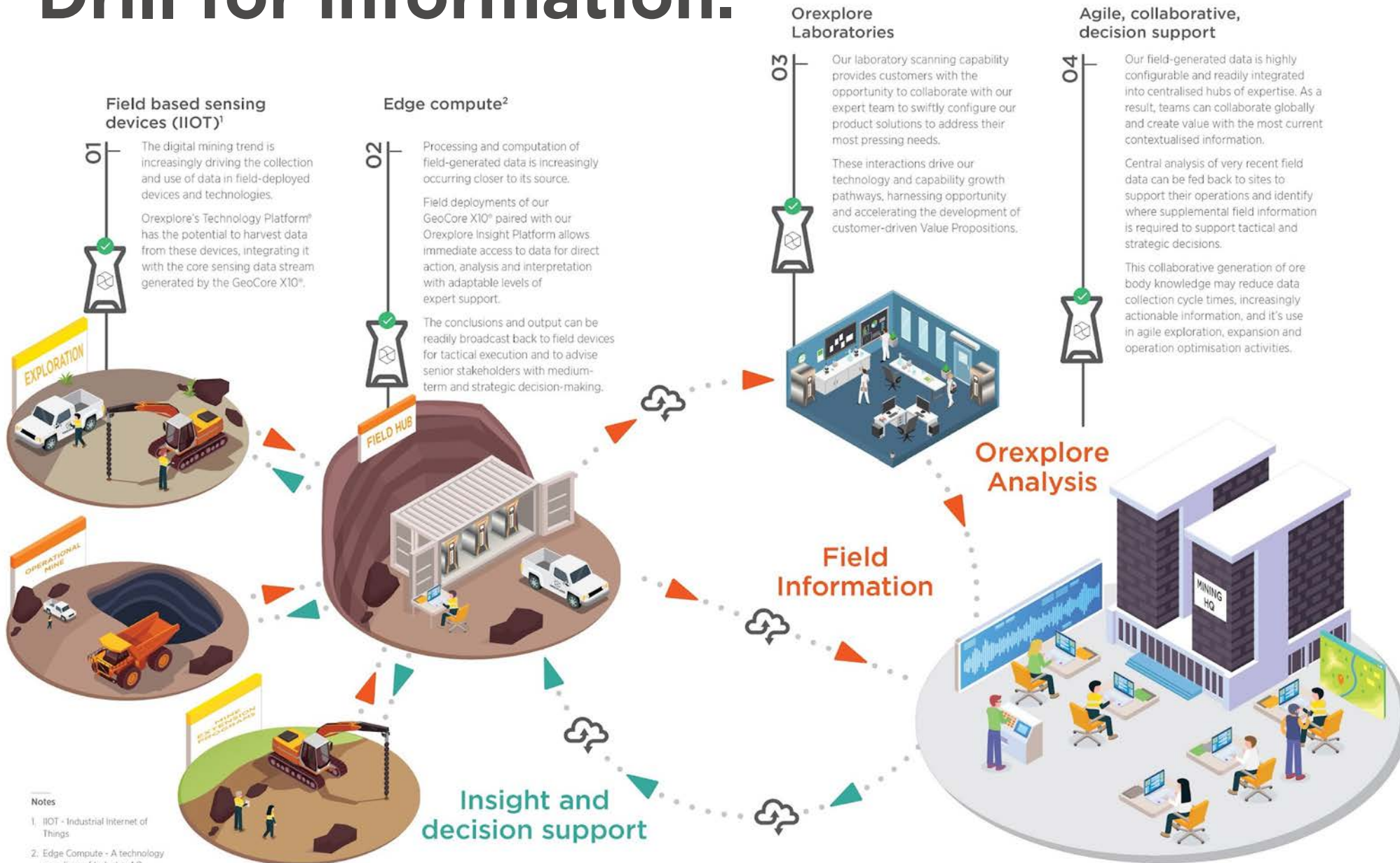
Dynamic field based environmental risk controls – such as acid drainage and waste impact monitoring.

**✗ ESG value creation & risk control**





# Drill for information.



## Notes

1. IIOT - Industrial Internet of Things
2. Edge Compute - A technology paradigm of Industry 4.0



## Fast

*industry leading*  
**Drilled to insight**  
*remote analysis within 15m*



## Mobile

*exploring with you*  
**Anywhere in the world**  
*rapidly transportable containers*



## Sustainable

*scan core*  
**Transport information**  
*save time, money and emissions*

# Technical capabilities.

## Geochemical

Detected elements and emerging geochemistry

Elements - continually improving the accuracy and number of elements that can be detected.

Dense particle detection

Detection of the location of dense particles within the entire core down to 100-micron particle sizes.

## Geological

Lithology / texture

Semi-automatic identification and logging of lithological features.

Rock mechanics

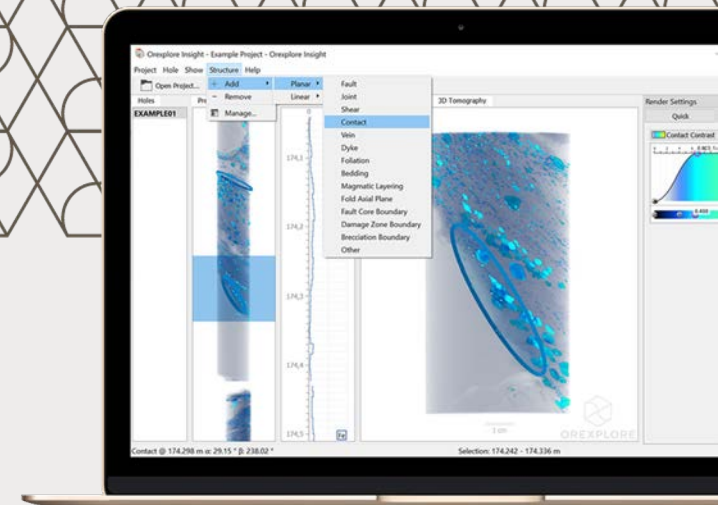
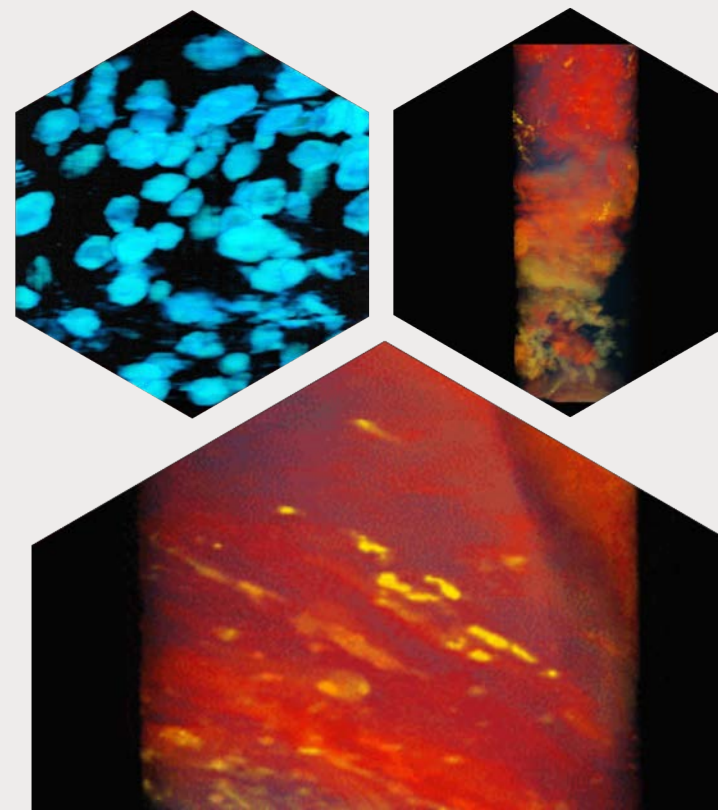
Collection and annotation of rock mass data incl. rock quality designation (RQD), detailed assessment of joint orientation and infill.

Structures

Bedding planes, veins, folds and lineations through the core - oriented and exportable to 3<sup>rd</sup> party software.

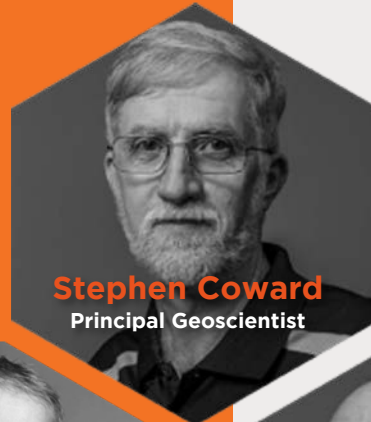
Density

Accurate density measurement of each core sample. Inferred density up to 25 sample points per metre.





# Key Personnel.



# Board of Directors.



**Alan Bye**  
**Non-Executive Chairman**

Alan is a highly respected industry figure with strong expertise on the innovation of the resource industry – covering both digital and extractive innovation technologies. Alan is the co-founder and Managing Director of Imvelo Pty Ltd, a Non-executive Director at Scitech, and holds council positions at SmartSat CRC & CSIRO. Alan has a Ph.D. in Mining from the University of KwaZulu-Natal.



**Brett Giroud**  
**Managing Director**

Brett brings over 24-years of technology delivery, creating and leading large high performing teams. He has driven mining industry transformation and delivered systems and technology across over \$15B of capital projects. Brett has created and led business units, lectured on future systems and is a sought after advisor to start-ups. Brett was previously the Chief Engineer (ICT) for Jacobs (SKM) Engineering, and APAC head of Strategy and Transaction Services for Worley (Advisian). Brett has a Bachelor of Engineering & an MBA from the University of Western Australia



**Kent Swick**  
**Non-Executive Director**

Kent is a Mechanical Engineer with over 30 years' experience in civil construction, mining maintenance and surface and underground mineral drilling. Kent successfully founded and has led (Managing Director) Swick Mining Services Ltd since its inception. Kent has a Bachelors of Engineering from the University of Western Australia and has completed the Owner/President Management program at Harvard Business School



**Stefan Sädbom**  
**Non-Executive Director**

Stefan is a senior exploration geologist with over 35 years' experience in exploration and underground mining. Through various entities, Stefan has been deeply involved in several Swedish and European innovation projects relating to the improvement of the mining industry. Stefan sits on the board of a number of other Swedish listed and non-listed entities. Stefan holds a Bachelors of Geology from Uppsala University



**Stuart Carmichael**  
**Non-Executive Director**

Stuart is a Chartered Accountant with over 20 years' experience in the provision of corporate advisory services both within Australia and internationally. Stuart is a Principal and Director of Ventnor Capital Pty Ltd and Ventnor Securities Pty Ltd which provides corporate and financial advice to small-cap ASX listed companies. Further, Stuart acts as a Non-Executive Chairman / Director for a number of other ASX listed companies