

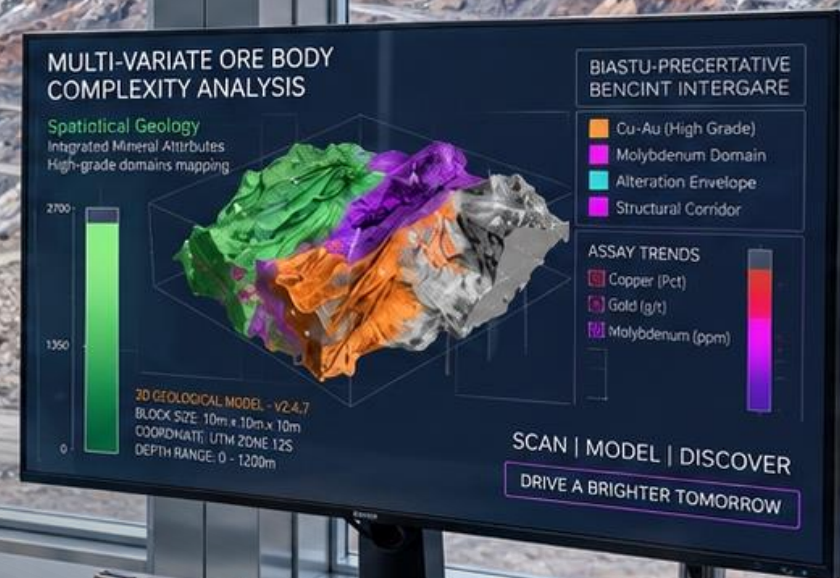


Momentum
Transfer

Seed Investor Presentation · 2026

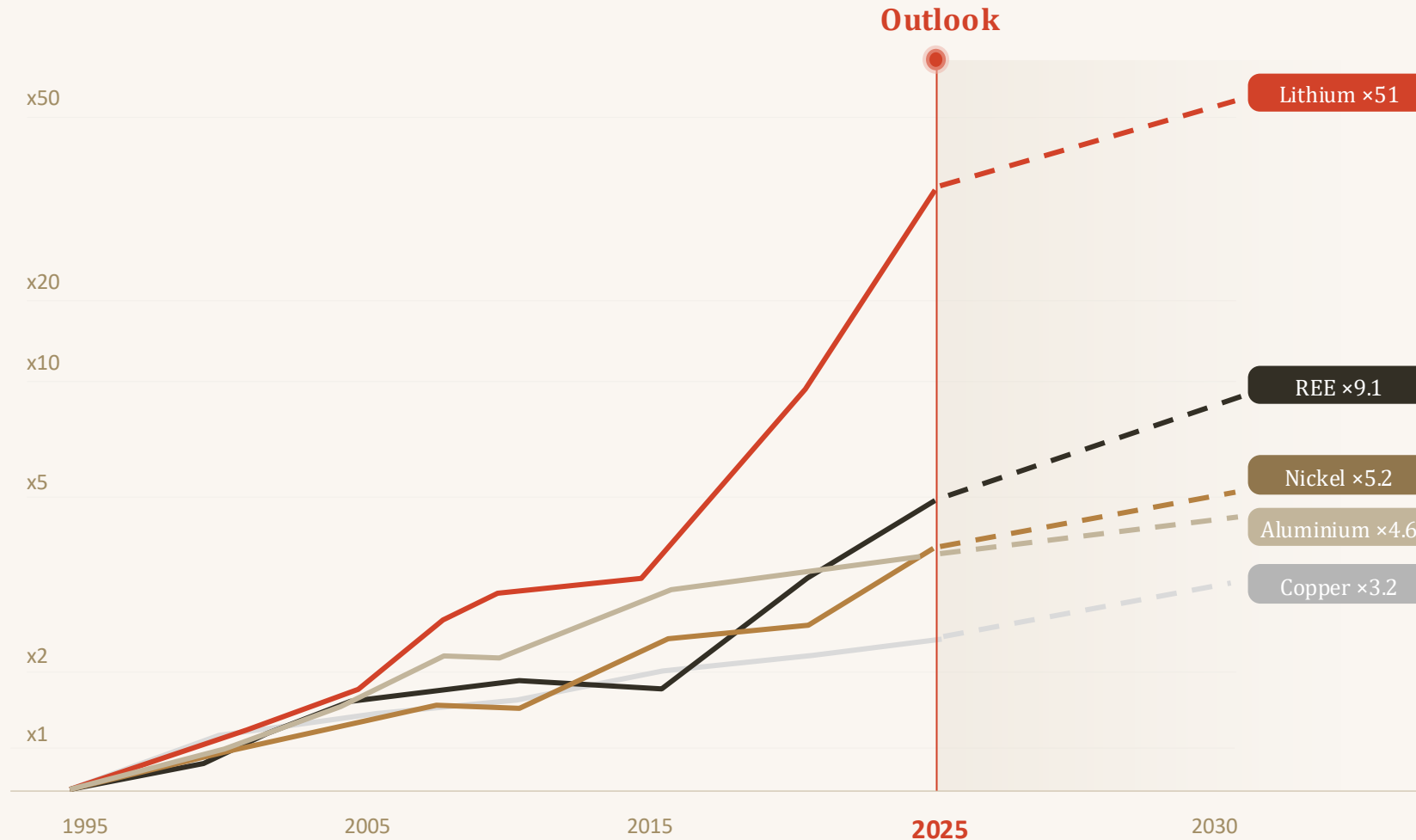
**×200 better mineral data at ×1000
the scale, for mine operators who
turn it straight into margin.**

€3M seed round to become the technology leader in the €2B mineral analytics market.



PROBLEM

Demand for raw materials is growing, and the best deposits are already mined.

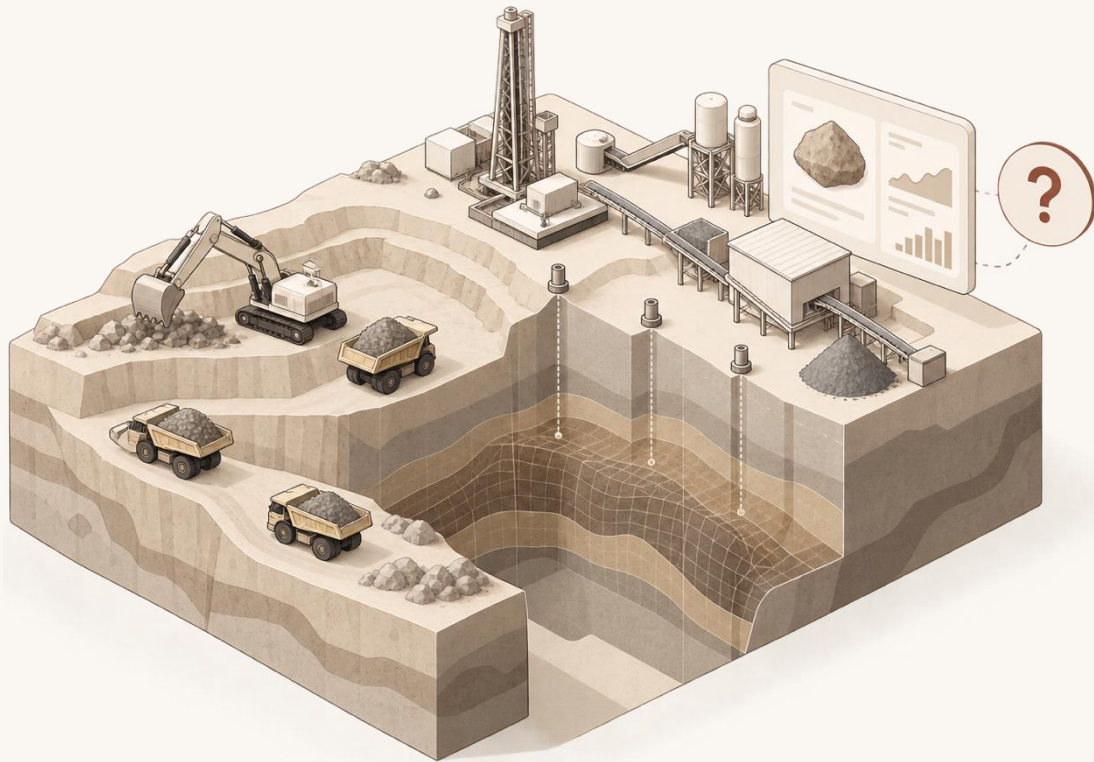


Source: USGS Mineral Commodity Summaries (historical) · IEA STEPS / Net Zero scenarios (2030/2035)

On top of growing demand due to energy transition, fracturing global supply chains require more regional supply.

This means more mines go for more challenging deposits.

Mines lack the tools to predict how much of the value they can extract at any given time.



Revenue

Potential
+5-25%

27%
Average margin
of top 40 miners

Risk
-33%

<https://www.pwc.com/gx/en/industries/energy-utilities-resources/publications/mine.html>

Recovery Rates are calculated Recovered / Grade – So what was the plant able to retrieve from the rock vs what was suppose to be in it.

We have customers that report that they work regularly at above 90%, but can drop to 80% or even 60% - without warning. The result is 33% less revenue at same costs

Mines know how much value is in their deposit. They can only estimate how much can be recovered.



5-25%* of value lost ⚠

Recovery Rates are 95-75% depending on deposit and commodity type.

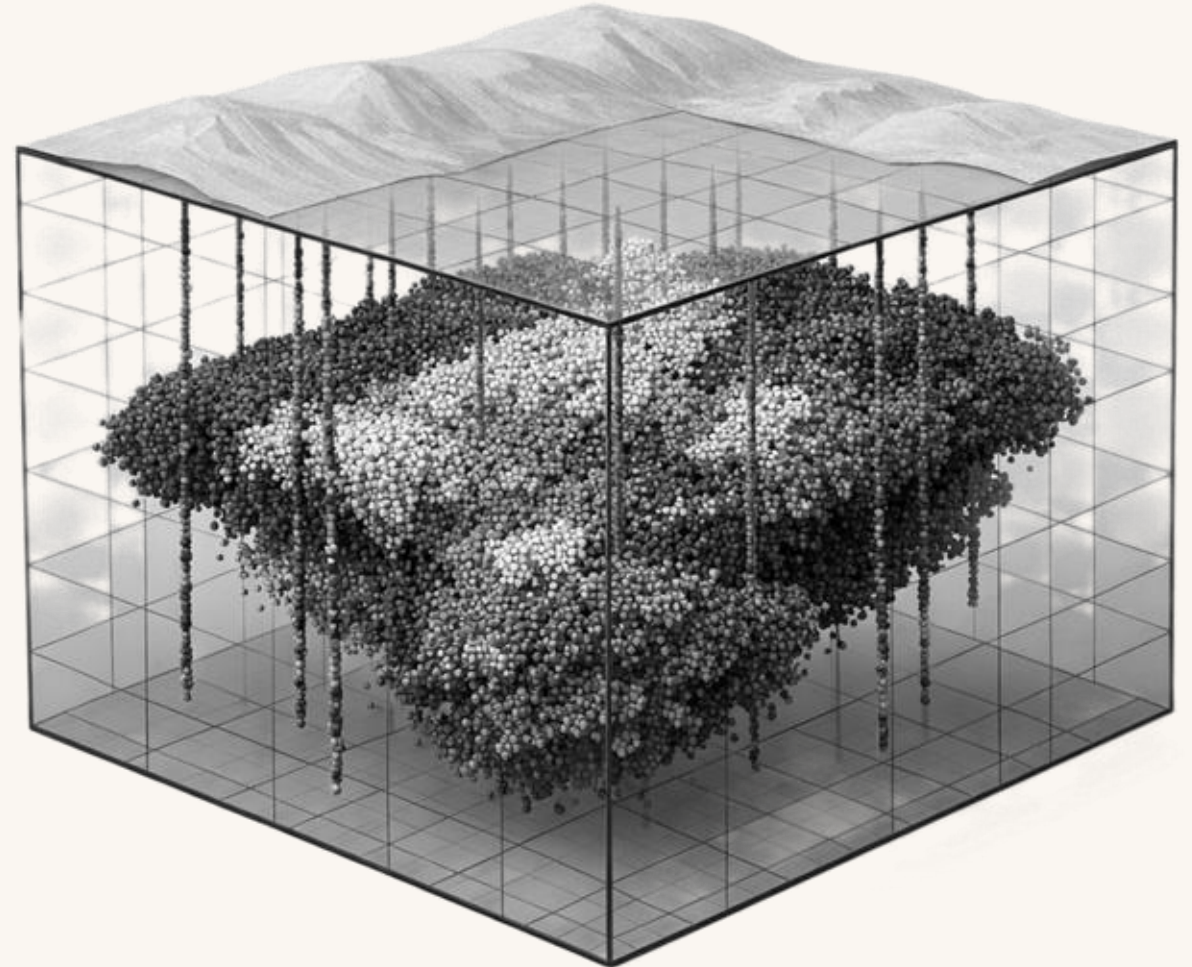
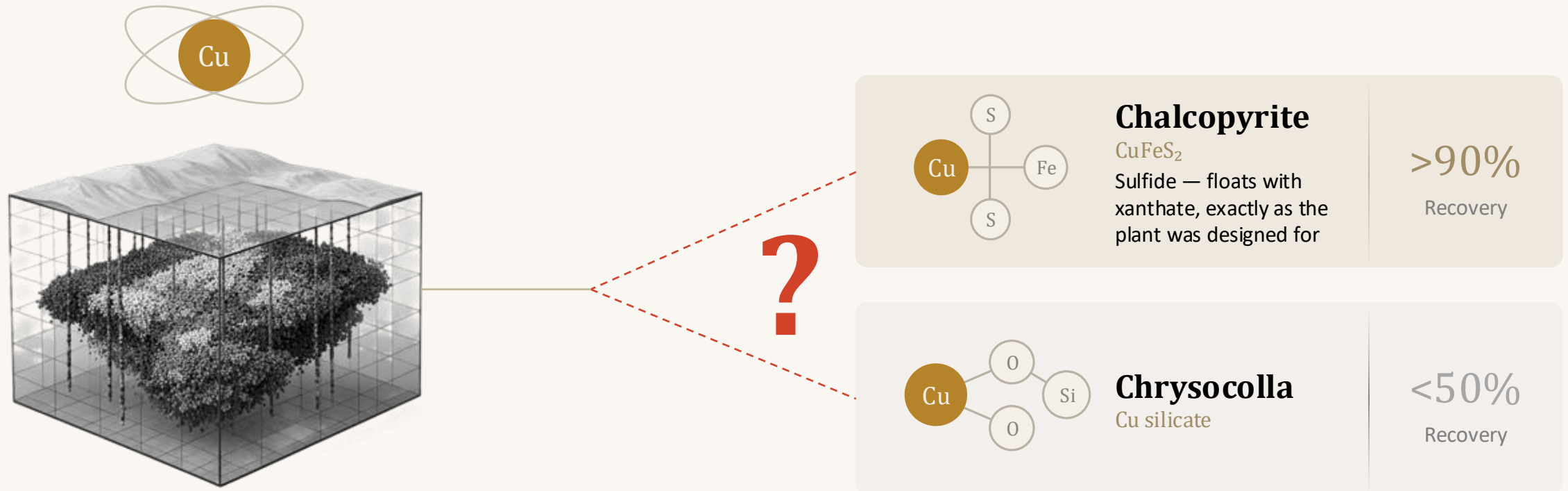


Illustration. The grey scale gives the grade: how much metal is in the ground. Lighter = more.

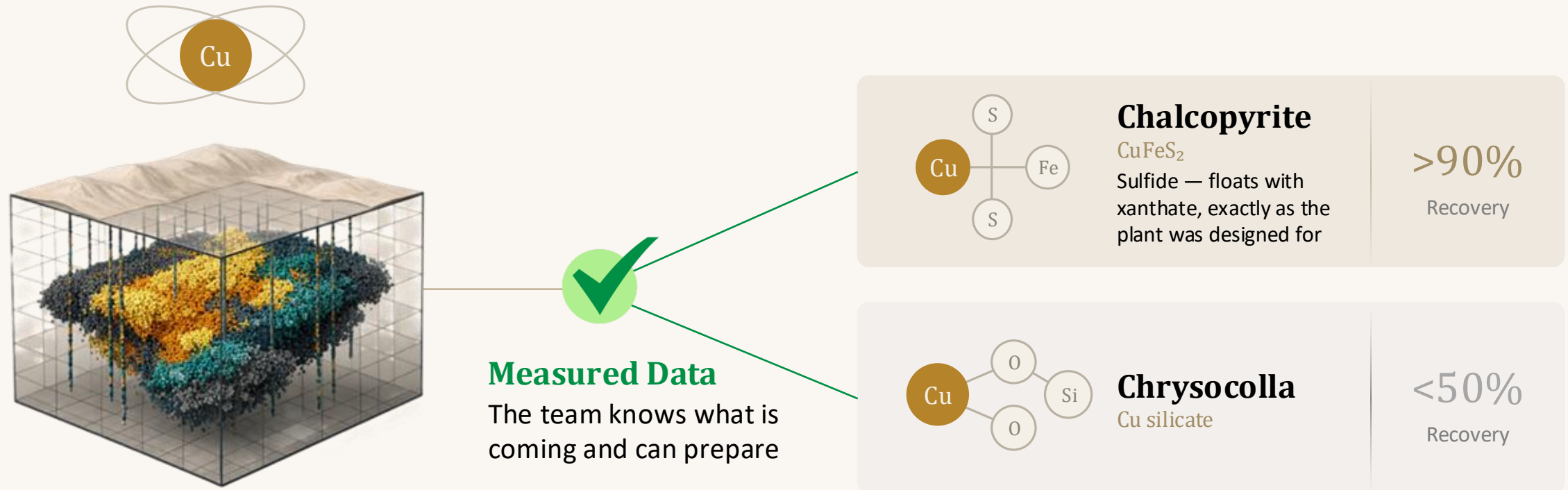
* <https://www.miningfrontier.com/insights/recovery-is-becoming-a-bigger-mining-value-lever/>

Without knowing what is in the ore the mines cannot optimize their processes.



→ Higher risk, higher waste, less profit

Knowing what comes out of the ground next allows for optimized processes



→ **Less Risk, Lower Waste, Increased Revenue**

Centralising measurements at the world's most powerful light sources delivers **minerals data at mine scale** for the first time.



1,000,000× brighter

More photons compared with a standard laboratory X-ray source → enabling precision data with short exposure.



200x data quality

Signal-to-noise compared to lab device, leading to more sensitive detection limits → crucial for recovery prediction.



1000x capacity

High throughput allows for fast measurements without compromising on data quality. Quick delivery for batches.



Adoption is easy and fast, and integrates in existing customer workflows.

01



Customer ships standard samples

We work with 5-10 g standard pulp samples mines produce systematically in the tens of thousands.

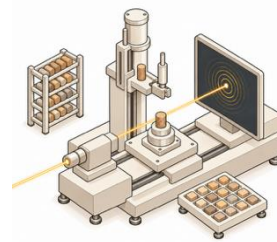
02



We prepare and load samples

Sample intake and preparation in our purpose-built lab.

03



We measure

Pre-booked synchrotron beamtime bi-weekly, standardised setup with thousands of measurement capacity per shift.

04



We process and interpret the data

Highly integrated, automated, reproducible pipelines — AI aided and expert checked. Results in days.

05



Customer gets results

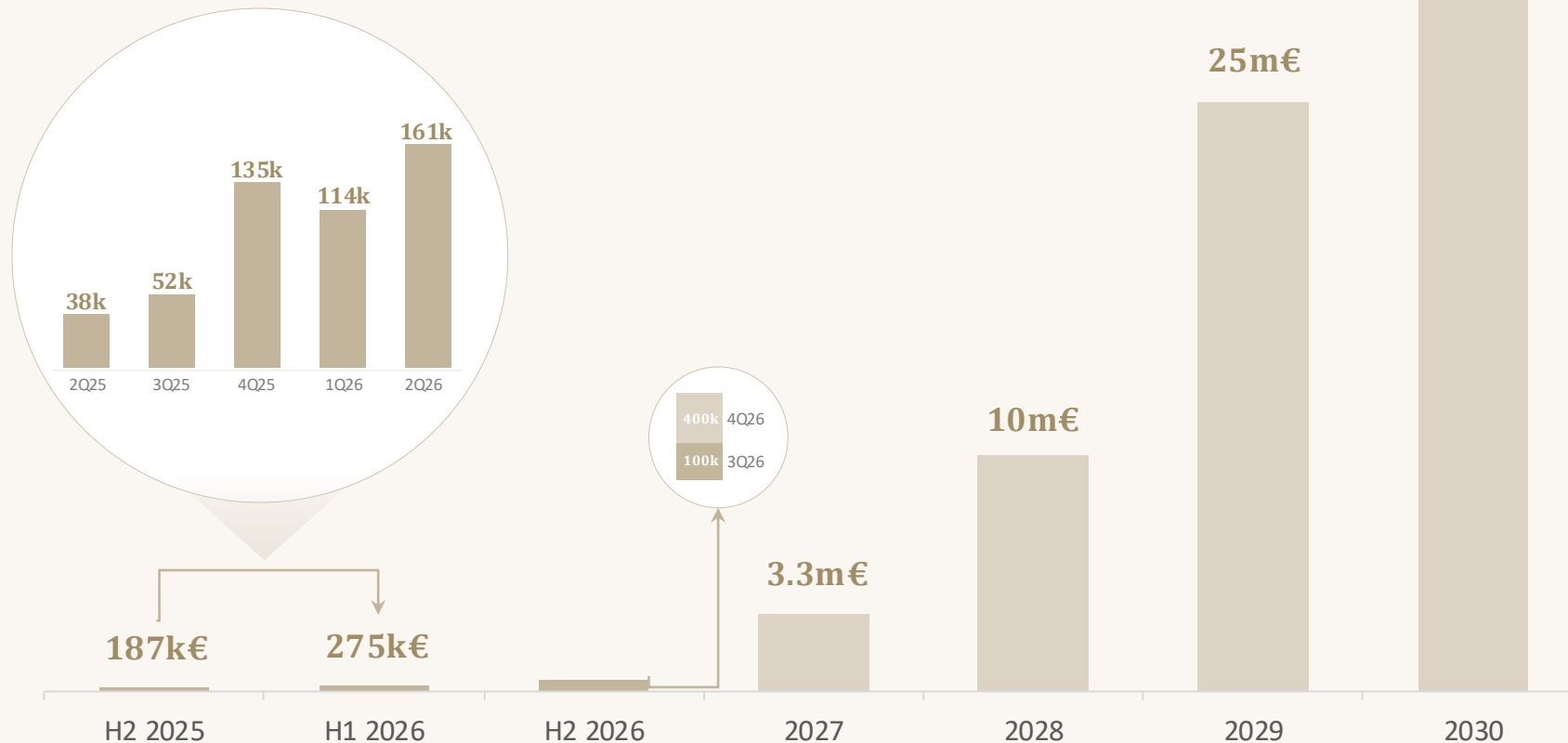
Reliable, reproducible, precise results that are crucial for the future decisions.

The service is reliable and highly standardized. We are in full control of the customer experience.

Only we can deliver this.

Momentum Transfer is already commercial and in the process of scaling.

Contract Value Won Per Quarter • €



€560k

total won sales since spin-out

60%

average margin today
>85% at full scale projected

131€

Average Revenue per
Measurement in 2026

12,450+

Datasets collected (incl. free ones)

Successful founder-led sales in mining using a repeatable process.



The mining KPIs so far

5 weeks

from 1st contact to pilot order

€13k

average deal size

€79k

BHP Pilot

40,000 samples

max project size in pipeline

12 mining customers in five months incl. the world's largest mining company.

Customers



Customer Voices

“ I was looking for a synchrotron mineralogy service for a long time. Finally, I found you.”

Kathy (Superintendent Geometallurgy, BHP)

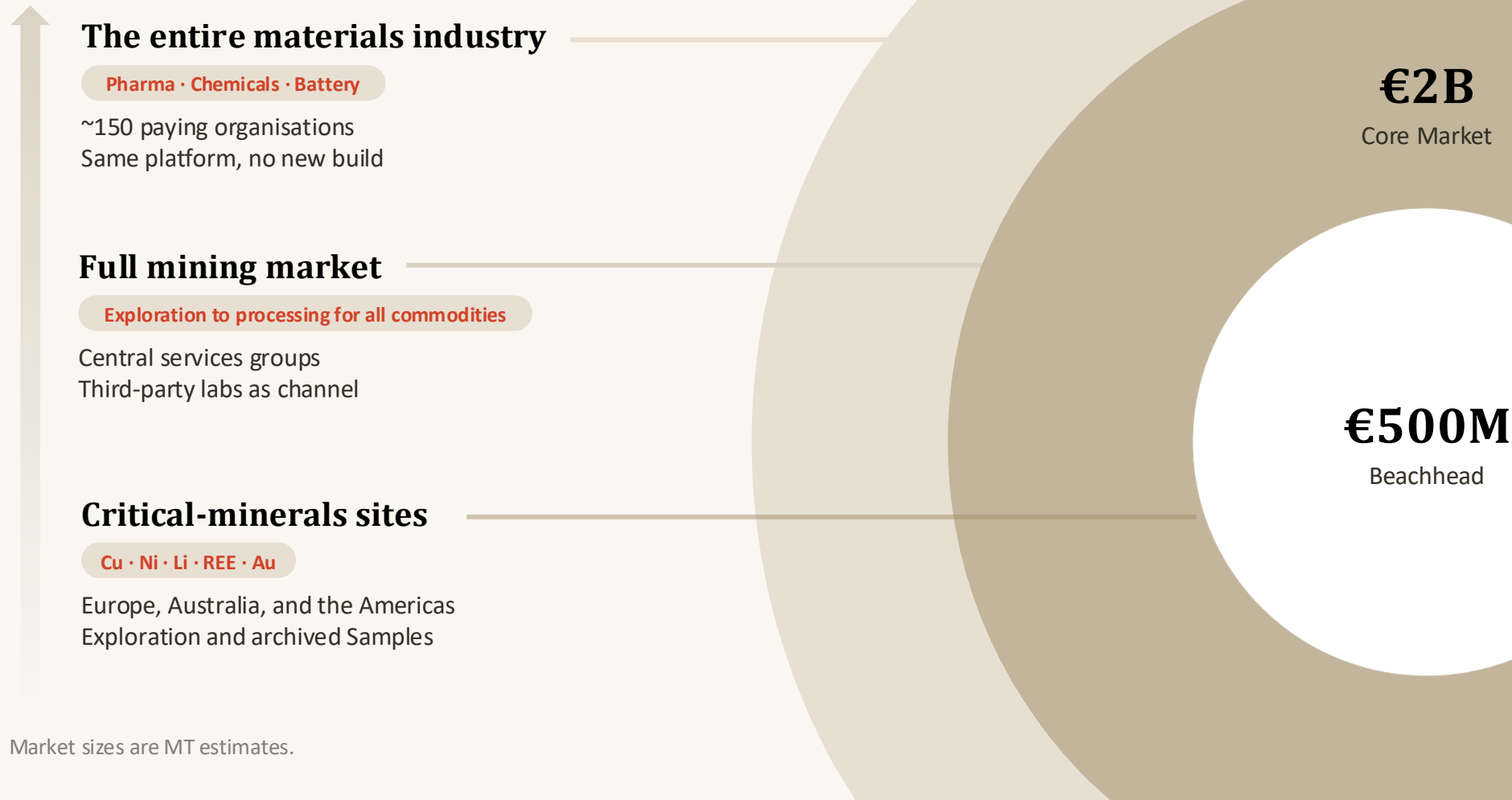
“ This has the potential to completely change how we analyse sand samples in the heavy mineral sand sector.”

Damien (Exploration Manager, Image Resources)

“ Without this service, the nanoscale minerals in our samples would have remained invisible”

Roland (Technical Manager, Impact)

The critical-minerals beachhead opens the mining mineralogy market and the way to the full materials industry.



Momentum Transfer has lighthouse customers in all important future markets.

Pharma

Total 6

MERCK, BAYER, Abbvie



abbvie

Chemistry

Total 19

BASF, EVONIK, KISUMA CHEMICALS



Battery

Total 7

PowerCo, TOPSOE, Cenate AS

PowerCo

TOPSOE



Materials Discovery

Total 7

CUSP AI, Co-reactive, Magneto



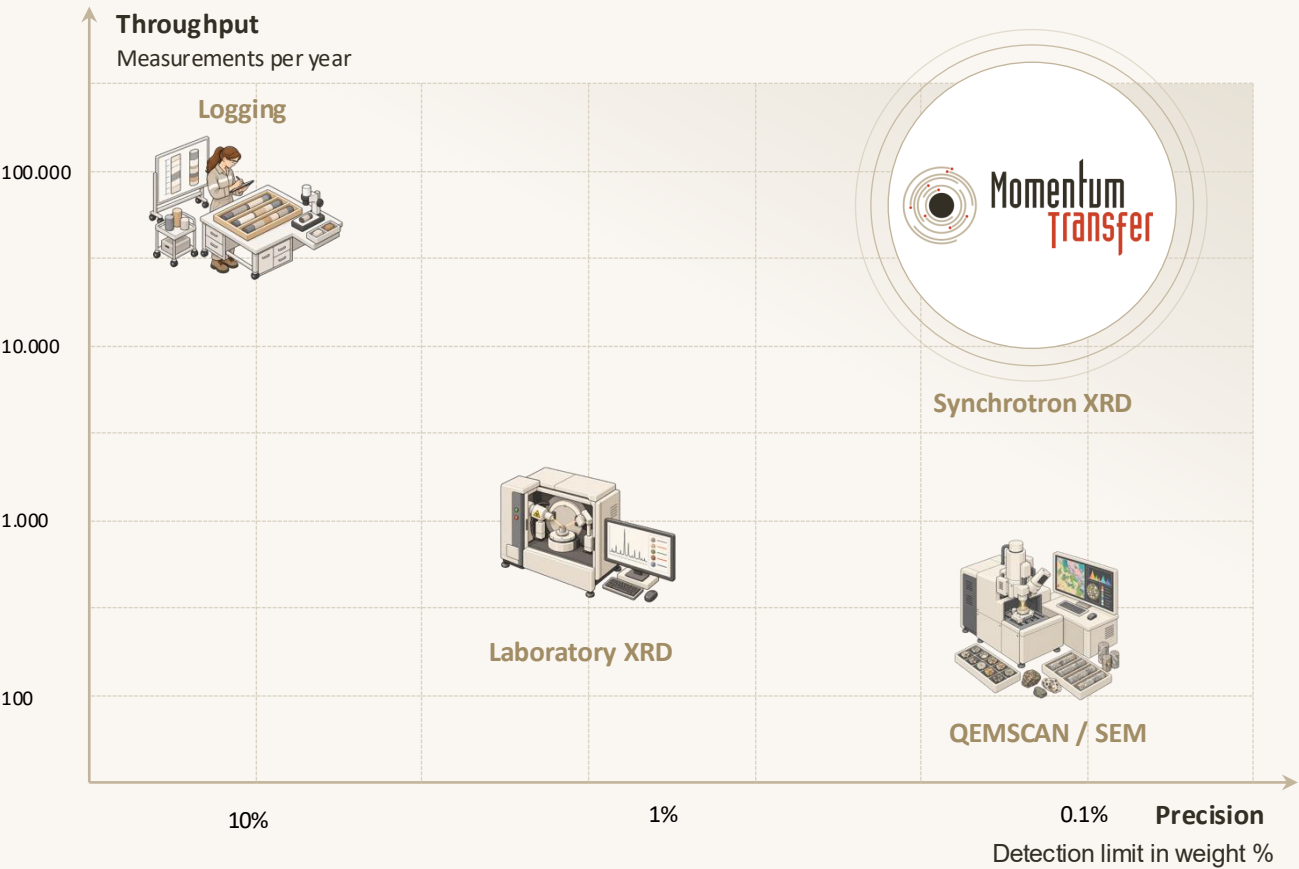
Academia

Total 107

ETH, Princeton, China Spallation Neutron Source



A category of one: No alternative full-service matches Momentum Transfer on both precision and throughput.



	SYNCHROTRON ACCESS	SAMPLE PREP	BATCH SIZE	BUSINESS MODEL
Momentum Transfer	Bi-weekly ESRF (weekly + DESY 2027)	Own lab (Q4/26)	1 to 10k+, pilots and custom batching	Specialized mining service, outbound sales, recurring orders
ANAXAM	Per project, scheduling can takes months, not flexible	Unclear / none	1-10 or >10k	Engineering service, all industries, no outbound sales
DeterMin	Through ANAXAM	External facilities	>10k only, pre-scheduled	Big projects, mining only, limited sales
Mineralytics (Our Partner)	Through Momentum Transfer or ANAXAM	External facilities	Depends on provider	Big projects, mining only, no traction

Throughput, prices and detection limits: Momentum Transfer benchmarking. ×1,000: one lab instrument manages ~2,000 samples a year against our effectively unlimited beamtime capacity. Positions are Momentum Transfer's assessment. Additional existing intermediated and data analytics companies providing synchrotron measurements do not offer a full service.

14

Stand-out team: serial commercial founder, leading technical experts, and industry insiders.

Key Team Members

- **Thomas Unger**
Lab head · Former Director At SGS And Intertek
- **Callum Clark**
Sales · Geologist, Field Background
- **Lukas Wollmann**
Development · Lab-software Founder, PhD Chemistry



Dr. Maxwell Terban

Materials scientist · COO

Columbia University and Max Planck Stuttgart. Recognised in 2024 as a world-leading expert in characterisation.

Dr. Bernd Hinrichsen

Mineralogist · CSO

Mineralogy PhD. Materials characterisation at Bruker and BASF. Synchrotron committee member, DE and EU.

Dr. Sebastian Winkler

Physicist · CEO

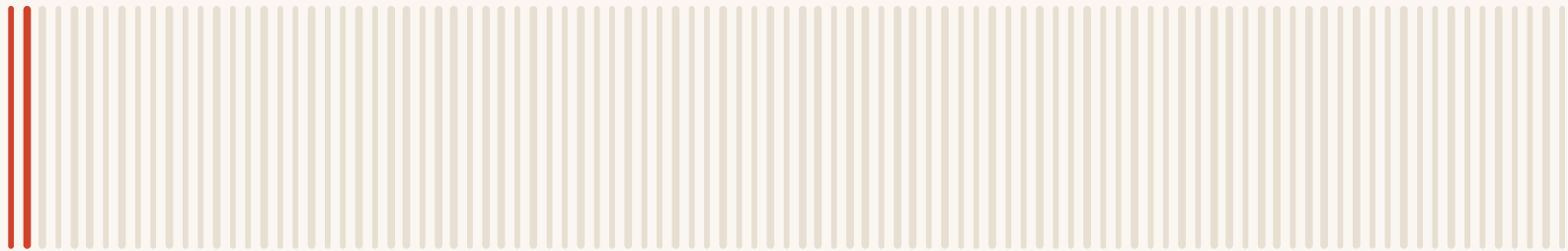
Repeat VC-backed founder with one exit. Physics PhD, 13 years in B2B hardware and data sales.

Supply is secured and abundant: A €1B business needs under 2% of the world's beamtime.

Global Synchrotron Beamtime Per Year

<20,000 hours
— under 2%

is all a €1B measurement
business would need.



10+ synchrotrons
× ~40 beamlines
× ~400 shifts
× 8 hours

1.300.000 hours a year

Secured

ESRF, Grenoble

Ten-year access contracts since 2025.
More capacity under discussion.

2027

DESY, Hamburg

Second facility comes online.
Funded by this round.

No Ceiling

Beyond €5B

At that scale we consider retro-fit or build a
dedicated source. Not a seed problem.

VISION

Everybody in (mining) industry to work with us.

Copper

Nickel

Lithium

Rare earths

Gold

Uranium

Bauxite

Tailings

Smelter feed

Battery materials

Catalysts

Cement

Pharma

MINERALOGICAL ANALYSIS



SYNCHROTRON XRD

XRD PATTERN



PHASE QUANTIFICATION



€3M takes Momentum Transfer to scale sales, a second facility and further automation of sample prep and interpretation.

GO TO MARKET

€10M

revenue run rate, targeted in 20–24 months

- Geologist-led reps for English- and Spanish-speaking markets
- Case studies from the sites we already have
- Convert pilots and first orders into account-level contracts

CAPACITY & AUTOMATION

2nd site

DESY Hamburg live, on hardware V2

- Automate and accelerate further sample preparation, measurement, and data analysis
- Unit costs fall with every batch as automation compounds
- Expand footprint at ESRF and DESY, start preparation for regional hub

20–24 months runway · ready for a Series A

€3M for equity

to own precision mineralogy for the mining industry.

CAP TABLE · INDICATIVE

Shareholder		Today
3 x Founders		3 x 20.14 %
STS Ventures ->	committed	14.21 %
Chemovator (BASF) -	spin-out	13.26 %
Venture Stars ->	committed	12.11 %



Dr. Sebastian Winkler

Physicist · CEO

sebastian.winkler@momentum-transfer.com

WhatsApp +49 170 818 4173

momentum-transfer.com