



# Faster, more accurate **gold** analysis

## **Full Year Results FY22**

August 2022

Dirk Treasure, CEO & Managing Director

Brett Coventry, CFO

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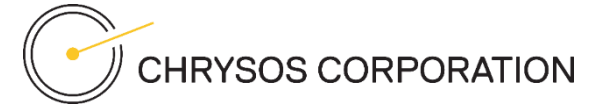
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# Chrysos – revolutionising the global mining industry



Chrysos is a global provider of novel assay services through its proprietary PhotonAssay™ technology

## Disruptive Minerals Analysis Technology

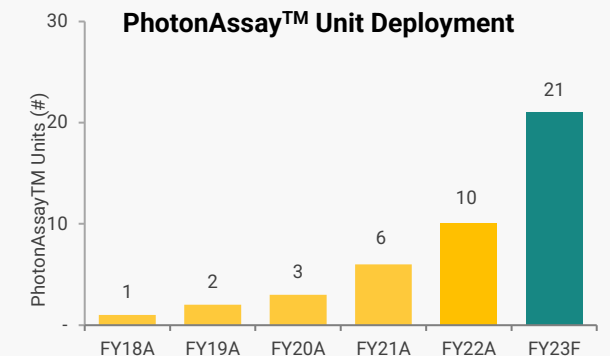
- Developed by CSIRO
- Faster process
- More accurate results
- Reduced sample preparation
- Automated operation
- Lower labour requirements
- Improved workplace OHS
- Better environmental outcomes
- Larger, more representative, sample size

## Service and Lease Model with Tier 1 Counterparties

- Units operating commercially since 2018
- Deployed across 3 continents
- Over 3m commercial samples processed
- Secure Long-Term Revenue
- Unit deployments contracted out to 2025
- \$705m Total Contract Value
- Excess revenue via increased unit utilisation
- Annual Return on Invested Capital 47% - 82%
- No known viable competitors

## Industry Accepted Technology Displacing Traditional Fire Assay

- Non-discretionary industry spend
- Total addressable market of 610 units globally
- Used in JORC and NI43-101, ISO17025
- Ability to analyse additional elements to gold
- Exponential growth supported by pre-contracted units



# Agenda

**01 FY22 Results Highlights**

**02 FY22 Financial Summary**

**03 Outlook**

**04 Questions**

**05 About Chrysos**





# FY22 Results Highlights

# FY22 results

## Strong growth ahead of Prospectus forecasts

### \$14.3m

#### Total Revenue in FY22

- +215% growth on FY21 (+\$4.5m)
- +3.8% increase on Prospectus forecast (+\$13.7m)
- MMAP/AAC Revenue of \$13.5m
- **On track to meet FY23 Prospectus target (+\$26.6m)**

### \$1.45m

#### Proforma EBITDA in FY22<sup>1</sup>

- +\$2.2m growth on FY21 (-\$0.7m)
- 57% increase on Prospectus forecast (\$0.9m)
- Driven by lower unit costs and company expenses
- **On track to meet FY23 Prospectus target (\$3.2m)**

### \$558m

#### Total Contract Value (TCV)

- +\$147m in TCV added post period (\$705m)<sup>2</sup>
- Expansion of customer base
- Improving TCV per unit
- **Long-term committed revenue**

### \$92m

#### Cash position

- Operating cash-flow positive<sup>1</sup>
- Continuing discussions with financiers for debt facility
- CAPEX of \$27m vs \$29m Prospectus forecast
- **Well-funded to support PhotonAssay™ unit growth**

### 38

#### Contracted units

- 23 new lease agreements signed in FY22
- 10 additional units leased post-period (total 48 units)
- Contracted unit deployment extends into 2025
- **Supports manufacturing expansion to 18 units/year**

### 10

#### Deployed units

- 4 new units deployed in FY22
- 1 new unit deployed post-period
- Unit utilisation of 66% vs Prospectus forecast of 64%
- **On track to meet FY23 Prospectus target (21 Units)**

1. Proforma (excluding IPO Costs which are treated as financing activities)  
2. As at 29 August 2022

# Accelerated market penetration driving Total Contract Value

New customer lease agreements expanded Chrysos' sales footprint in Africa and North America in FY22

## Customers



**Intertek MSALABS ALS**

**Britannia Life Sciences**

**Alfred H Knight SGS**

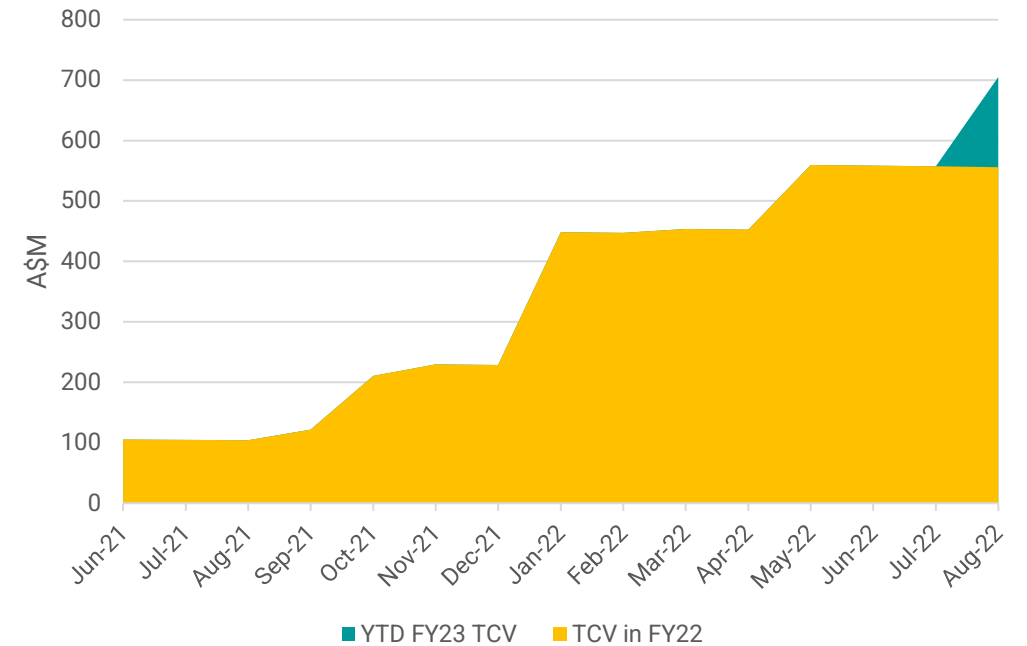


**Barrick Gold Corporation**

**AGNICO EAGLE / Kirkland Lake Gold**

**Novo Resources Corp**

## Total Contract Value<sup>1, 2</sup>



**\$705m of Total Contract Value committed under existing contracts<sup>3</sup>**

<sup>1</sup> TCV is calculated using foreign exchange rates of AUD:USD 0.73, AUD:CAD 0.94 and AUD:GBP 0.56. The USD and CAD rates are based on the average of the 3-month forward curve from Bloomberg in March 2022, per the Chrysos Prospectus and GBP rates are based on the average of the 3-month forward curve from Bloomberg in May 2022.

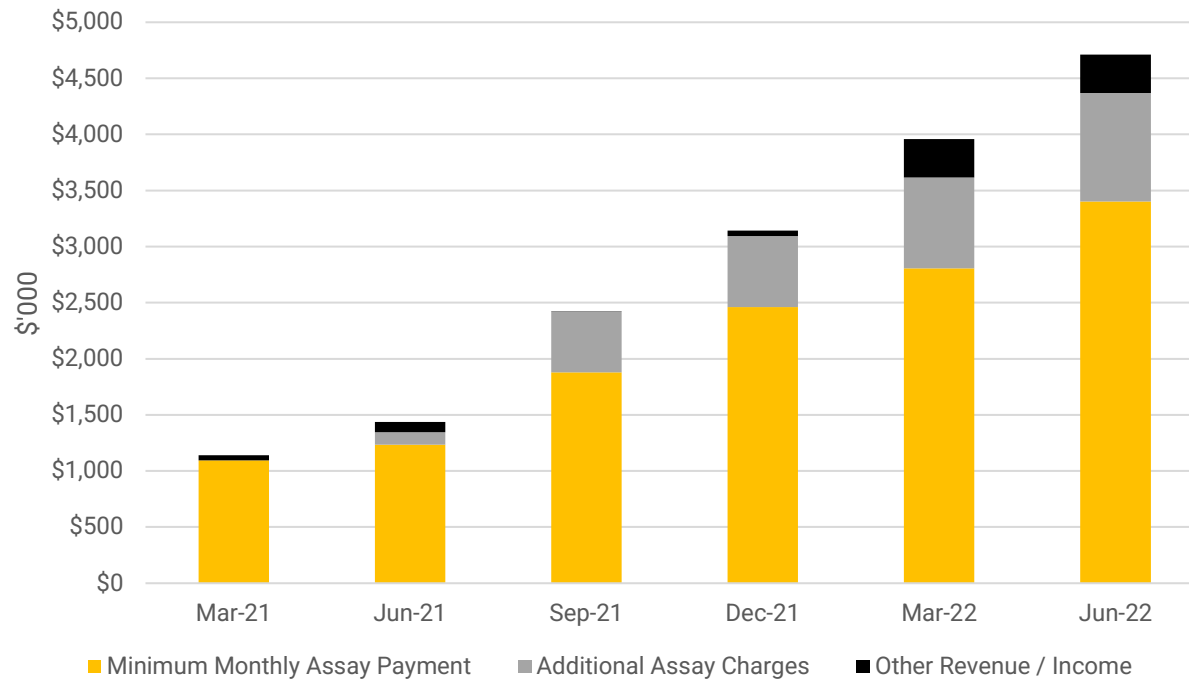
<sup>2</sup> TCV represents the future minimum contracted revenue on PhotonAssay leases (both deployed and committed) that are yet to be invoiced at a point in time, which are subject to the Company's contractual performance obligations and where the Directors consider reasonable certainty exists, may include values associated with exercise of option periods.

<sup>3</sup> As at 29 August 2022

# Revenue growth

Unit deployments plus strong and sustained utilisation is driving revenue growth

## MMAP, AAC & Other Income



**Growth reflects the ongoing strong performance of deployed units and the installation of additional units throughout FY22**

- Minimum Monthly Assay Payments (MMAP) provide sustainable, forecastable minimum revenue
  - The 11 currently deployed units<sup>1</sup> provide a baseline MMAP of \$1.3m per month, or \$15.6m per year
- Additional Assay Charges (AAC) are continuing to increase as a proportion of revenue, supported by high utilisation
  - AAC accounted for 22% of FY22 PhotonAssay™ Revenue (up from 20% in FY21)
- Consumables Revenue (included in Other Revenue) reflects Chrysos' investment in supply chain security
  - During FY22, Chrysos made the decision to invest upstream into consumables supply for PhotonAssay™
  - Consumables Revenue is excluded from Proforma Revenue and EBITDA

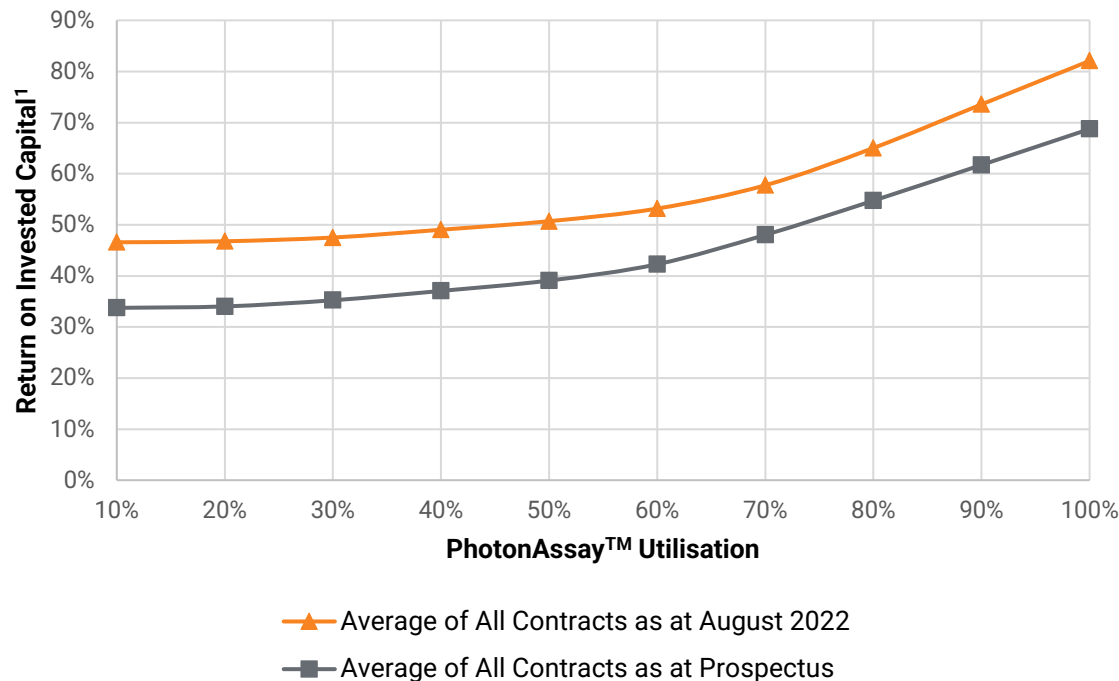
<sup>1</sup> As at 29 August 2022



# Improving unit economics in new sales

Chrysos continues to execute larger customer agreements with improving unit economics

## PhotonAssay™ Unit Economics



<sup>1</sup> Return on Invested Capital (ROIC) is non-IFRS information and is calculated by the forecast annual gross profit divided by forecast capital expenditure to produce and install the unit, where the annual gross profit is calculated as the forecast annual revenue less the forecast direct costs associated with operating the unit. This information may assist forecast the growth of the Group, based on the groups growing deployment rate for PhotonAssay™ and has not been audited by the Group's auditor. For the purposes of calculation, the company has used capital expenditure of \$3.65m and operating costs of \$0.375m, which are consistent with existing costs

- PhotonAssay™ agreements signed subsequent to the IPO have increased average minimum Return on Invested Capital (ROIC)<sup>1</sup> from 34% to 47%
- Additional Assay Charges related to utilisation add potential upside to Minimum Monthly Revenue of 76%
- Chrysos PhotonAssay™ units generate excellent returns over a long estimated equipment life:
  - At 47% ROIC, a PhotonAssay™ Unit has a ~26-month payback period and **generates ~\$1.75m gross profit per year**
  - At 82% ROIC, a PhotonAssay™ Unit has a ~14-month payback period and **generates ~\$3.2m gross profit per year**
- Chrysos' low OPEX PhotonAssay™ technology creates a sustainable, high-value revenue stream
- Clustering of units provides the opportunity to reduce operating costs and drive additional ROIC

# Deployments & Utilisation

Strong and sustainable growth underpinned by long-term annuity-style recurring revenue

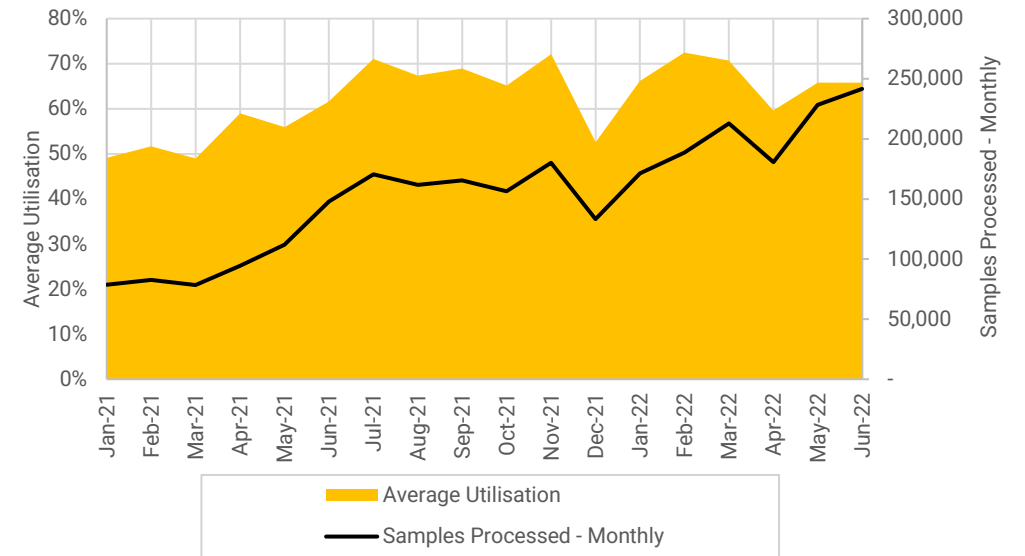
## 11 Units Deployed<sup>1</sup>

-  Regions with PhotonAssay™ Due Diligence
-  Operating PhotonAssay™ Units
-  Offices & Manufacturing
-  Currently Installing PhotonAssay™ Units



Chrysos has grown its deployment capability to sustain three simultaneous installations

## Unit Utilisation & Samples Processed in FY22



2.2m samples processed in FY22, reflecting 265% growth YoY and an average unit utilisation rate of 66%

<sup>1</sup> As at 29 August 2022



# FY22 Financial Summary

# Revenue & profitability

## FY22 Pro forma Results

\$'000	FY21A	FY22F Prospectus	FY22A
<b>Revenue and other income</b>			
Revenue	4,341	13,583	13,521
Other income	127	156	166
<b>Total revenue and other income</b>	<b>4,468</b>	<b>13,739</b>	<b>13,687</b>
PhotonAssay™ costs	-791	-2,130	-1,840
<b>Gross profit</b>	<b>3,677</b>	<b>11,609</b>	<b>11,846</b>
<b>Operating expenses</b>			
Employee benefits expense	-3,182	-8,123	-7,676 <sup>1</sup>
Legal fees	-176	-241	-400
Travel & marketing costs	-271	-529	-656
Admin and other expenses	-740	-1,791	-1,663 <sup>2</sup>
<b>Total operating expenses</b>	<b>-4,369</b>	<b>-10,684</b>	<b>-10,395</b>
<b>EBITDA</b>	<b>-692</b>	<b>925</b>	<b>1,452</b>
D&A	-2,343	-3,167	-2,825
<b>EBIT</b>	<b>-3,035</b>	<b>-2,242</b>	<b>-1,374</b>
Net finance costs	-406	-692	-189
<b>Profit before income tax</b>	<b>(3,441)</b>	<b>-2,935</b>	<b>-1,563</b>
Income tax (expense)/benefit	-	-	-
<b>Pro forma NPAT</b>	<b>(3,441)</b>	<b>-2,935</b>	<b>-1,563</b>

1. Includes \$114k in costs, from general and other costs which aligns employment cost versus prospectus forecast cost allocation for comparative and adds back \$850k of provision for payroll tax realised

2. Captures all other costs, adjusted for provision for expected credit loss of \$169k

## Commentary

- Proforma Total Revenue is in line with Prospects forecast and excludes consumables income which is included in Statutory Total Revenue
- PhotonAssay™ costs 14% below Prospectus forecast due to better performance and emerging evidence of clustering impact of Australian units
- Proforma EBITDA \$1.45m is 57% ahead of Prospectus forecast
- Employee expenses were 6% below Prospectus forecast primarily due to the timing of employment hires
- Legal costs 66% higher than Prospectus forecast attributable to additional investment into new and increased IP protections
- Travel and Marketing costs were 24% above Prospectus forecast due to increased investment in expanding PhotonAssay™ application

# Cash flow summary

Chrysos is operationally cash-flow positive

## Pro forma historical and forecast cash flow summary

\$000's	FY21A	FY22F Prospectus	FY22A
<b>EBITDA</b>	<b>-692</b>	<b>925</b>	<b>1,452</b>
Non-cash items	575	771	548
Changes in working capital	-344	167	-1,037
<b>Operating cash flows</b>	<b>-461</b>	<b>1,863</b>	<b>962</b>
Sustaining capital expenditure	-477	-3,312	-2,166
Growth capital expenditure	-6,622	-24,757	-23,349
Capitalised R&D	-973	-1,405	-1,561
<b>Total capital expenditure</b>	<b>-8,073</b>	<b>-29,474</b>	<b>-27,076</b>
<b>Free cash flow before financing and dividends</b>	<b>-8,534</b>	<b>-27,611</b>	<b>-26,114</b>

## Commentary

- Positive operating cash flow of \$962k is below Prospectus forecast due to a build in working capital which was largely attributable to year end timing differences in cash collection
- Leasing model requires significant up-front CAPEX as the unit is manufactured and deployed and becomes chargeable to the client, after which highly predictable cash flow is generated over the life of the lease
- Growth CAPEX in the period primarily relates to new PhotonAssay™ units, with a small amount for infrastructure to support global business platform (office, technology, motor vehicles etc)
- Sustaining CAPEX largely relates to spare parts, testing and R&D equipment. As Chrysos continues to grow, spare parts will comprise the largest item of sustaining expenditure
- Chrysos is well progressed in discussions with financiers for an expanded debt facility and remains confident of a material increase in borrowing facilities

# Reconciliation to statutory accounts

## P&L Reconciliation

\$'000	Pro forma	Statutory
	FY22A	FY22A
<b>Revenue and other income</b>		
Revenue	13,521	13,521
Other income/consumables	166	737
<b>Total revenue and other income</b>	<b>13,687</b>	<b>14,258</b>
Maintenance + consumables	-1,840	-2,382
<b>Gross profit</b>	<b>11,846</b>	<b>11,876</b>
<b>Operating expenses</b>		
Employee benefits expense	-7,676	-6,712
Legal fees	-400	-400
Travel & marketing costs	-656	-656
Admin & other expenses	-1,663	-1,946
<b>Total operating expenses</b>	<b>-10,395</b>	<b>-9,714</b>
<b>EBITDA</b>	<b>1,452</b>	<b>2,162</b>
D&A	-2,825	-2,825
<b>EBIT</b>	<b>-1,374</b>	<b>-663</b>
Net finance costs	-189	-1,905
<b>Profit before income tax</b>	<b>-1,563</b>	<b>-2,568</b>
Income tax (expense)/benefit	-	-1,370
<b>NPAT</b>	<b>-1,563</b>	<b>-3,938</b>

## Cash Flow Reconciliation

\$000's	Pro forma	Statutory
	FY22A	FY22A
<b>EBITDA</b>	<b>1,452</b>	<b>2,162</b>
Non-cash items	548	-302
Changes in working capital	-1,037	-1,037
<b>Operating cash flows</b>	<b>962</b>	<b>823</b>
Sustaining capital expenditure	-2,166	-2,166
Growth capital expenditure	-23,349	-23,349
Capitalised R&D	-1,561	-1,561
<b>Total capital expenditure</b>	<b>-27,076</b>	<b>-27,076</b>
<b>Free cash flow before financing and dividends</b>	<b>-26,114</b>	<b>-26,253</b>

## Commentary

### P&L

- Statutory other income includes \$571k of consumable revenue which is excluded from Proforma, but accounts for the 3.8% increase over Prospectus forecast
- Statutory PhotonAssay™ costs include \$542k of consumable costs which are excluded from Proforma operating expenses
- Statutory Employee benefits expense reflects the positive impact of a \$850k release of payroll tax provision (based on fair value of the employee share scheme payroll tax liability at balance date)
- Statutory Other expenses were \$169k higher as a result of creation of a provision for expected credit loss, while no concerns exist on current debtors
- Statutory Net finance costs of \$1,716k were excluded from proforma results due to cost of capital raising (series C and IPO)

### Cash Flow

- Statutory Non-cash items are \$850k less than forecast as a result of the non-cash employment provision, stated above

# Balance sheet

Strong balance sheet provides a solid platform to accelerate growth

\$000's	FY21	FY22
<b>Assets</b>		
Cash and cash equivalents	5,768	92,104
Trade and other receivables	1,024	5,782
Other current assets (incl prepayments)	3,120	6,822
Non-current assets	19,600	39,378
<b>Total Assets</b>	<b>29,512</b>	<b>144,086</b>
<b>Liabilities</b>		
Trade & other payables	7,706	10,098
Other current liabilities	2,261	2,706
Loans and Borrowings	-	4,900
Other non-current liabilities	5,317	4,064
<b>Total liabilities</b>	<b>15,284</b>	<b>21,768</b>
<b>Net Assets</b>	<b>14,228</b>	<b>122,318</b>
<b>Equity</b>		
Issued capital	24,081	135,725
Accumulated losses	(10,589)	(14,527)
Share-based payment reserve	736	1,120
<b>Total Equity</b>	<b>14,228</b>	<b>122,318</b>

## Commentary

- Highly liquid balance sheet with significant cash to fund growth into FY23 and beyond
- Growth in Trade receivables reflects an increase in deployed units with monthly billing. A significant proportion of this can be attributed to invoicing timing, based on implementation of appropriate global corporate structures during the financial period
- Non-current assets includes \$27.9m of income generating deployed PhotonAssay™ units and \$9.3m of WIP units
- Movements in Traded Payables and other Current Liabilities are in line with growth expectations
- Chrysos is well progressed in discussions with financiers for an expanded debt facility and remains confident of a material increase in borrowing facilities
- Issued capital reflective of Series C and IPO capital raising activities



# Outlook



## Chrysos is well positioned to continue accelerating its global growth

- Growth momentum set to continue in FY23
- On track to meet FY23 Prospectus targets:
  - Total Revenue: \$26.6m
  - EBITDA: \$3.2m
  - 21 deployed units
- Expansion of customer base and improving TCV per unit with long-term committed revenue to underpin forecasts
- Improving ROIC from upcoming deployments as unit revenue increases and costs decrease due to unit clustering
- Contracted unit deployments extend into 2025
- Manufacturing expansion set to increase to 18 units/year
- Well-funded with \$92m cash in bank to support PhotonAssay™ unit growth
- Continuing discussions with financiers for debt facility to support further growth

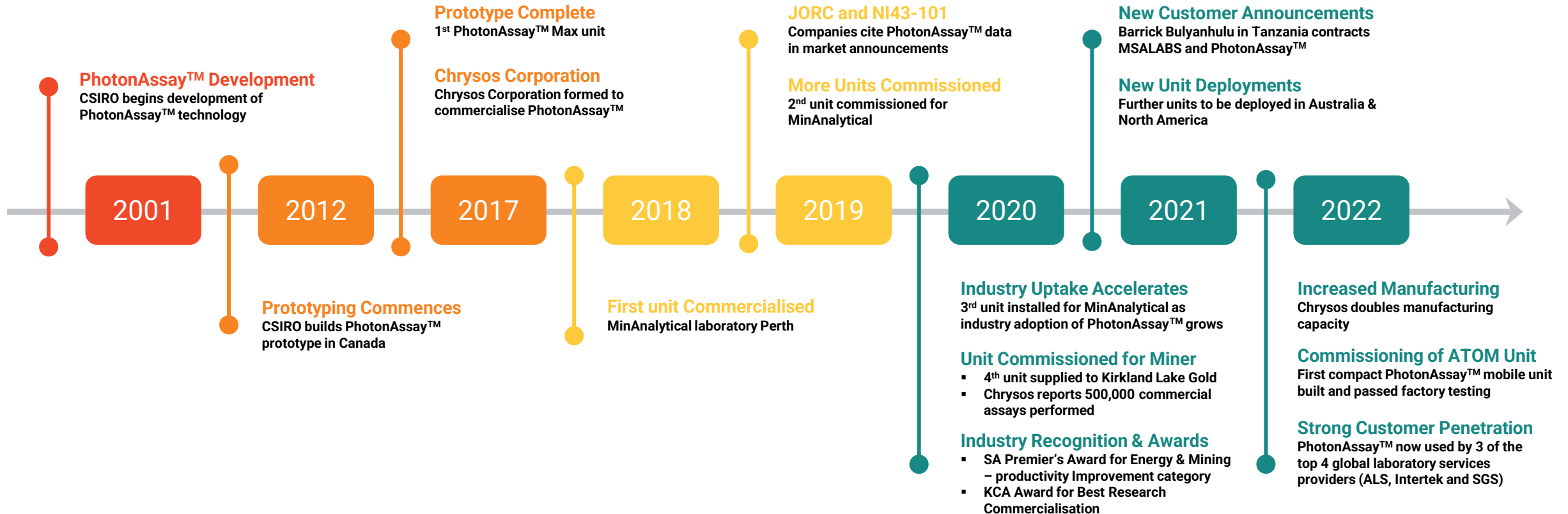




# About Chrysos

# Our commercialisation journey

The outcome of 20+ years of research and development



# The Chrysos Vision

To become the world's leading provider of innovative assay services and technologies



## Market Challenge:

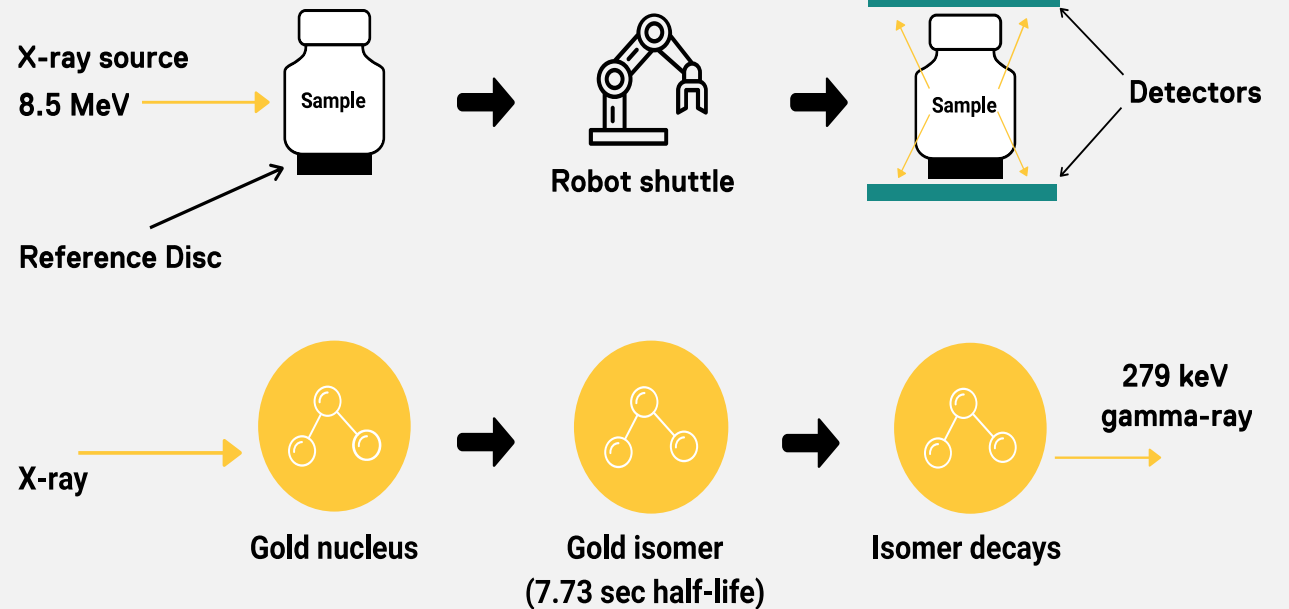
Traditional assay techniques are slow, labour intensive, complex, destructive to the assay sample, and involve dangerously high temperatures and toxic chemicals that are hazardous to both operators and the environment.



## The Solution: Chrysos PhotonAssay™

- ✓ Provides **faster and more accurate** assaying
- ✓ Allows **real-time delivery** of information to support agile decision making
- ✓ Rapid decision making helps to improve **operational efficiency, recovery and profitability**
- ✓ **Removes hazardous chemicals** from the assay process protecting operators and **reducing emissions**
- ✓ **Is non-destructive** allowing for repeat testing and comparative analysis
- ✓ The process is **largely automated**, reducing labour requirements and the chance of human error

## Fully-quantitative analysis in as little as 2 minutes!



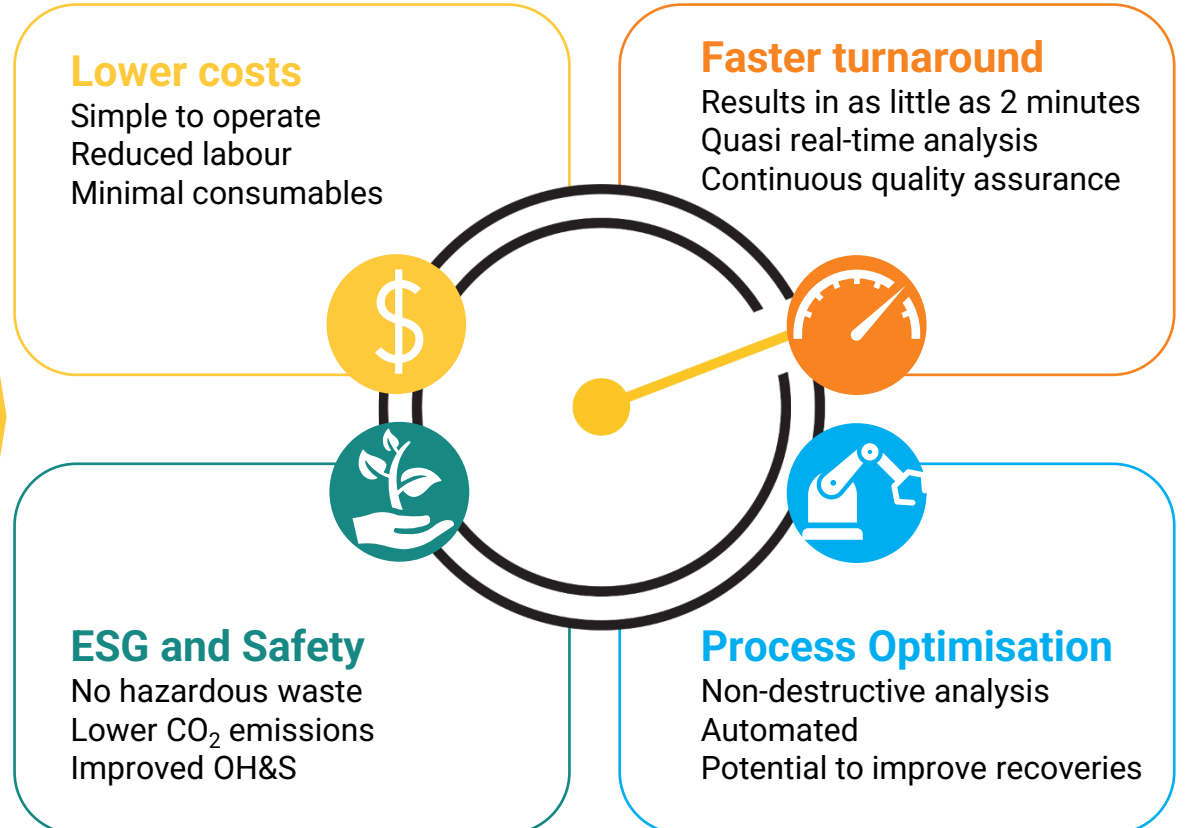
# PhotonAssay™ technology

Best in class gold assaying with measurable benefits over traditionally used methods

## PhotonAssay™ vs. Traditional Fire Assay<sup>1</sup>

	Fire Assay	PhotonAssay™
<b>Time per sample<sup>2</sup></b>	~3-4 hours	~2-3 minutes ✓
<b>Sample size</b>	10-50 grams	250-650 grams ✓
<b>CO<sub>2</sub> per sample</b>	0.91kg	0.455kg ✓
<b>Hazardous waste per sample</b>	0.31kg	0kg ✓
<b>Energy use per sample<sup>3</sup></b>	1.3kWh	0.65kWh ✓
<b>Automation</b>	✗	✓

## PhotonAssay™ value proposition



1. Comparison of PhotonAssay™ and fire assay per Frost & Sullivan industry report  
 2. Fire assay shown based on the minimum processing time. 24-hours is generally considered rapid turn-around time in practice.  
 3. Assumes same electricity source is used

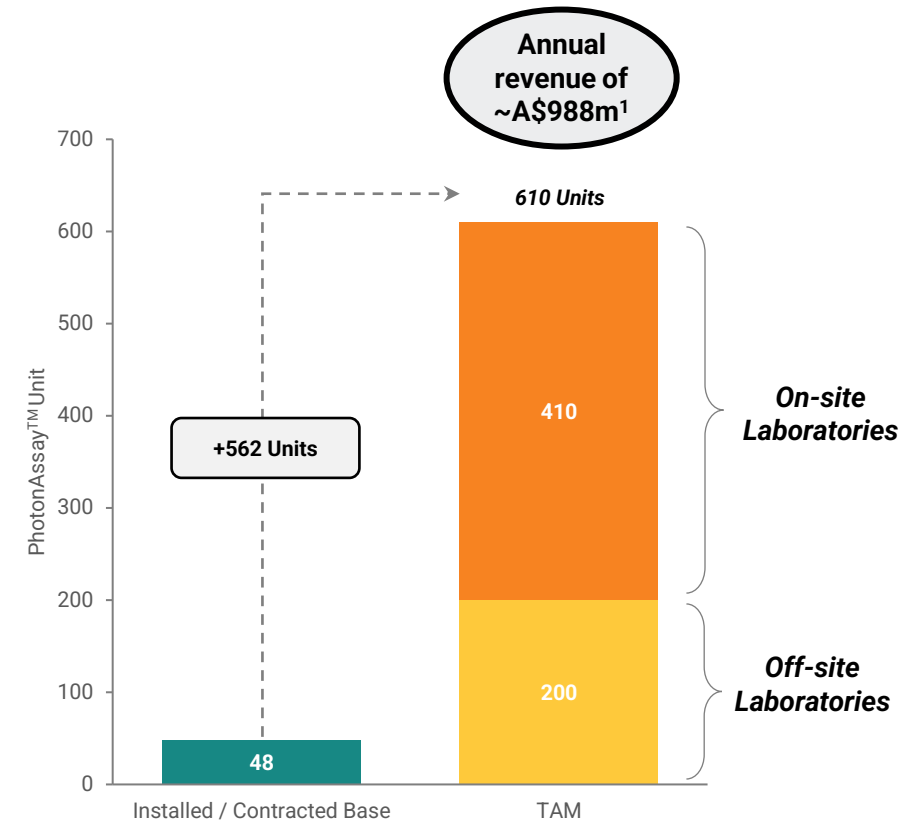
# Large & unpenetrated TAM

Assay expenditure is a non-discretionary operating cost

## Existing PhotonAssay™ Reach



## TAM for PhotonAssay™ Units



1. Frost & Sullivan industry report – assumes A\$1.6m revenue per annum per unit for total annual revenue

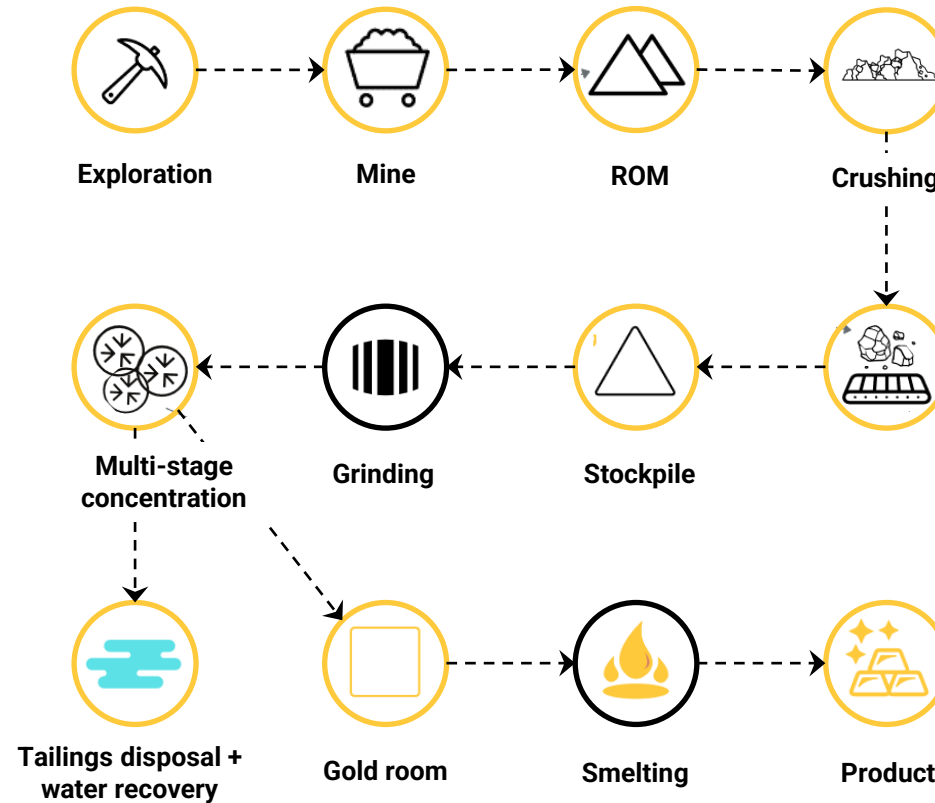
# Delivering tangible benefits for miners

PhotonAssay™ enables timely decision making and additional gold recovery

## The opportunity...

- Each year global miners are estimated to lose >\$2.0 billion worth of recoverable gold
- PhotonAssay™ provides miners with access to real-time data, helping to improve decision making through the value chain
- Enabling the optimisation of processes to generate potential productivity gains

## PhotonAssay™ is embedded in the mining value chain



 Denotes PhotonAssay™ value add

PhotonAssay™ Value Add	
Exploration	Fast turnaround for mine planning and scheduling in-pit
Mine	
ROM	Assay-supported blending between pit & processing
Crushing	
Stockpile	Stockpile sampling & optimised gold recovery
Multi-stage concentration	Reduction in process reagents & consumables
Tailings + Water recovery	Tailings grade monitoring
Gold room	All samples retained for QA/QC
Product	Buyer / seller assays

# An environmentally-friendly solution

Substantially better for the environment and significantly safer than fire assay

PhotonAssay™ has a substantial **positive environmental impact** that will continue to grow in tandem with the uptake of the technology

- ✓ PhotonAssay™ **reduces CO<sub>2</sub> emissions and eliminates lead-contaminated waste**
- ✓ Quantifiable benefit
  - 0.455kg of CO<sub>2</sub> reduced per sample (compared to fire assay)
  - 0.31kg of hazardous lead-contaminated waste reduced per sample (compared to fire assay)
- ✓ Improved OH&S through the **elimination of hazardous chemicals, lead exposure, and ultra-high temperatures** used in conventional fire assay
  - Fire assayers require routine blood tests to confirm acceptable levels of lead
  - Fire assayers are routinely rotated through other laboratory tasks to prevent a build-up of lead

## LIKE TO TREAD MORE LIGHTLY ON THE PLANET?

Every sample analysed with PhotonAssay means reduced CO<sub>2</sub> emissions and less hazardous waste.



3,161,413

Chrysos PhotonAssay™  
samples



1454.25 tonnes

Reduced CO<sub>2</sub>  
emissions



980.04 tonnes

Hazardous waste  
reduction

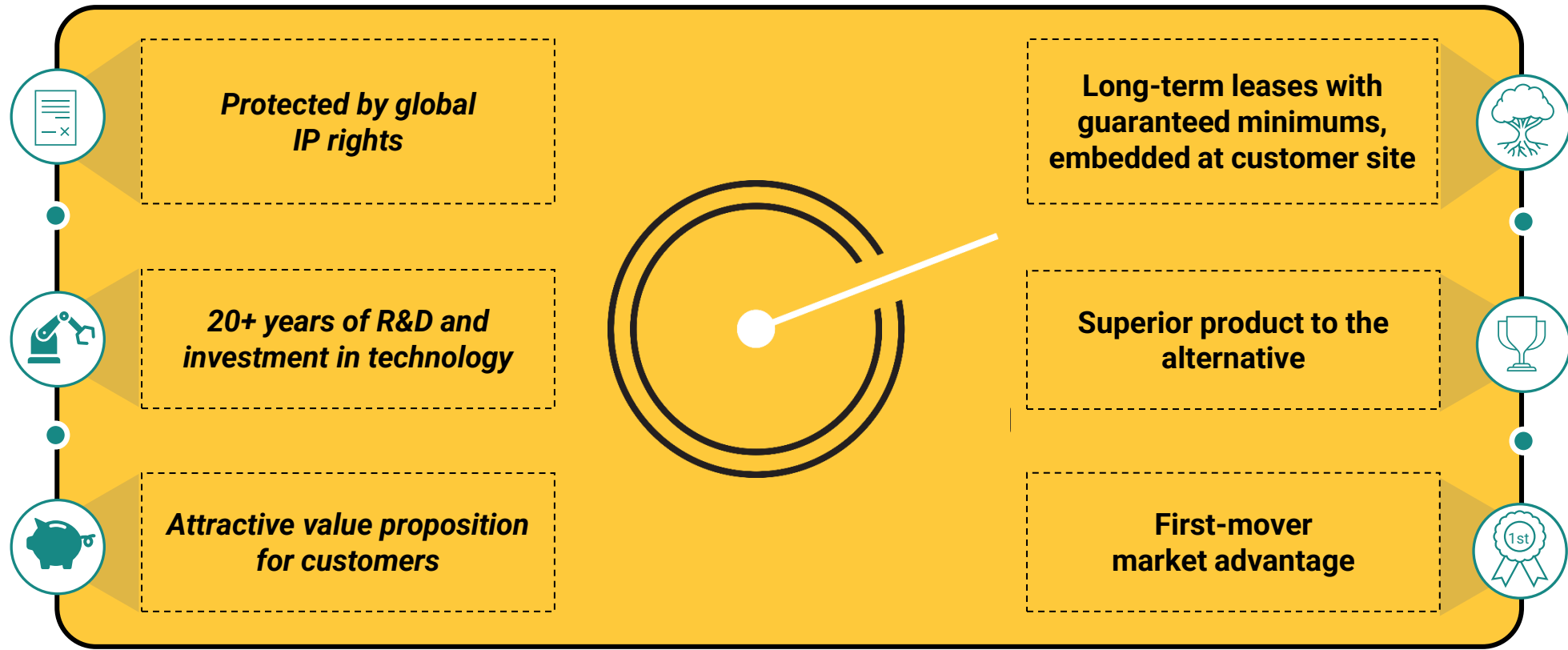
As at 29 August 2022



# High barriers to entry

High barriers to entry supported by global IP rights

## Barriers to competitive entry



# Clear growth pathway

Clear organic growth plan with potential to expand TAM through additional commodities

## Business development pipeline

- Global networks of laboratories

**Intertek ALS SGS MSALABS**

- PhotonAssay™ unit commitments extend out to 2025
- Existing customers offer additional deployment opportunities

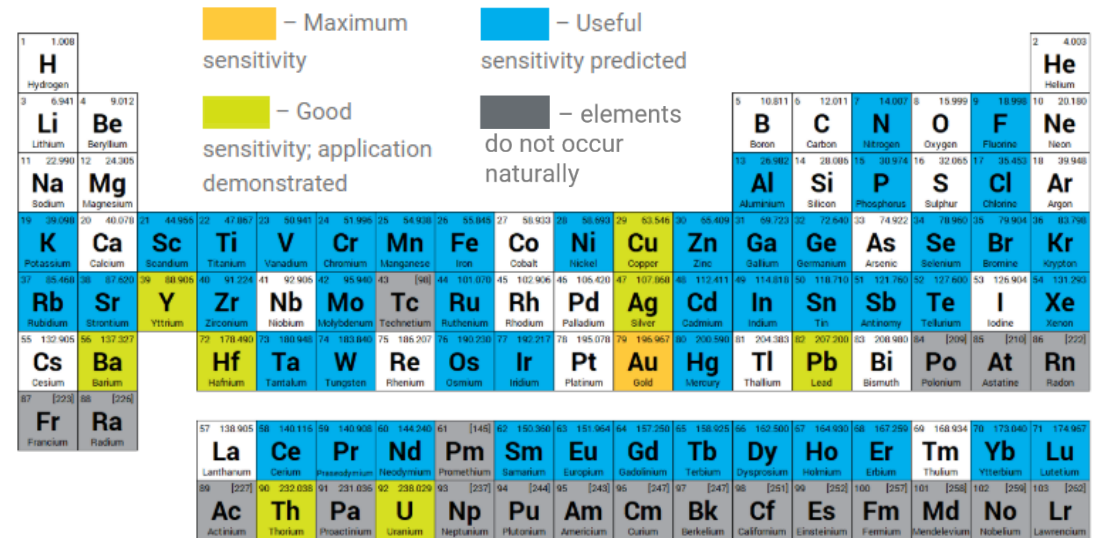
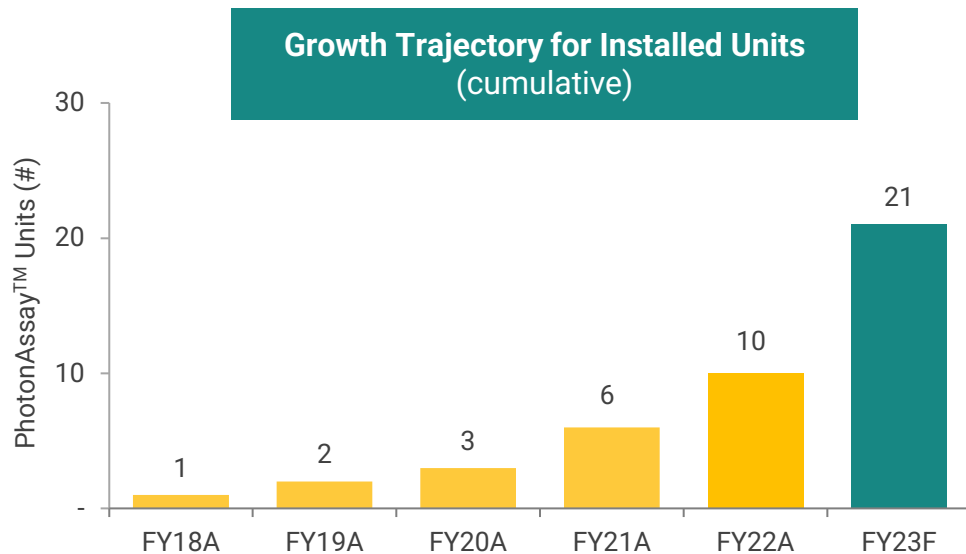
## Multi-commodity assaying

### Potential to expand TAM

- Base metals
- Energy metals
- Electronics recycling

### Potential to increase profitability

- Add-on analyses
- Concurrent moisture



# Experienced leadership team

Supported by a well respected and tenured board

## Senior leadership team



**Dirk Treasure**  
Founding CEO & Managing Director

- Metallurgist with a background in both technical and commercial mining aspects spanning 15 years in the industry
- 7 years in novel metallurgical process development and commercialisation prior to becoming Chrysos' founding CEO



**Brett Coventry**  
Chief Financial Officer

- Experienced in taking high growth technology start-ups from inception through to maturity
- 20 years in various roles encompassing international expansion, capital raising and listing through IPO

## Board of Directors



**Rob Adamson**  
Founder & Chairman

- 20+ years' experience in mining and finance
- Executive Chairman of RFC Ambrian



**Brett Boynton**  
Founding Director

- Co-founder of AI data analytics business and founder of London listed gold exploration technology co.
- 20+ years' investment banking experience in London, New York, Sydney



**Ivan Mellado**  
Founding Director

- 20 years' experience in technology commercialisation and development ventures
- Business and Law qualifications; experienced executive and NED



**Kerry Gleeson**  
Director

- Experienced executive and non-executive director in mining and associated industries
- Qualified Australian and English Lawyer: M&A, debt & equity funding & commercialising technology

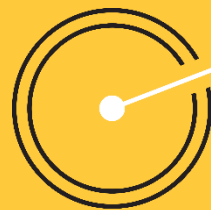


**Eric Ford**  
Director

- 40 years of strategic, management, commercial, operating and engineering experience in resources and energy

# Thank you

For more information, please visit [chrysos.com.au](https://chrysos.com.au)  
or contact us at [investors@chrysos.com.au](mailto:investors@chrysos.com.au)



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