# Jervois Finland

A Leading Producer of Cobalt Chemicals and Powders

SUBSIDIARY OF JERVOIS GLOBAL

Monday 27 June 2022

**Investor and Analyst Tour** 



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#### FINANCIAL DATA AND ROUNDING

Certain financial measures included in this presentation are "non-IFRS financial information" under ASIC Regulatory Guide 230: "Disclosing non-IFRS financial information" and "non-GAAP financial measures" within the meaning of Regulation G under the U.S. Securities Exchange Act of 1934, as amended and are not recognised under Australian Accounting Standards ("AAS") and International Financial Reporting Standards ("IFRS"). Non-IFRS financial information/non-GAAP financial measures do not have a standardised meaning prescribed by AAS or IFRS and may therefore not be comparable to similarly titled measures presented by other entities and should not be construed as an alternative to other financial measures determined in accordance with AAS or IFRS.

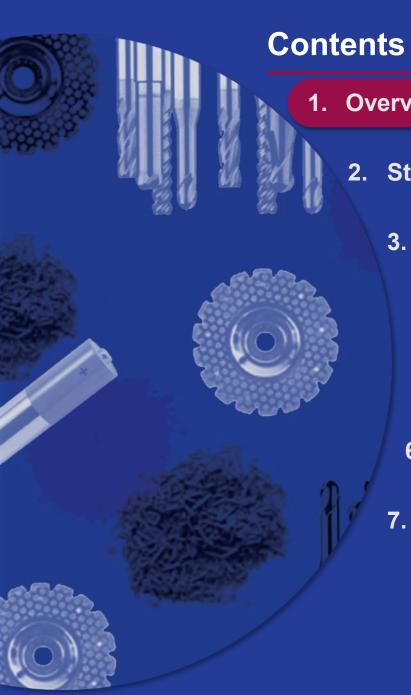
Although Jervois believes these non-IFRS financial information/non-GAAP financial measures provide useful information to investors in measuring the financial performance and condition of Jervois Finland and the Jervois group, investors are cautioned not to place undue reliance on these non-IFRS financial information/non-GAAP financial measures. The financial information in this presentation is presented in an abbreviated form insofar as it does not include all the disclosures required by the AAS and other mandatory professional reporting requirements applicable to general purpose financial reports prepared in accordance with the Corporations Act.

All dollar values are in United States dollars (US\$) or Australian dollars (A\$) and financial data is presented as at 31 March 2022, unless stated otherwise. Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided and percentages may not precisely reflect the absolute figures.

Further information regarding the basis of preparation of financial information in this presentation is included in Slide 28.



Source: Company information



- 1. Overview of Jervois Finland
  - **Strong ESG Credentials** 
    - **Business Model and Flowsheet** 
      - 4. Sales and Marketing
      - **Cobalt Market**
      - 6. Expansion, Growth Potential and Recycling
    - 7. Concluding Site Photographs

### Introduction to Jervois Finland

### Global leader in refined cobalt products

#### **Overview**

- Leading downstream cobalt products manufacturing facility with established marketing platform and long-term global customer base
- Long-term contracts with leading suppliers of cobalt hydroxide feed
- Long-term capacity sharing agreement with world-class cobalt refinery in Kokkola, Finland
- Commitment to best practices in responsible production and sourcing
- Recognized as only conformant downstream facility by the Responsible Minerals Initiative (RMI)
- Expertise in cobalt products providing value to our customers
- Approximately 10-15% of cobalt supply comes from recycling or re-processing of customer materials



Kokkola Manufacturing Facility



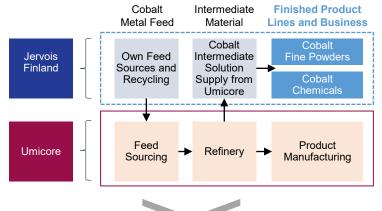
### Introduction to Jervois Finland

A stable, industry leading business, that has produced cobalt products for key markets since 1968



Strategic location in Kokkola, Finland – competitive industrial park, proximate to key markets





Formerly integrated operations "split" in 2019 with refinery operation sold to Umicore. Jervois holds contractual rights to c.40% refinery capacity

Cobalt hydroxide supply contracts (Jervois sourced)

Umicore operated Kokkola refinery Total capacity c.15,000 mtpa

Up to 6,250 mtpa intermediate solution Long-term agreement, defined cost-sharing basis

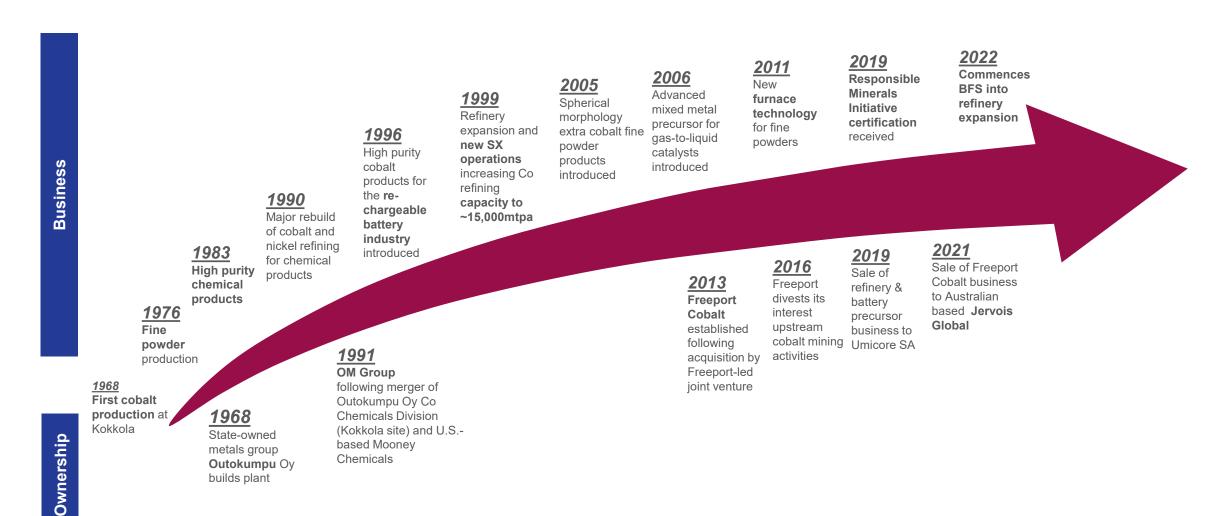
Downstream	Fine Co	Cobalt	Cobalt	
	Powder	Hydroxide	Sulfate	
business	Cobalt	Cobalt	Cobalt	
	Oxide	Carbonate	Acetate	

Jervois business based on contractual rights to refining capacity and ownership of downstream production



## Longstanding industry leadership and record of innovation

Kokkola Business History





### **Kokkola Industrial Park**

### **Exceptional Infrastructure**

- Kokkola Industrial Park ("KIP") purpose built for industrial operations
- Gas supply for H2, N2, CO2, O2
- Energy supply for steam and district heat
- Water supply
- Other industrial services:
  - KIP-wide EHSQ standards
  - KIP fire protection station and services
  - Raw material handling
  - Maintenance
  - Guarding
  - Harbor service



### **Jervois Finland – Executive Management**

Experienced operating and commercial leadership, with substantial experience in the industry and in managing the Kokkola-based operation and its global marketing activities

#### SAMI KALLIOINEN

President and Managing Director

Joined Freeport Cobalt 1998 from Merita Investment Bank

Appointed President and Managing Director in 2019 for overall operational and global commercial activities of Freeport Cobalt

20+ years of international experience in leading the finance function for the Business, including expat assignment in US

Intensive involvement with various M&A projects within the Business

Holds an MSc in Business Administration

#### **PIA LEHTONEN**

Controller Finance

Joined Freeport Cobalt in the procurement department in 1994

Controller for the Business responsible for global finance functions

In 2003, moved to financial department, with strong history in various financial positions within the Business

Holds an MS in Economics and Business Administration

#### **JUHA JÄRVI**

Technical Director

Joined Freeport Cobalt in 1996

Appointed Technical Director in 2019 with responsibility for production, plant support and commercial services, including R&D

Previously held various management positions with Freeport Cobalt in R&D, Production and Projects

Expat assignments in USA from 1999-2000 (Manager, Process R&D) and in China from 2016-2018 (Technology Director

#### **THOMAS SLOTTE**

Director – Plant Support & Administration

Joined Freeport Cobalt in 2007 in the role of Product Stewardship Manager. Moved to current role in 2009

Prior to joining the Business, held various leadership positions within the chemical Industry

Holds a PhD in Chemistry

#### **JEFF BLAZEK**

Global Business Manager, Cobalt Fine Powers

Manages all sales and administration for both the Americas and Japan

Joined Freeport Cobalt in 2000, starting as the Business Manager for Asia Pacific until 2002

From 2002 to present, took on the various roles of Global Business Manager for Battery Materials, Copper Cathodes and Sulfate and Cobalt Fine Powders

Holds a BA in Business Administration Degree with a focus on International Marketing

#### **MIKE LACIS**

Global Business Manager, Chemicals, Catalysts and Ceramics

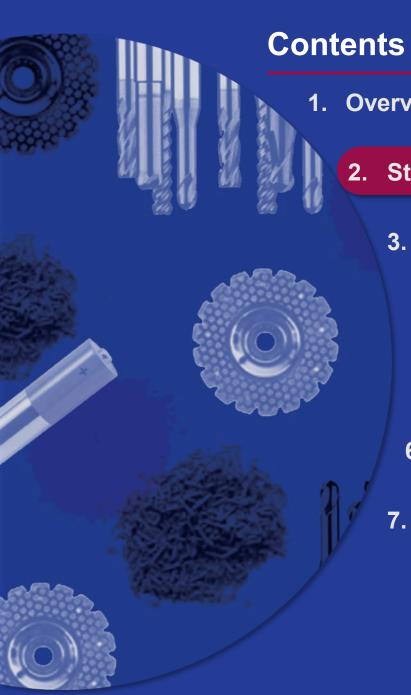
Global Business Manager responsible for marketing and sales of Freeport's Cobalt Chemicals into the Chemicals, Catalysts and Ceramic Pigments industries

Joined Freeport Cobalt in 1993

Held various technical and sales positions with Dow and Johnson Matthey Chemicals

Holds a Bachelor of Science Degree in Applied Chemistry, and a Master of Business Administration Degree





2. Strong ESG Credentials

**Business Model and Flowsheet** 

4. Sales and Marketing

**Cobalt Market** 

6. Expansion, Growth Potential and Recycling

7. Concluding Site Photographs

### Safety, People, Communities

### Putting People First

### Safety programs for 2022

- Process safety management
  - o MOC-process development
  - o HAZOP-process renewal
- Cobalt dust management (occupational)
- Safety and housekeeping rounds
- Safety monitoring tool: 1052 safety inspections in 2021
- Security management
- Crisis management
  - o COVID-19 management
  - o Safety management plan update for SEVECO III
  - 2021 training: 1 table top training and 6 drills
- Contractor safety management program continues (2014-)
  - o Regular safety release for contractors
  - Joint safety meetings
- Collaborations:
  - Learning institutions
  - Kokkola Industrial Park (KIP)

### **Total Recordable Incident Rate (TRIR)**



Total Recordable Incident Rate (TRIR) = ((Fatalities + Lost Time Incidents + Restricted Duty Incidents + Medical Treatment + Occupational Illness Incidents) \* 200 000) / Total Hours Worked



### **Environment**

### Excellence in Environmental Stewardship

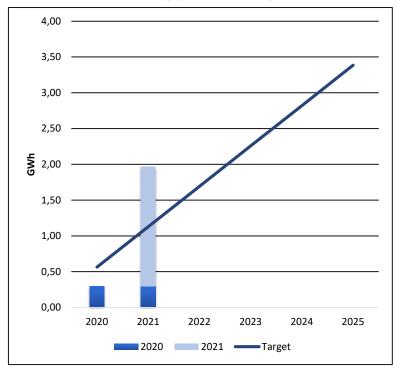
### **2021 Highlights**

- Water recycled over 5 times prior to discharge.
- Over 99% of general waste generated is re-used as material or energy
- Proportion of all wastes going to final disposal declined from 23.6% to 8.6%
- Energy efficiency targets met or exceeded since 2008
- Continuing collaborations on water, air and biodiversity monitoring

#### 2022 Environmental Goals

- Ensure JFO operates in accordance with environmental permits and legislation
- Reduce harmful emissions
  - o Air emission management
  - Controlling wastewater emissions based on agreements
- To minimize and increase recycling of waste
  - o New waste management SOP and new waste collection points
- To improve energy efficiency and reduce energy consumption
  - JFO has joined to the new energy saving agreement for years 2020-2025

### **Energy Efficiency**



- Since 2020: JFO part of national energy saving program
- During 2020-2025 JFO committed to reach energy saving target of 3,385GWh



### CO<sub>2</sub> Reduction Roadmap

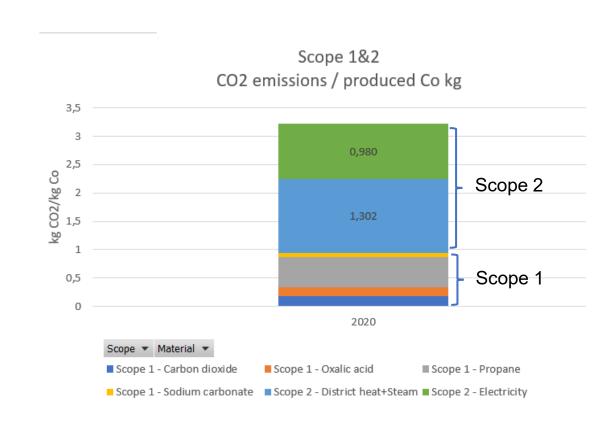
### Committed to understanding and reducing CO2 emissions

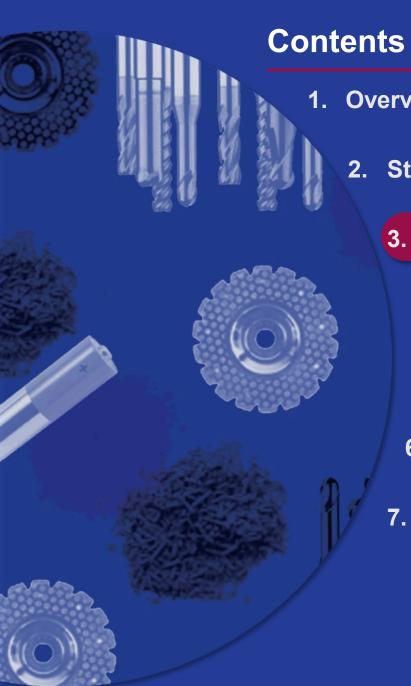
#### Work to date:

- Scope 1 and 2 emissions calculated
- Active work on CO2 emission reductions for over 20 years has resulted in JFO being significantly below industry average
- Collecting information on what we have done and should/could do
- Life Cycle Assessments

### Next Steps for 2022:

- Scope 3 emissions calculated
- Enquiries with supplier commenced to understand their emissions
- Remained focused on continued reductions





**Strong ESG Credentials** 

3. Business Model and Flowsheet

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**Cobalt Market** 

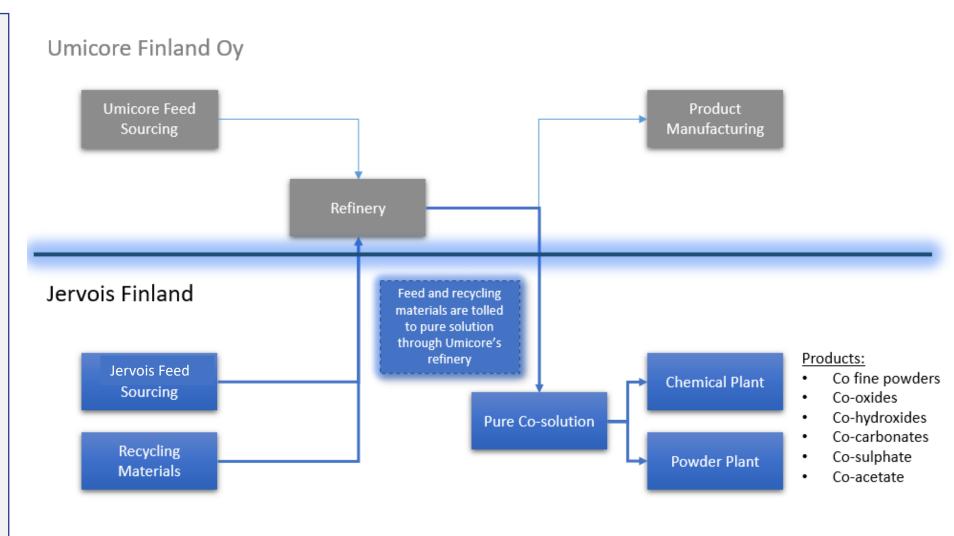
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### Jervois Finland: Business Model

### Operational structure at Kokkola

- Long term refinery capacity sharing agreement on defined cost-sharing basis
- Refinery flowsheet steps are: leaching, precipitation purification (Fe, Al, Cu, Zn) and SX. Intermediate SX products are pure CoSO4 and CoCl2 solutions
- Jervois has multiple product lines, technologies applied include precipitation, washing and filtration, drying, high temperature oxidization and reduction, milling, classification and crystallization
- Waste water treatment and gas purification are essential steps



## Attractive financial profile

Jervois Finland generates cash flow through the cycle, leveraged to higher cobalt prices whilst protected at low

	2018 Actual	2019 Actual	2020 Actual	2021 Actual	Q1 2022 Actual	2022 Guidance
Cobalt price (Metal Bulletin market price) – US\$/lb	US\$36/lb	US\$16/lb	US\$15/lb	US\$24/lb	US\$36/lb	US\$39/lb
Chemicals, catalysts and ceramics – m lbs	5.0	5.9	6.2	5.6	1.4	n/a
Powder metallurgy – m lbs	2.7	2.1	1.6	2.2	0.6	n/a
Battery materials – m lbs	5.0	3.2	3.6	4.5	1.2	n/a
Sales volumes (subtotal) – m lbs	12.7	11.1	11.5	12.3	3.2	12.7
Other – m lbs	-	-	3.1	0.2	-	-
Sales volumes (total) – m lbs	12.7	11.1	14.6	12.5	3.2	12.7
Revenue – US\$m	444	211	209	296	105	n/a
Pro forma adjusted EBITDA (pre one-off items) – US\$m	83	8	21	19	15	50-55
One-off non-cash inventory write down to NRV in Q1 19	-	20	-	-	-	-
Pro forma adjusted EBITDA – US\$m	83	28	21	19	15	50-55
EBITDA Margin – %	19%	13%	10%	6%	14%	n/a
Capex – US\$m	0.6	1.9	6.8	2.4	1.4	n/a

### Working capital overview

Jervois Finland business continues to be underpinned by >US\$100M of product inventory

US\$M	31 December 2021 Unaudited	31 March 2022 Unaudited
Cobalt price at end qtr (actual, US\$/lb) <sup>1</sup>	33.5	39.0
Trade accounts receivable (US\$M)	34	43
Product inventory (US\$M)	103	107
Other inventory (US\$M)	7	7
Accounts payable (US\$M)	(21)	(27)
Other (net) (US\$M)	(8)	(5)
Net Working Capital <sup>2</sup>	115	125
Cobalt inventories at quarter end (tonnes)	1,704	1,511
Last 12 months sales volume (tonnes)	5,677	5,680
Inventory cover (days)	110	97

## Rising price environment key driver of higher working capital

- Cobalt price movements materially impact inventory value and changes to working capital
- Net increase of US\$10M in Q1 2022 higher prices partially offset by lower inventory volumes

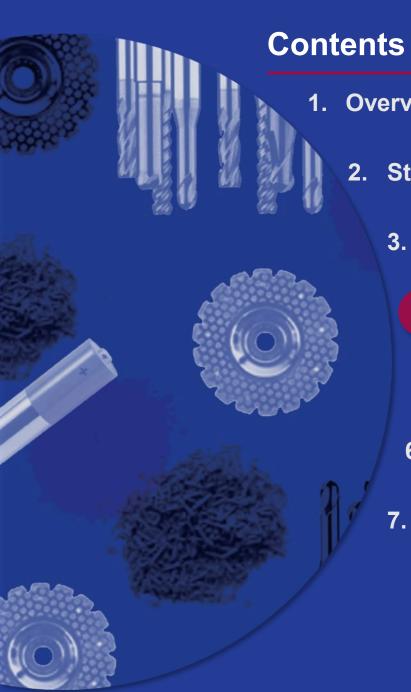
## Working capital rises funded via drawdown on US\$150M Mercuria standby credit facility

- Single drawdown in Q1 2022– US\$17.5M in March
- Due to higher cobalt prices, US\$75M Accordion agreed in Q2, taking total facility size to US\$150M
- Provides flexibility for higher cobalt prices –
  +US\$25M drawn prior to end Q2; taking facility drawdowns to US\$100M; up to US\$50M available for upstreaming to Jervois group (incl. US and Brazil)

## Investment in working capital part of the Jervois Finland business model

- Diverse and specialized products supply chain length and proximity to customers key drivers
- Customer payment terms structured to maximise long-term commercial value (high premia products)





**Strong ESG Credentials** 

**Business Model and Flowsheet** 

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## Product portfolio and end-use segments

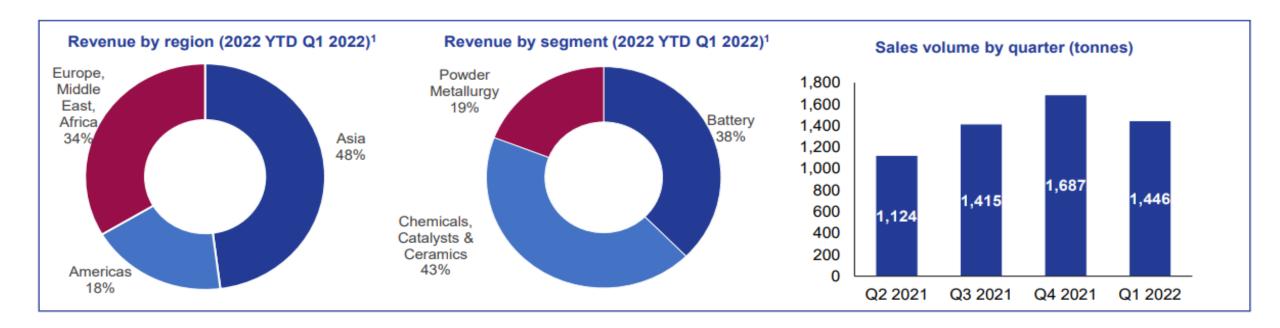
Jervois Finland manufactures a broad range of products across cobalt oxides, salts, and fine powders

Pro	oduct family	End-use market applications							
		Hard metal	Diamond tools	Catalyst	Electronics	Animal feed	Carboxylates	Pigments, glass and ceramics	Battery
Fine	Co fine powders	✓	<b>√</b>						✓
Cobalt Chemicals	Co hydroxide			✓			✓	✓	✓
	Co carbonate			✓		✓			
	Co sulfate					✓			✓
	Co acetate			<b>√</b>		✓			
	Co oxide				<b>√</b>				<b>√</b>
Powder Metallurgy Chemicals, Catalysts and Ceramics Battery									



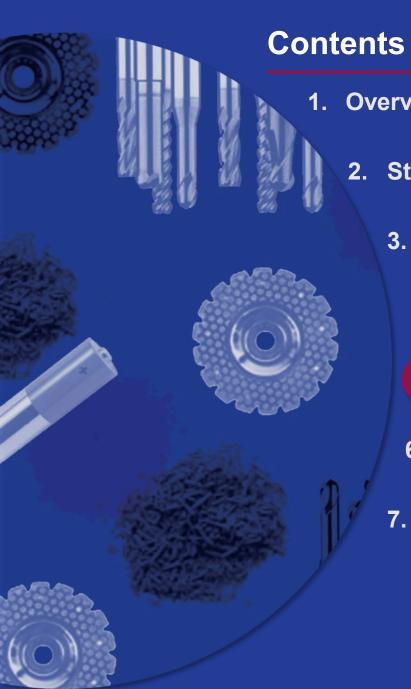
## Sales and marketing platform

A global leader in cobalt-based advanced materials servicing blue-chip customer base



- Established global leader in cobalt-based advanced materials and chemicals
  - One of two major players active across all key markets globally
  - Top three position across all cobalt chemicals and fine powder products
  - #1 position in certain high-value market segments
  - Longstanding presence in cobalt materials for battery / energy storage markets

- World-class operation in Kokkola-Finland with robust operating set-up and leading technological capabilities
- Well diversified business serving customers in over 50 countries across Europe, the Americas and Asia



**Strong ESG Credentials** 

**Business Model and Flowsheet** 

4. Sales and Marketing

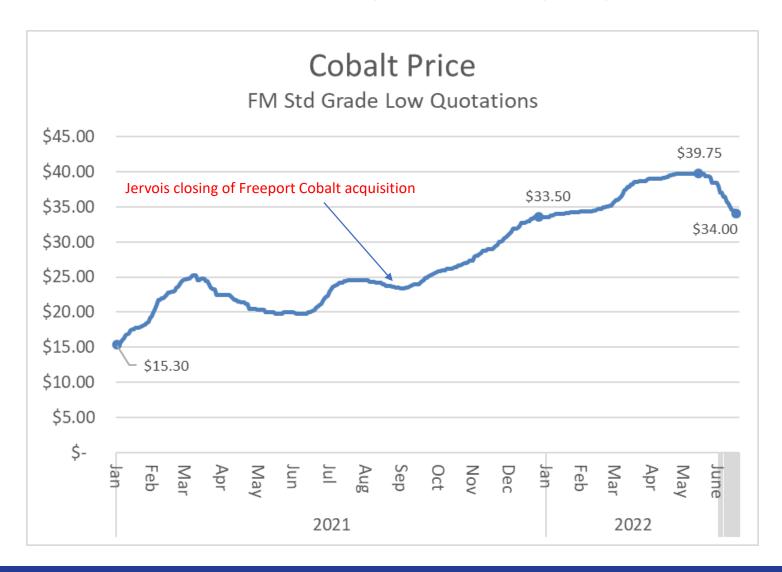
**Cobalt Market** 

6. Expansion, Growth Potential and Recycling

7. Concluding Site Photographs

### **Cobalt Market Overview**

Prices have fallen from recent highs – to near beginning 2022 level



Fastmarkets MB Std. Grade cobalt price @
 US\$33.45-34.25 per lb (24 June 2022)

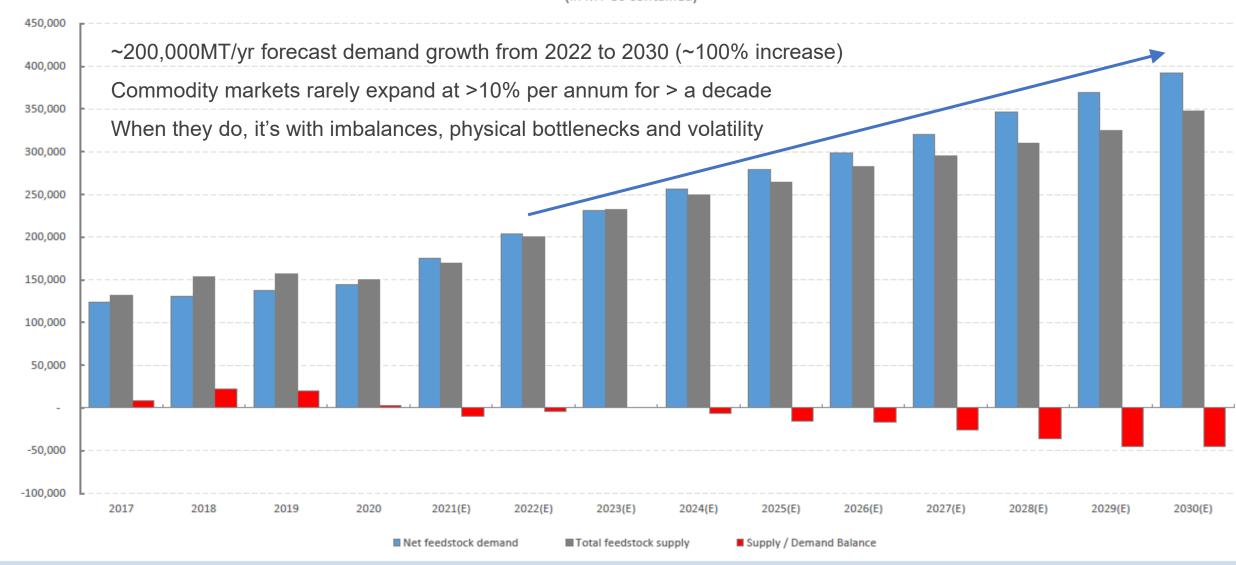
#### • Drivers:

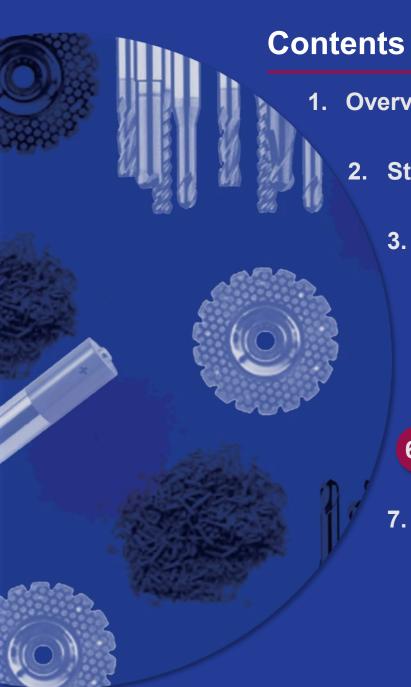
- EV demand growth remains positive longterm, but recent Covid shutdowns have impacted short-term consumption
- Metal consumption in battery supply chains has decreased as well
- Bottlenecks have improved, but logistics continue to be less efficient than normal
- Co Hydroxide intermediates production in DRC is steady, but in some cases below expectations. New projects are still some time (years?) away
- Lower Co Hydroxide payables has spurred some metal production in China
- Market sentiment is positive, with expectations of increased consumption once Covid issues are resolved

### **Cobalt Market Projections**



Cobalt Market – Supply / Demand Balance (in MT Co contained)





**Strong ESG Credentials** 

**Business Model and Flowsheet** 

Sales and Marketing

**Cobalt Market** 

6. Expansion, Growth Potential and Recycling

**Concluding Site Photographs** 

### **Growth potential study underway**

JFO platform provides optionality and opportunities for growth

### **Market demand growth**

- EV Battery applications expected to grow at CAGR of >10%. Regional supply chains developing in EU and Americas.
- Legacy applications expected to continue to grow along with GDP
- Full traceability and responsible sourcing growing in importance

### **Refinery Expansion Bankable Feasibility Study**

- Evaluating refinery addition proximate to KIP
- Bankable Feasibility Study underway
- Discussions with potential feed suppliers and customers commenced
- Adding recycling volume capacity
- Expand refinery capacity from 6,250 mtpa to 12,250 mtpa refined cobalt production

- Product mix continuously optimised to enhance margins
- Flexibility / capability to adapt to end-user demands
- Potential to expand physical footprint



Hard metal tools



Diamond tools



Catalysts





### Recycling

 Business has established activities in recycling of spent cobalt bearing materials



- Product processed in circular "closed loop", wherein cobalt material is used by customers and returned for regeneration
- Current source of growth with options to further expand



### Recycling, Research and Development

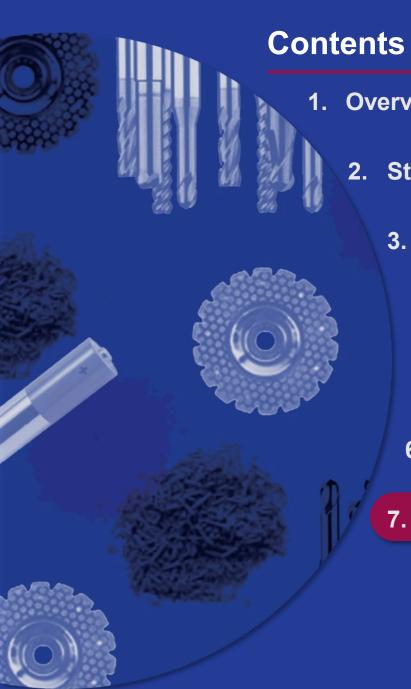
Focus on circular economy

Over it's history Kokkola R&D team has a successful track record on product and process development, working closely with customers

- Jervois Finland has its own R&D team including R&D laboratory
- Strong relationships with top universities in Finland
- Several ongoing projects with universities
- Utilizing public Business Finland R&D funding for projects

#### **R&D Focus areas:**

- 1. Promotion of circular economy Development, commissioning and commercialization of processes used for recycling materials from different applications.
- 2. New product opportunities Development work for new products with lower CO2 footprint especially for hard metal and catalyst applications.
- 3. Process efficiency (Process development):
  - Optimal utilization of internal recycling steams (off-specs, waste streams)
  - Minimization of utility usage (gases, chemicals, energy)
- 4. New technologies and partnerships Strengthening university co-operation and increasing domestic know-how on Jervois Finland business areas



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## **Jervois Finland: Concluding Photographs**









**Head Office** 

**Chemical Plant** 

Powder Plant

**Delivery Service** 



Control room



Example of Prod. area



Example of tank area



FG inventory

### Basis of preparation of financial information

#### Historical and forecast financial information

Historical information is derived from the audited financial statements for Koboltti Chemicals Holdings Ltd (**KCHL**) which are prepared in accordance with US GAAP. KCHL is the parent company of Freeport Cobalt Oy and four affiliated entities (the entities that Jervois acquired). The consolidated KCHL financial statements also include a small number of immaterial balances that relate only to the activity of the KCHL parent entity (which Jervois did not acquire).

EBITDA for 2018, 2019 and 2020 is presented on a pro forma adjusted basis and is a non-IFRS/non-GAAP measure. Proforma, adjusted EBITDA is presented as net income after adding back tax, interest, depreciation, other income, extraordinary items, and the profit on sale of part of the business to Umicore (which occurred in 2019). Information for 2018 and 2019 has been adjusted to exclude the estimated revenue and costs attributable to the portion of the business sold to Umicore.

All revenue and cost adjustments have been estimated using information provided by KCHL (applying certain judgements, carve-out estimates and assumptions). These adjustments have not been audited. Because of lower quoted cobalt prices and a relatively long inventory position and applying a lower of cost or net realisable value methodology, KCHL recorded write-downs to its inventories of US\$58m in 2019. Jervois estimates the portion attributable to the retained business it is acquiring was US\$20m.

Financial information presented for the period prior to acquisition by Jervois Global on 1 September 2021 is presented on a proforma basis for illustrative purposes only.

Financial information presented for periods after acquisition on 1 September 2022 is prepared under Jervois group accounting policies, which conform with Australian Accounting Standards ("AASBs") and International Financial Reporting Standards ("IFRS"). The Jervois Finland financial results for the period post-acquisition are consolidated into the Jervois Global consolidated financial statements. Information presented is unaudited.

The Jervois Finland 2022 guidance consists of actual results for January to March and forecast results for April to December. The forecast period includes an assumption of a forecast quoted cobalt price of US\$39.75/lb. Other forecast assumptions, including production, sales plans, costs and exchange rates are based on Jervois' internal estimates.

All financial and non-financial information is presented for illustrative purposes only.

#### Reconciliation of EBITDA to Adjusted EBITDA

Adjusted EBITDA represents EBITDA attributable to Jervois, adjusted to exclude items which do not reflect the underlying performance of the company's operations. Exclusions from adjusted EBITDA are items that require exclusion in order to maximise insight and consistency on the financial performance of the company's operations.

Exclusions include gains/losses on disposals, impairment charges (or reversals), certain derivative items, and one-off costs related post-acquisition integration.

US\$M	2021 (proforma)	Q1 2022 (unaudited)		
EBITDA	18.3	14.2		
One-off integration costs	0.7	0.7		
Adjusted EBITDA	19.0	14.9		





