



Sunrise Battery Materials Complex

**Critical raw materials for a
battery revolution**

CORPORATE PRESENTATION

June 2019



TSX CLQ

Cautionary statement

Certain statements in this presentation constitute “forward-looking statements” or “forward-looking information” within the meaning of applicable securities laws. Such statements involve known and unknown risks, uncertainties and other factors, which may cause actual results, performance or achievements of Clean TeQ Holdings Limited (the “Company” or “Clean TeQ”), the Clean TeQ Sunrise Project (“Sunrise”, the “Project” or the “Sunrise Project”), or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as “may”, “would”, “could”, “will”, “intend”, “expect”, “believe”, “plan”, “anticipate”, “estimate”, “scheduled”, “forecast”, “predict” and other similar terminology, or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved. These statements reflect the Company’s current expectations regarding future events, performance and results, and speak only as of the date of this presentation.

Statements in this presentation that constitute forward-looking statements or information include, but are not limited to: statements regarding the negotiation and conclusion of further offtake agreements; the settlement and completion of a debt financing facility from the mandated lead arranger group prior to a final investment decision for Sunrise; the potential investment by a strategic investor and/or additional financing; completing of final design and detailed engineering work; making a Final Investment Decision; statements relating to the timing of commencement and/or completion of construction of the Clean TeQ Sunrise Project, commissioning, first production and ramp up; and the potential for a scandium market to develop and increase.

In addition, all disclosure in this presentation related to the results of the 2018 Sunrise Project’s Definitive Feasibility Study (the “DFS”) announced on 25 June 2018¹, constitute forward-looking statements and forward-looking information. The forward-looking statements includes metal price assumptions, cash flow forecasts, projected capital and operating costs, metal recoveries, mine life and production rates, and the financial results of the DFS. These include statements regarding the Sunrise Project IRR; the Project’s NPV (as well as all other before and after taxation NPV calculations); life of mine revenue; average annual EBITDA; capital cost; average C1 operating cash costs before and after by-product credits; proposed mining plans and methods, the negotiation and execution of offtake agreements, a mine life estimate; project payback period; the expected number of people to be employed at the Project during both construction and operations and the availability and development of water, electricity and other infrastructure for the Sunrise Project, as well as the indicative project schedule.

Readers are cautioned that actual results may vary from those presented.

All such forward-looking information and statements are based on certain assumptions and analyses made by Clean TeQ’s management in light of their experience and perception of historical trends, current conditions and expected future developments, as well as other factors management believe are appropriate in the circumstances. These statements, however, are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking information or statements including, but not limited to, unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; changes in investor demand; the results of negotiations with project financiers; the failure of parties to contracts to perform as agreed; changes in commodity prices; unexpected failure or inadequacy of infrastructure, or delays in the development of infrastructure, and the failure of exploration programs or other studies to deliver anticipated results or results that would justify and support continued studies, development or operations. Other important factors that could cause actual results to differ from these forward-looking statements also include those described under the heading “Risk Factors” in the Company’s most recently filed Annual Information Form available under its profile on SEDAR at www.sedar.com.

Readers are cautioned not to place undue reliance on forward-looking information or statements.

Although the forward-looking statements contained in this presentation are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward-looking statements. These forward-looking statements are made as of the date of this presentation and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this presentation.

¹ Full information regarding the DFS is contained in the technical report titled “Sunrise Nickel Cobalt Project, New South Wales, Australia NI 43-101 Technical Report” dated effective 25 June 2018 and filed at www.sedar.com under the Company’s SEDAR profile and is also available on the Company’s website at www.cleanteq.com.

Our vision is to empower the clean revolution

Critical raw materials for electric vehicles and energy storage

- Advancing development of the **Sunrise Battery Materials Complex** – a nickel, cobalt and scandium project in NSW, Australia
- Sunrise is a **strategic asset** in the lithium-ion battery supply chain as one of the largest development ready nickel and cobalt projects which is located outside Africa
- Sunrise will produce **critical raw materials** for the rapidly growing lithium-ion battery industry
- Large resource with **high by-product credits**
- Definitive Feasibility Study completed, demonstrates a **highly economic project** with outstanding technical foundations
- **Engineering** and **design** underway with a **final investment decision** targeted for **4Q 2019** and construction to commence shortly thereafter



Clean TeQ commences partnering process for Sunrise

- As announced on 4 June 2019, **Clean TeQ** has **commenced** a **partnering process** for its wholly-owned Sunrise Battery Materials Complex (“Sunrise”)
- The announcement followed numerous **in-bound enquiries** from a range of participants in the electric vehicle supply chain in relation to **project level ownership, long-term offtake** and **other financing arrangements**
- **Macquarie Capital** has been appointed to run the partnering process where Clean TeQ is considering a divestment of **up to 50%** interest in Sunrise, in combination with **long-term offtake**
- Clean TeQ is targeting to complete the partnering process in the **second half of 2019** in order to make a **final investment decision** for Sunrise in **4Q 2019**
- Clean TeQ has appointed four leading global banks as **Mandated Lead Arrangers** to progress a project debt facility targeting **at least 50% of the total funding** requirement for the project

US\$1,491MILLION



Sunrise development capex

>50% OF SUNRISE'S FUNDING
REQUIREMENT



Targeted project debt facility

US\$500MILLION



MLA Group indicative commitments to date
(ICBC, NAB, Société Générale & Natixis)

A\$150MILLION



Clean TeQ
investment in Sunrise to date



1. Market overview

A battery revolution is expected to drive raw materials demand

Electric vehicles around the corner

China's CATL, Honda plan to co-operate on EV battery development

5 Feb 2019, Reuters

BYD all-electric trucks and vans coming to Europe

31 Jan 2019, Electrive

John Deere premiers electric tractor in action

12 Dec 2018, Electrive

SK Innovation Eyes \$10 Billion Battery Bet After Major VW Order

9 Jan 2019, Bloomberg

Panasonic eyes upstream investments to secure battery raw materials

5 Feb 2019, S&P Global

Škoda preparing for electric launch with €2 billion

7 Feb 2019, Electrive

Shell snaps up Greenlots to accelerate electric vehicle charging networks across North America

31 Jan 2019, VentureBeat

Ford says carmakers may need to invest in cobalt mines soon

5 Feb 2019, Mining.com

Volvo Trucks teases upcoming new all-electric semi truck

12 Dec 2018, Electrek

An All-Electric Ford F-150 Pickup Truck Is Happening

17 Jan 2019, Car and Driver

China's CATL plans battery cell production of 60 GWh from 2026 at German plant

23 Jan 2019, Reuters

Toyota, Panasonic announce battery venture to expand electric vehicle push

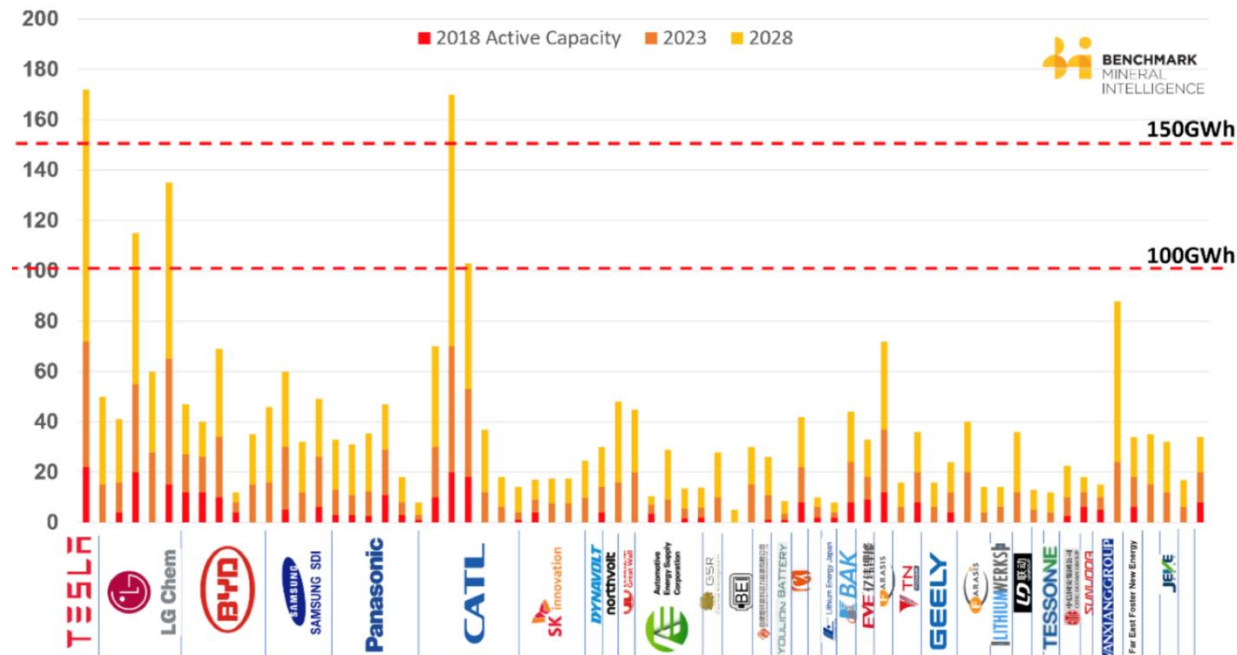
22 Jan 2019, The Globe and Mail

Daimler is buying over \$20 billion in battery cells to support electric vehicle plans

11 Dec 2018, Electrek

Megafactories being built now

Significant increase in Li-ion battery capacity from 2018 to 2028



- Benchmark Mineral Intelligence is tracking **70 megafactories currently under construction**
 - 46 based in China**
 - In October 2017, only 17 under construction
- Megafactories will make **Li-ion batteries** with two specific chemistries
 - NCM** (nickel-cobalt-manganese)
 - NCA** (nickel-cobalt-aluminium)
- Significant impact for four critical raw materials: lithium, **nickel, cobalt** and graphite

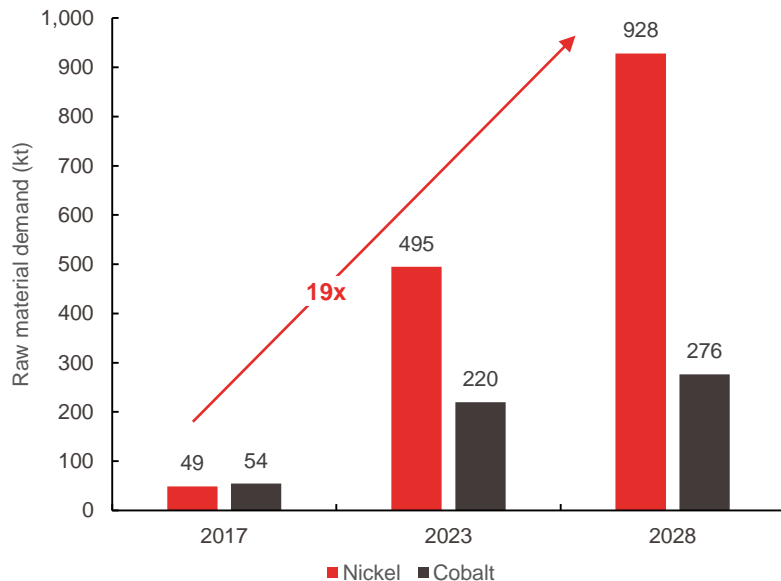
Source: Benchmark Mineral Intelligence (5 Feb 2019 written testimony to US Senate Committee on Energy and Natural Resources Committee)

Supply of battery raw materials will be challenged

New sources of nickel and cobalt are required

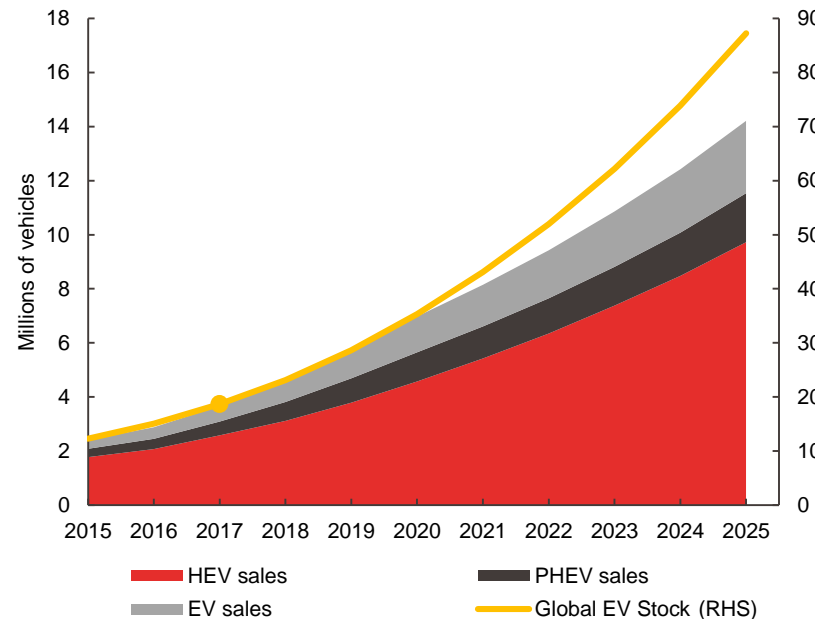
Projected megafactory demand

(at 100% utilization)



Source: Benchmark Mineral Intelligence (5 Feb 2019 written testimony to US Senate Committee on Energy and Natural Resources Committee)

Global EV sales projections



Source: Wood Mackenzie

Largest demand pull from China

Emissions controls legislation driving the agenda

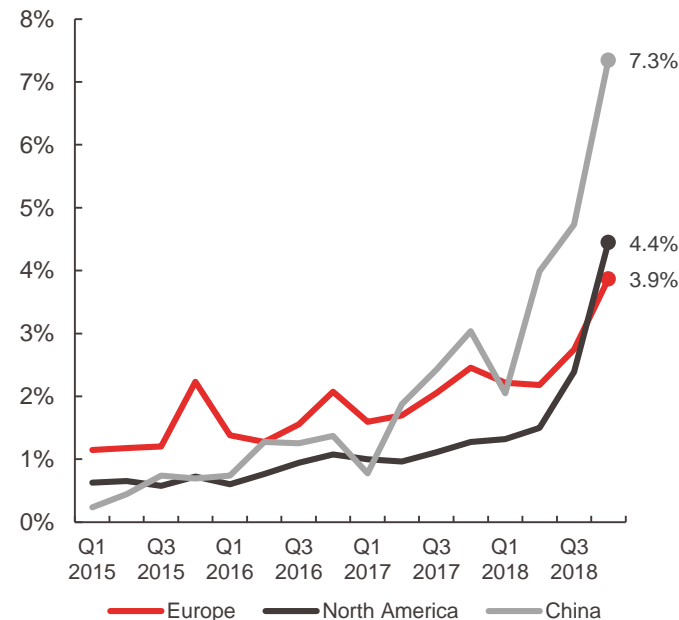
- **The shift to New Energy Vehicles (NEV) is here!**
 - NEV mandate is effective in 2019
- Credit based system targeting: **10% EV (2019), 12% (2020)**
- EV subsidies based on vehicle range:
 - **¥50,000 (~US\$7,400) for EV range \geq 400 km**

BYD Yuan EV360



Price	US\$12,500 (after subsidies)
Battery	42 kWh
Power	160 kW
Range	305 km
Features	In-car wifi, auto air conditioning, cruise control, multi-function steering wheel, leather seats, smart charging and scheduled charging, 8 airbags, tire pressure detection, ESP

EV vs. total passenger vehicle sales



Source: China Association of Automotive Manufacturers, Bloomberg NEF

Nickel sulphate capacity needs to grow

- Electric vehicles are **heavy consumers of nickel sulphate** irrespective of battery chemistry
- Next generation lithium ion batteries will be **more nickel intensive**
- **Less than 50%** of current global nickel production is suitable for battery applications (Class 1 nickel)
- Lack of new Class 1¹ sulphate developments are leading to a **sustained sulphate premium** over LME nickel price



1. Class 1 nickel refers to sulphate and laterite operations which produce high purity nickel metal products and chemicals suitable for a variety of applications. Class 2 nickel operations are ferronickel and nickel pig iron operations which are only suitable for stainless steel

Significant nickel supply growth needed – Vale

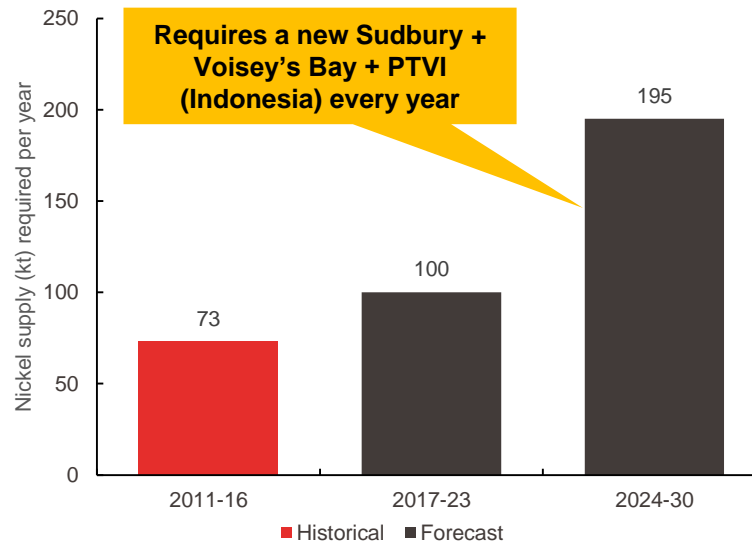


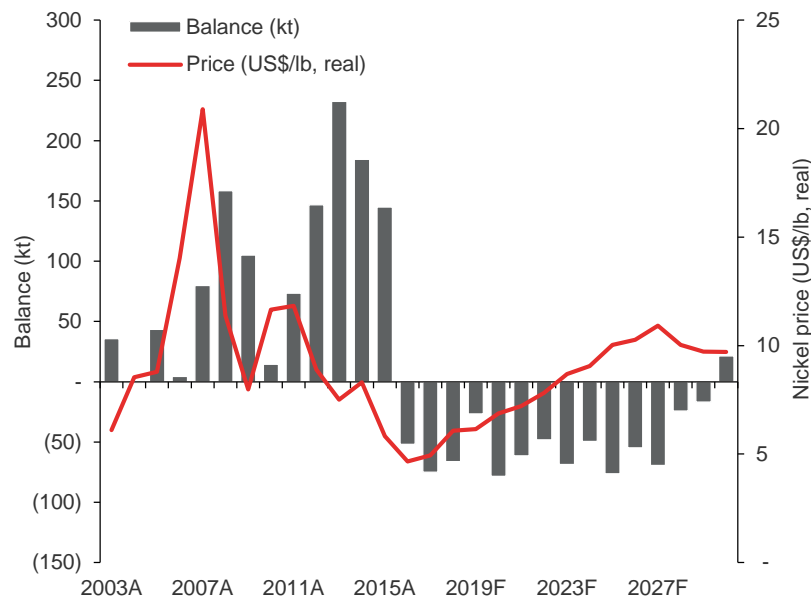
Chart source: Vale Day 2018 presentation (6 December 2018, slide 62).

Historical data source: Wood Mackenzie.

Forecast data source: Vale analysis built on Wood Mackenzie, CRU, public announcements, academic papers and conversations with downstream producers.

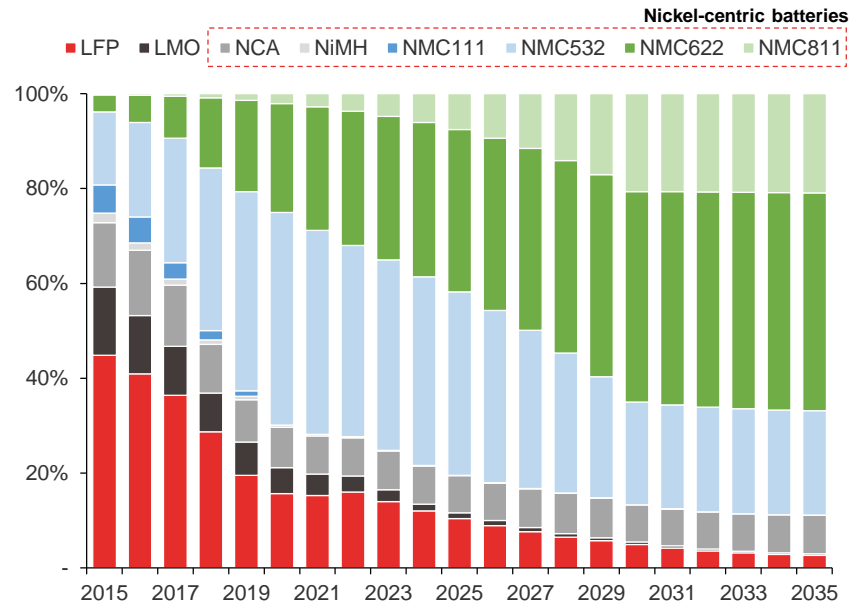
There is a global shortage of battery-grade nickel

Battery-grade nickel supply deficit



Source: Wood Mackenzie, March 2019

Trend towards nickel-rich battery chemistries



Source: CRU Nickel & Cobalt Market Study, October 2018

Cobalt supply is highly constrained

- **Majority of global cobalt sourced from DRC** presenting major supply risk for end users
 - Security of supply
 - Auditability of supply chain
- 95% of production comes as a **by-product of copper or nickel production**
 - Higher cobalt price doesn't necessarily incentivise new cobalt production
- **Political, legal and regulatory challenges** in DRC



Cobalt Production – Global Rankings

Mine	Country	2018 est. tonnes
Mutanda	DRC	27,300
Tenke Fungurume	DRC	18,750
Katanga	DRC	11,100
Huayou Cobalt	DRC	9,100
Chemaf	DRC	7,100
Hanrui Cobalt	DRC	6,200
Clean TeQ Sunrise	Australia	4,620
Ruashi	DRC	4,300
Somika	DRC	3,500
Artisanal	DRC	~16,000

Source: Public data, Darton Cobalt Market Review 2018-19, Clean TeQ estimates
*Average annual production (years 2-6) based on 2018 Definitive Feasibility Study

Scandium for a new generation of lightweight alloys

- Sunrise is one of the **world's largest and highest grade scandium resources**
- Scandium is used to provide next generation **lightweight aluminium alloys** for key transportation markets
- Clean TeQ continues to **promote the use and development** of new scandium alloys with industry participants including Airbus and Chinalco
- Current development plan is to **extract scandium oxide as a by-product** of cobalt and nickel sulphate production
- Marginal **cost of production expected to be very low** (approx. US\$150/kg¹)

¹ Estimated marginal cost of production per kilogram refined scandium oxide based on 10 tonne per annum production.

Airbus Group's Light-rider



The world's first 3D printed electric bike aluminium-scandium frame makes it lighter and stronger

The bike weighs 35kg, contains a 6kWh battery, has a top speed of 80km/h and a range of 60km



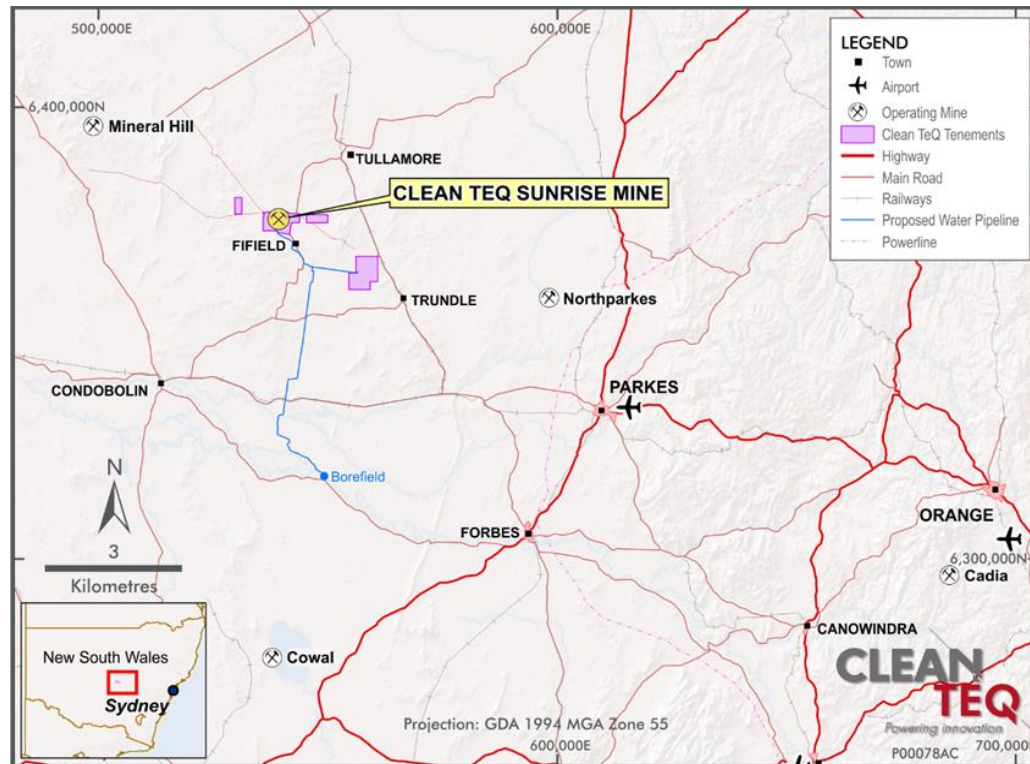
2. Sunrise snapshot

A strategic asset in the battery materials supply chain

CLEAN
TEQ
SUNRISE

Advanced development project in Central NSW

- **Sunrise Battery Materials Complex**
- **100% owned** by Clean TeQ
- Laterite (iron-hosted) mineral resource, rich in **nickel, cobalt and scandium**
- One of the largest and highest grade sources of **cobalt outside Africa**
- Located 350 km west of Sydney in an **established mining region**
- **Significant infrastructure in place** including sealed road to site
- **Fully permitted** and development ready



Project highlights



One of the largest
nickel and cobalt
resources outside of
Africa



Low first quartile
position on the
nickel cost curve



A simplified flow
sheet direct to
battery precursor
materials



Positioned to
address global nickel
and cobalt **supply**
constraints



Stable and low risk
mining jurisdiction
offering **credibility**
and auditability



Project team has
worked on **several**
major laterite
projects globally



Scale



Low cost



Efficient



Market



Secure



Experience

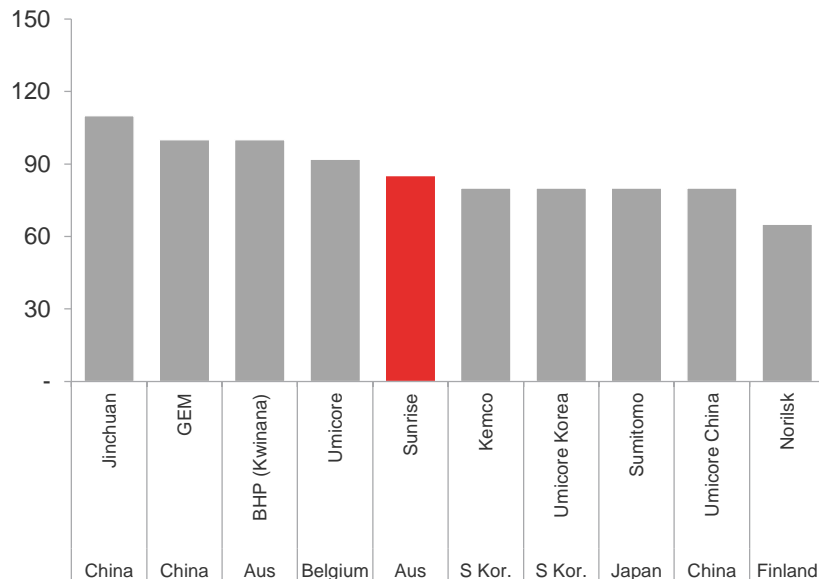
Sunrise is a highly strategic asset in the lithium ion battery supply chain, as one of the
largest, development-ready nickel and cobalt resources outside Africa

Sunrise is a strategic battery minerals asset

Fully-integrated¹ producer of nickel and cobalt sulphate

Global nickel sulphate production

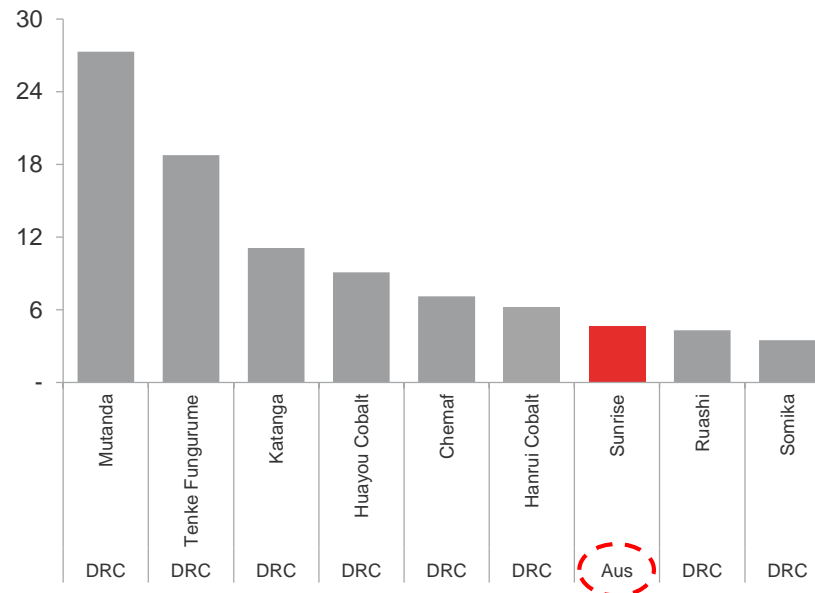
(thousand tonnes nickel sulphate)



Source: CRU Nickel & Cobalt Market Study, October 2018

Global cobalt production

(thousand tonnes contained cobalt)



Source: Public data, Darton Cobalt Market Review 2018-19, Clean TeQ estimates
*Average annual production (years 2-6) based on 2018 Definitive Feasibility Study

Primary drivers to success

Mineralogy

- **Near surface deposit** with maximum depth of 40 metres
- **High cobalt grades** relative to other laterite deposits³
- **Very low in acid consuming elements** (magnesium and calcium⁴)

Flowsheet

- Clean iX® - continuous ion exchange technology provides **lowest cost path to battery-ready products**
- Production of final **cobalt and nickel sulphates** onsite
- Flowsheet **supported by extensive testwork** and pilot plant validation

Location

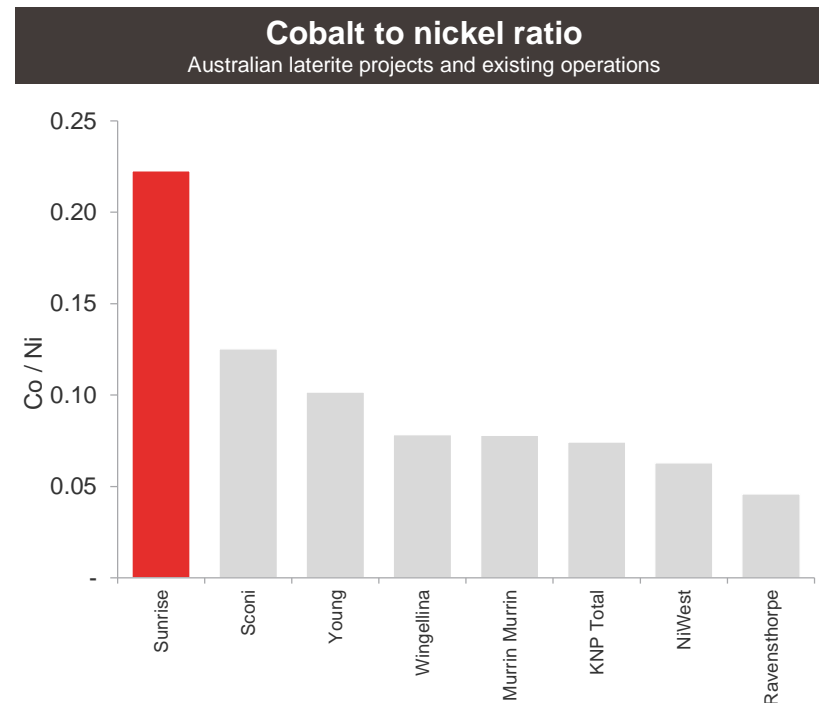
- **Fully auditable, non-DRC supply**
- Access to **rail, road, power and water** infrastructure
- Supportive local community in **established mining area**

3. Based on publicly disclosed information.

4. Extensive metallurgical test work has demonstrated very low acid consumption (250-280 kg/tonne HPAL feed) relative to publicly disclosed consumption rates of other nickel laterite projects, which range from 340-500 kg/tonne.

Sunrise is unique among nickel / cobalt laterite projects

- ✓ Sunrise's shallow deposit allows for **simple strip mining**
- ✓ Unique among nickel laterite projects due to its **high cobalt content relative to nickel**. Post by-product credits, Sunrise will have **negative C1 cash costs**
- ✓ Clean TeQ has developed an ore handling strategy which focuses on delivering **consistent feedstock**
- ✓ Benefits from **low clay content** and dry mining conditions, minimising ore variability
- ✓ **Low in acid consuming elements**, reducing overall operating costs
- ✓ **Fourth-generation** HPAL processing plant incorporates the learnings from prior projects in both design and engineering



Source: Based on published Mineral Resource statements, as at 3 June 2019.

Advantages from mine to product



Process designed and built for next generation of EV batteries



Removes intermediate processing steps, providing the lowest cost path to battery-ready products



Technology supported by pilot testwork, with all processing stages extensively tested

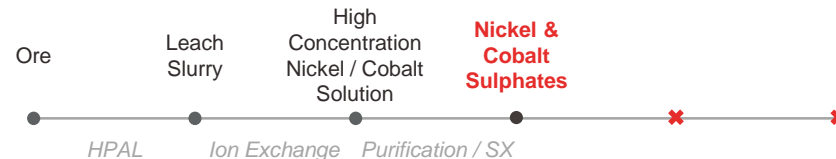


Extensive pilot plant testing has validated the cRIP technology, confirming the process plant will achieve high metal recoveries

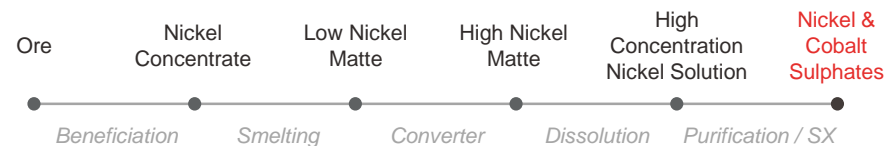


Enables Sunrise to achieve 100% LME/FastMarkets pricing plus a sulphate premium while minimising capital and operational expenditure

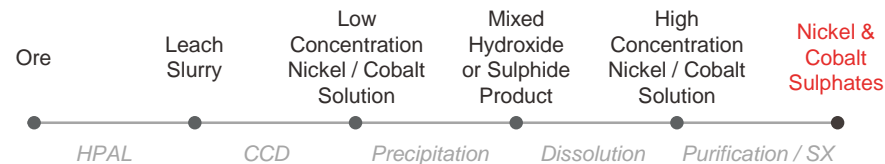
Clean TeQ flowsheet



Typical pyrometallurgical flowsheet



Typical hydrometallurgical flowsheet



Fully permitted and development ready

✓ STUDIES	Definitive Feasibility Study completed in June 2018
✓ PERMITS	Approved 2.5 Mtpa project from NSW Government
✓ WATER	Secured 3.2 GLpa water allocation
✓ INFRASTRUCTURE	Road and rail access in place
✓ POWER	Power and gas in close proximity
✓ PILOT PLANT	Successful pilot plant operation demonstrated process flowsheet
✓ MAIDEN OFFTAKE	Secured initial offtake agreement with Beijing Easpring
✓ MINING LEASES	Mining Leases granted
✓ CAPABILITY	Strong technical team with track record of delivery
✓ PREPARING FOR CONSTRUCTION	Engineering underway with MCC – our project delivery partner

2018 Definitive Feasibility Study

Outstanding economic and technical outcomes

STRONG ANNUAL PRODUCTION⁵

Nickel: **19,620** tonnes per annum
Cobalt: **4,420** tonnes per annum
Average over first 10 years



EXCELLENT PROJECT ECONOMICS

NPV of **US\$1.39 billion**
IRR of **19.1%**⁶



40+ YEAR MINE LIFE

supported by mineral
Reserve



PRODUCTION OF HIGH PURITY BATTERY GRADE MATERIALS

- Nickel Sulphate
- Cobalt Sulphate

PLUS Scandium Oxide for
automotive & aerospace applications



EXCEPTIONAL CASH FLOWS

Life of Mine Revenue: **+US\$14 billion**
LOM EBITDA: **~US\$8.60 billion**
Average EBITDA: **US\$344 million** per annum



CAPITAL COST ESTIMATE

US\$1.49 billion
including
\$165 million
contingency



FIRST QUARTILE OPERATING COSTS

Negative **US\$1.46/lb**
Ni after by-product
credits⁷



SECURE SOURCE OF COBALT SUPPLY OUTSIDE OF AFRICA



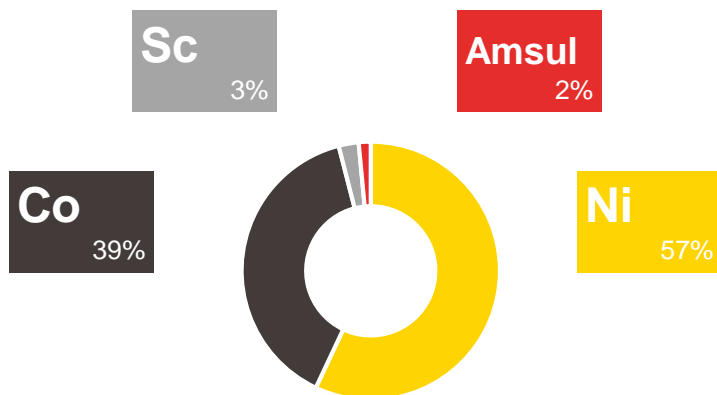
5. Full information regarding the Definitive Feasibility Study is contained in the technical report titled "Sunrise Nickel Cobalt Project, New South Wales, Australia NI 43-101 Technical Report" dated 25 June 2018 and filed at www.sedar.com and available on the company's website at www.cleanteq.com
6. Net Present Value (NPV) is calculated at 8% discount rate, real, 100% equity basis.
7. By-product credits include cobalt, scandium and ammonium sulphate.

Strong free cash flow generation

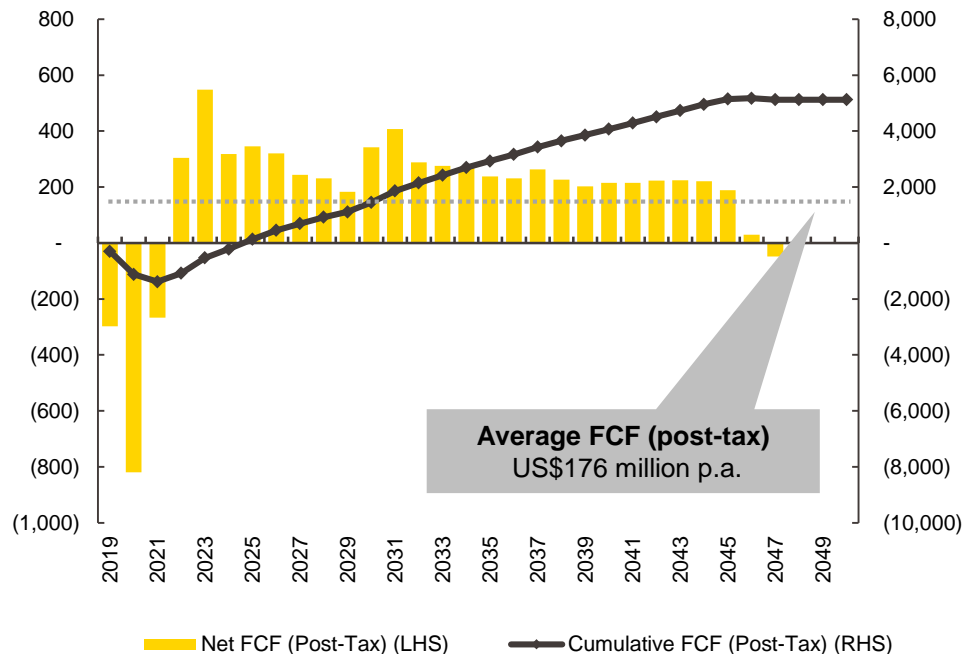
- Clean TeQ Sunrise is forecast to deliver:

- **US\$14 billion in revenue⁸**
- **LOM EBITDA of US\$8.6 billion**
- Average annual **EBITDA of US\$344 million**

Revenue Breakdown



DFS free cash flow profile (US\$M)

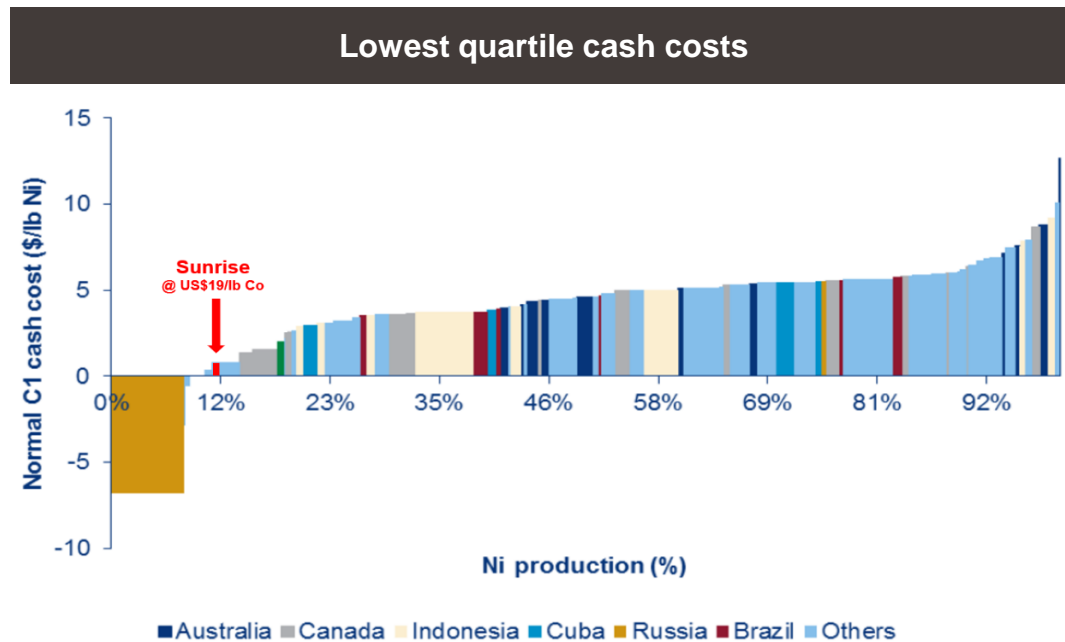


8. Projected revenue and EBITDA assumes commodity prices of US\$8/lb Ni (including sulphate premia), US\$30/lb Co, US\$1,500/kg Sc and US\$90/t ammonium sulphate.

Competitive operating cost position

	US\$/lb Ni before credits	US\$/lb Ni after credits
Mining	\$1.14	\$1.14
Processing	\$3.33	\$3.33
Haulage & port	\$0.07	\$0.07
G&A	\$0.14	\$0.14
Cobalt credits		(\$5.60)
Scandium credits		(\$0.36)
Amsul credits		(\$0.18)
Total C1⁹ cash cost	\$4.68	(\$1.46)

9. C1 Cash cost of nickel produced (per lb) is the sum of production costs, net of capital expenditure development costs and by-product credits, divided by the nickel pounds produced. C1 cash costs reported by the Company include mining, processing, haulage and port expenses. By-product credits are calculated based on expected sales (net of mining and processing costs) of cobalt, scandium oxide and ammonium sulphate divided by the total pounds of nickel, using the assumed sales prices of US\$30/lb for cobalt, US\$1,500/kg for scandium and US\$90/tonne for ammonium sulphate.



Source: Wood Mackenzie. Assumed cobalt price for 2025 for the purposes of this chart is US\$19/lb in real 2017 US\$.

Significant community and social benefits

- Strong anticipated community benefits over life of mine including:
 - Long-term **employment**
 - Significant **infrastructure upgrades**
 - Increased **tax revenue**
 - Government **royalties payable**



STEADY STATE OPERATIONS WORKFORCE

300 people
(excluding mining
contractors and
ancillary services)



CORPORATE TAX

~A\$2.2 Billion
over life of mine



EMPLOYEE SALARIES AND WAGES

~A\$1.9 Billion
(including staff
and contractors)



STATE ROYALTIES AND PAYROLL TAX

~A\$630 million
over life of mine



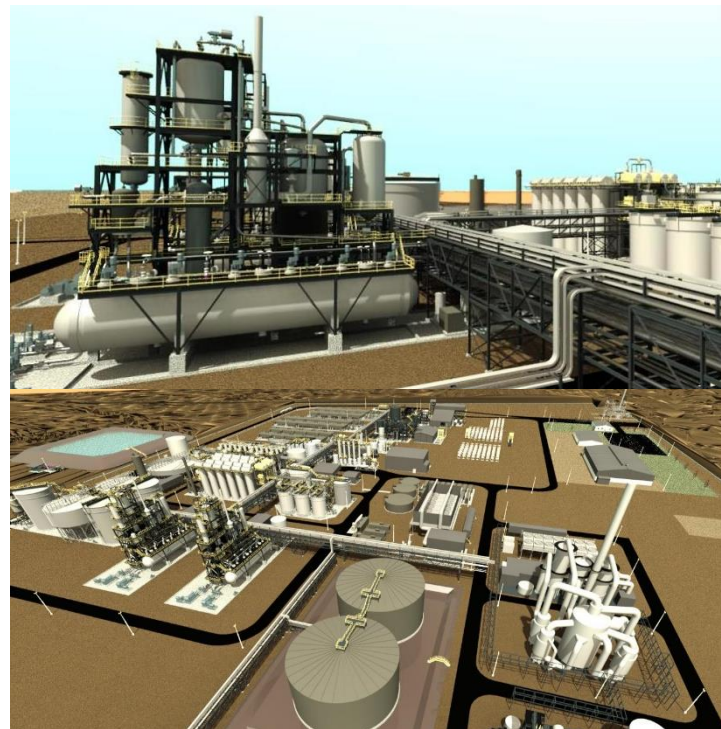
3. Next steps

Development milestones to first production

Project engineering & design underway

MCC selected as a key project delivery partner

- **Fixed-price EPC** contract with MCC
 - Covering engineering, procurement and on-site construction for process plant scope
- **MCC built, own and operate Ramu nickel-cobalt mine in PNG**
- Front-end-engineering and Design (FEED) contract signed with MCC
- Integration of engineering teams and handover of project data complete
 - FEED now underway
- Early works are progressing with engineering of the water pipeline



Comprehensive project financing package

Project debt, strategic partnership & offtake

- **Mandated Lead Arranger (MLA) group** for project debt facility
 - Industrial Commercial Bank of China (ICBC), National Australia Bank, Société Générale and Natixis
- **US\$500 million indicative debt commitments** received prior to syndication, **targeting a total debt facility for at least 50% of capex**
- Extensive **due-diligence is ongoing** by a range of parties considering **product offtake and project level investment**
- Product samples provided to various participants including:
 - OEMs
 - Cathode manufacturers
 - Battery manufacturers
 - Integrated trading houses
- **Initial offtake agreement** signed with Beijing Easpring
 - Easpring is a leading producer of cathode materials in China



ICBC



SOCIÉTÉ
GÉNÉRALE



NATIXIS



当升科技
EASPRING

- **Binding 5-year offtake agreement** for 20% of Ni and Co sulphate
- **Transparent pricing mechanism** LME/LMB Price + sulphate premia (negotiated quarterly)
- Offtake will convert to **LOM supply with project level investment**

Our key project partners

Well-aligned for successful project delivery



Debt financing

ICBC appointed to the Mandated Lead Arranger (MLA) group for project debt financing in November 2017



Project delivery

Heads of Agreement signed with MCC in August 2018 for an EPC contract to engineer and construct Clean TeQ Sunrise. FEED contract signed.



Offtake

Binding five-year offtake agreement for 20% of cobalt and nickel sulphate production signed with Beijing Easpring



Product end-use

Landmark agreement with Chinalco and Chongqing University for the development and adoption of scandium alloys in the global transport industry

Appendix

Capital Structure	
ASX/TSX code	CLQ
Ordinary shares ¹	746.5M
Unlisted options ¹	12.8M
Performance rights ¹	8.3M
Cash at bank (31 March 2019)	\$99.7M
Market capitalisation ² (undiluted)	\$238.9M

1. As at 13 June 2019

2. Based on CLQ share price 19 June 2019 of \$A0.32

3. Approximate balances at June 2019 or latest substantial shareholder notices

4. Excludes options and performance rights

Major Shareholders ³	
Robert Friedland	12.9%
Pengxin International	12.4%
FMR LLC	7.8%
AustralianSuper	6.3%
Board/Management ⁴	~7%

Ore Resources and Reserves

Where a Competent Person has previously issued the written consent to the inclusion of their findings in a report, a company re-issuing that information to the Public, whether in the form of a presentation or a subsequent announcement, must state the report name, date and reference the location of the original source Public Report for public access. The information contained herein is extracted from the report entitled Sunrise Definitive Feasibility Study published on 25 June 2018 and is available to view on the Company's website www.cleanteq.com and "Sunrise Nickel Cobalt Project, New South Wales, Australia NI 43-101 Technical Report", with an effective date of 25 June 2018 (announced on 7 August 2018) as filed on www.sedar.com. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

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Powering innovation

