28 September 2020

Sunrise Battery Materials Project Reaches Key Development Milestone

Study Confirms One of the World's Lowest Cost Sources of Sustainable Nickel and Cobalt

Clean TeQ to Host Battery Metals Day on 1 October 2020

MELBOURNE, Australia – Co-Chairman, Robert Friedland, and CEO, Sam Riggall, of Clean TeQ Holdings Limited ('Clean TeQ' or 'Company') (ASX/TSX:CLQ; OTCQX:CTEQF) are pleased to announce the achievement of a key milestone in the Sunrise Battery Materials Project - completion of the Sunrise Project Execution Plan ('PEP').

Undertaken by an integrated Clean TeQ and Fluor Australia Pty Ltd ('Fluor') project delivery and engineering team, the PEP updates the 2018 Definitive Feasibility Study ('DFS'), incorporating revised cost estimates, design and engineering work to date, as well as a revised master schedule for the engineering, procurement, construction, commissioning and ramp-up of the Project.

The PEP outcomes confirm Sunrise's status as one of the world's lowest cost, development-ready sources of critical battery raw materials. In production it will be a major supplier of nickel and cobalt to the lithium-ion battery market, and scandium to the aerospace, consumer electronics and automotive sectors.

For the automotive sector, the Sunrise refinery is designed to produce enough high quality nickel to support the production of up to approximately 1,000,000 electric vehicles ('EVs') per annum, with cobalt production sufficient to support up to 2,000,000 EVs per annum.[1]

[1] Company estimate - assumes NCM811 or similar chemistry, an average 40-50kWh pack per EV and continued trend improvements in cathode active material energy density.

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Clean TeQ Co-Chairman Robert Friedland stated, *"Auto supply chains are coming to realise they are playing a game of nickel and cobalt musical chairs. We are half-way through the second verse and the music will eventually stop."*

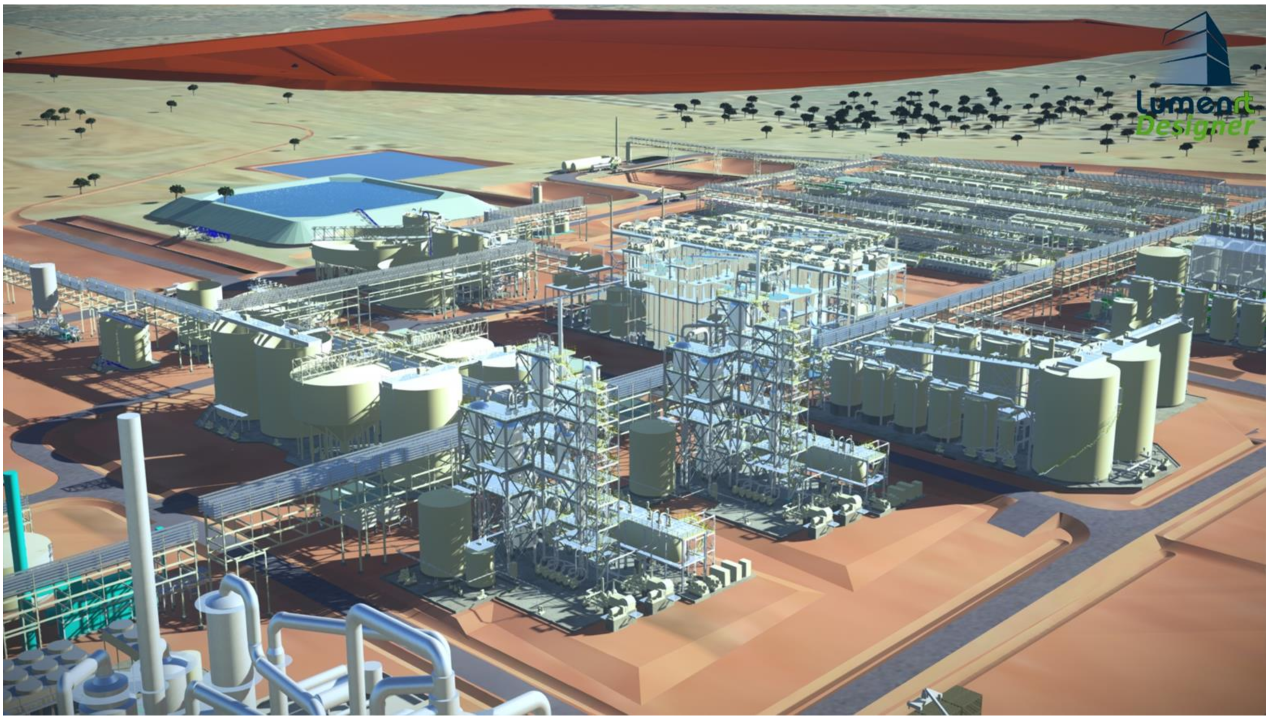
"We have a clear vision for how to create a sustainable auto supply chain of the future. Our team is proud to present that vision today. Sunrise is a long-life, low-cost, development-ready asset which is a template for consistent, sustainable and auditable nickel and cobalt supply. We cannot anticipate how long it will take to have the project funded and in development, but we can be patient with such a strategically important asset, and we are fully committed to ensuring it is developed with partners who understand the value that responsible supply chain integration brings."

Clean TeQ CEO, Sam Riggall will host Clean TeQ's Battery Metals Day via webcast to discuss battery materials market developments and the PEP results for analysts, investors and media at 11.30am AEST Thursday 1st October 2020.

To access the webcast please register and join via the link below:

https://78449.choruscall.com/dataconf/productusers/cleanteq/mediaframe/40782/indexr.html

Three-Dimensional Image of Clean TeQ Sunrise Process Plant Facilities



HIGHLIGHTS

- **The PEP results have been finalised at a time of encouragingly strong market demand for EVs, particularly in Europe, as new EU emissions standards take effect and carmakers begin to focus on the environmental and social aspects of supply chains. Despite significant economic uncertainty created by COVID-19, global electric vehicle sales surged in June and July and are, again, back to a healthy growth trajectory.**
- **Benchmarked against other operations and process flowsheets, Sunrise is the template for sustainable, reputable and auditable nickel and cobalt supply for the next generation of electric vehicles.**
- **The PEP modelled the first 25 years of production, with sufficient ore reserves to extend operations up to approximately 50 years.**
- **Long-term nickel and cobalt sulphate price forecasts obtained from independent expert Benchmark Mineral Intelligence. Weighted average forecast (metal equivalent) sulphate prices over the life of mine are approximately:**
  - **Nickel: US$24,200/t (including sulphate premium).**
  - **Cobalt: US$59,200/t.**
- **The PEP scope of works included a range of studies which have optimised metal production rates while holding autoclave ore feed constant at the approved maximum 2.5 million tonnes per annum. Average annual (metal equivalent) production rates are:**
  - **21,293 tonnes nickel and 4,366 tonnes cobalt (Year 2 – 11).**
  - **18,439 tonnes nickel and 3,179 tonnes cobalt (Year 2 – 25).**
- **The Project is forecast to deliver over US$16 billion in revenue and average annual post-tax free cashflow of US$308 million over the first 25 years of operations[2].**
- **Strong cash flows result in a post-tax net present value[3] (NPV) of US$1.21 billion (A$1.72 billion[4]) and post-tax Internal Rate of Return (IRR) of 15.44%.**
- **High cobalt credits result in very low average C1[5] operating costs of <u>negative</u> US$1.97/lb of nickel after by-product credits[6] (US$4.31/lb nickel before credits) in years 2-11.**

[2] Average post-tax free cashflow years 2-25
[3] Ungeared net present value calculated using real 8% discount rate
[4] AUD/USD 0.70 exchange rate applied for life of mine
[5] C1 Cash Cost includes mining, processing, site overheads (including administration), haulage and port charges
[6] By-products include cobalt, scandium oxide and ammonium sulphate

- **Average C1 operating costs of <u>negative</u> US$0.80/lb nickel after by-product credits (US$4.58/lb nickel before credits) over years 2-25, positioning the Project to generate high margins and strong cash flows over many decades.**
- **Global supply of scandium oxide is approximately 10-15 tonnes per annum. Consistent with the Company's strategy of facilitating wider-scale adoption in key emerging markets (such as high-performance aluminium alloys), Clean TeQ has adopted a long-term scandium oxide price assumption of US$1500/kg in the PEP.**
- **Scandium oxide refining capacity of up to 20 tonnes per year installed from year three, which can readily be expanded to 80 tonnes per year with approximately A$25 million capital expenditure on additional refining capacity. As the scandium market grows, future investment in a dedicated resin-in-pulp scandium extraction circuit and further refining capacity offers the potential to increase by-product scandium production to up to approximately 150 tonnes per annum.**
- **The PEP conservatively ramps up scandium oxide sales from 2 to 20 tonnes per year over the first decade of the mine life. Clean TeQ has existing offtake heads of agreement with companies including Panasonic Corporation Global Procurement Company and Relativity Space, Inc. and programs underway with a range of additional parties to develop new light-weight aluminum scandium alloys for the aerospace, additive layer manufacturing, consumer electronics and automotive sectors.**
- **Pre-production capital cost estimate of US$1.658 billion (A$2.368 billion) (excluding US$168 million estimated contingency) reflects a significantly de-risked capital cost, with approximately 79% of total equipment and materials costs covered by vendor quotations. Submissions were also obtained from contractors to validate the labour costs included in the total direct cost.**
- **Future value optimization studies will assess opportunities to reduce capex in areas of off-site pre-assembly, modularization and low-cost offshore procurement.**
- **The PEP assumed Project execution on an engineering, procurement, construction management ('EPCM') basis. Prior to making a final investment decision ('FID'), Clean TeQ will select an EPCM contractor for the engineering, procurement and construction phase of the Project.**
- **Engineering, procurement and construction schedule from signing of an EPCM contract to first production of approximately three years, followed by a 24-month ramp-up to full production.**

BROAD STAKEHOLDER BENEFITS

Sunrise is set to deliver significant economic and social benefits to a range of stakeholders over many decades, including safe and well-paid employment, infrastructure upgrades, royalties, taxes and local community contributions. Over the initial 25 year mine life the PEP estimated the following:

- **Construction workforce forecast to peak at around 1700 full-time equivalent jobs during three-year EPCM period.**
- **Steady-state operations workforce of approximately 377 people (not including maintenance support and mining and drilling contractors) to generate strong employment opportunities in the state of New South Wales, Australia. The majority of these workers are expected to reside in local communities.**
- **Employee salaries/wages of approximately A$1.2 billion (excluding mining contractor wages and logistics contractors and ancillary services).**
- **Local community contributions in excess of an estimated A$17 million including payments to compensate communities for local project impacts (principally road upgrades and maintenance) and additional ongoing local community enhancement initiatives. Telecommunications will also be greatly enhanced around the Project area, to the benefit of local residents.**
- **Services and supply opportunities are also expected for local businesses as suppliers of goods and services to Clean TeQ Sunrise.**
- **State Royalties and payroll tax payments totalling A$750 million.**
- **Commonwealth corporate tax payments of A$3.5 billion.**

SUNRISE ONGOING WORKS PROGRAMS

Although the level of activity associated with the PEP study and engineering works will now significantly reduce, a range of work-streams will continue in order to progress a number of value-adding deliverables aimed at minimising Project restart time once funding is secured:

- **Work will be progressed on the long-lead electrical transmission line ('ETL') work scope. The ETL application to connect to the NSW electrical grid is currently in progress and will continue through FY21.**
- **Progressing ongoing commercial discussions with landowners, local councils, the NSW state government and other impacted parties required for land access agreements for key infrastructure including the water pipeline and the ETL.**
- **Surveying and planning for autoclave and oversize equipment transport routes to site.**

- **Preliminary investigations to be undertaken on our exploration licences for limestone resources, a key process reagent for which the Company currently has a supply contract in place with a third party.**
- **Testwork and engineering assessing opportunities for potential further downstream processing of sulphates into battery precursor materials.**
- **Ongoing environmental work including monitoring and compliance reporting.**
- **The Sunrise Community Consultative Committee will be maintained along with a number of local community engagement/support programs.**
- **A range of scandium alloy development programs will continue to be progressed, consistent with Clean TeQ's long term strategy to work with, and assist, industry players to investigate and develop new applications for scandium-aluminium alloys.**

A more detailed outline of the PEP outcomes is provided in the section below.

Clean TeQ CEO, Sam Riggall will host Clean TeQ's Battery Metals Day via webcast to discuss battery materials market developments and the PEP results for analysts, investors and media at 11.30am AEST Thursday 1st October 2020.

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PROJECT EXECUTION PLAN OUTCOMES

The Sunrise Project's economic analysis is based on nickel and cobalt sulphate price forecasts provided by Benchmark Mineral Intelligence. Benchmark Mineral Intelligence is a leading independent consultancy which provides market analysis and intelligence for the lithium ion battery, electric vehicle and energy storage supply chains. These price forecasts reflect the prices required to incentivise new projects to satisfy forecast demand.

It is worth noting that independent long-term price forecasts for nickel and cobalt have generally strengthened over the past year due to a challenging supply outlook, improved confidence in electric vehicle uptake and an increasing awareness of procurement risks.

The key economic assumptions adopted for the Project's financial assessment[7] are:

[7] A number of alternate economic assumptions were adopted for other purposes including as modifying factors for the estimation of resources and reserves as detailed in Appendix A. The adoption of alternate economic assumptions is appropriate in the context of those specific purposes.

Long-term nickel sulphate price (USD/t $NiSO_4$)	~$5,300
Long-term LME nickel metal equivalent price (USD/t Ni)	~$22,000
Long-term cobalt sulphate price (USD/t $CoSO_4$)	~$12,100
Long-term LME cobalt metal equivalent price (USD/t Co)	~$59,200
Scandium oxide price (USD/kg)	$1,500
AUD/USD rate	0.70
Company tax rate	30%

Note: Prices are weighted averages over the 25 year life of mine quoted in 2020 real terms. LME nickel metal equivalent price excludes a $1/lb Ni sulphate premium. Assumes a 22% nickel metal equivalent content in $NiSO_4$ and a 20.5% cobalt metal equivalent content in $CoSO_4$.

Resources and Reserves

The Sunrise Mineral Resource Estimate has been updated to include new geological information obtained since the 2018 DFS.

The material changes that have driven the differences in the Mineral Resources since the previously announced Mineral Resource statement (dated 25 June 2018) include:

- An increase in density of the Goethite Zone from density of 1.2 to 1.3 t/m^3 based on downhole density and moisture surveys undertaken by MPC Kinetic Holdings Pty Ltd and a review of available density data measurements across the Project; and,
- A change in reporting from a cobalt cut-off to a nickel equivalent cut-off based on revised technical, marketing and economic parameters updated from the DFS for the PEP study.

Clean TeQ Sunrise Nickel, Cobalt and Scandium 2020 Mineral Resource Estimate (at a 0.35% nickel equivalent cut-off)

Category	Tonnes (Mt)	Grade Ni (%)	Grade Co (%)	Grade Sc (ppm)	Grade Pt (g/t)	Ni Metal (t)	Co Metal (t)	Sc Metal (t)	Sc Oxide (t)	Pt (oz)
Measured	69	0.65	0.11	61	0.23	450,000	73,000	4,200	6,400	500,000
Indicated	89	0.49	0.09	79	0.19	440,000	76,000	7,000	11,000	540,000
Measured and Indicated	160	0.56	0.09	71	0.21	890,000	150,000	11,000	17,000	1,000,000
Inferred	17	0.26	0.10	289	0.15	45,000	18,000	5,000	7,700	84,000

All reported tonnages are rounded to account for the relative precision of the estimate. Some figures may not add to the totals due to rounding. Nickel Equivalent cut-off (NiEq) = Nickel Grade + Cobalt Grade x Cobalt Price/Nickel Price x Cobalt Recovery/Nickel Recovery = Nickel Grade + Cobalt Grade x 3.69. Cobalt Price US$30/lb. Cobalt Recovery 91.2%. Nickel Price US$8.00/lb. Nickel Recovery 92.6%

The Sunrise Ore Reserves are sufficient to deliver a mine life in excess of 50 years, however, the PEP assessed only an initial 25 year mine life.

Clean TeQ Sunrise Ore Reserves

Category	Quantity (Mt)	Nickel Grade (%)	Cobalt Grade (%)	Scandium Grade (ppm)
Proven	65.4	0.67	0.11	55
Probable	77.9	0.52	0.09	41
Proven and Probable	**143.2**	**0.59**	**0.10**	**47**

All reported tonnages are rounded to account for the relative precision of the estimate. Some figures may not add to the totals due to rounding.

The material changes that have driven the differences in the Ore Reserves since the previously announced Ore Reserve statement (dated 25 June 2018) include:

- The updated Mineral Resource estimate with increased density of 1.3 t/m^3 of the Goethite Zone; and,
- Revised technical, marketing and economic parameters updated from the DFS for the PEP study.

Importantly, grade variability across the resource allows significant optimization of the mine plan, especially for cobalt. The maximum combined annual refinery capacity for both nickel and cobalt remains at 25,000 tonnes nickel and 7,000 tonnes cobalt metal equivalent production[8]. This allows higher production rates in the early years of the mine by targeting higher grade zones of ore. The variability in cobalt grade across the resource also provides the Company with the opportunity to flex production rates in response to prevailing commodity prices in the early years of the mine.

Mining and Processing

A new set of modifying factors was adopted for the PEP mining sequencing in order to generate an optimised production profile. The DFS mine plan assumed quite variable year on year ore and waste movements. This resulted in significant variations in the year on year change in total material movements, which is more difficult (and therefore more costly) for a mining contractor to manage.

Through the PEP phase, the mining team assessed multiple mining sequences with a range of modifying factors which resulted in an optimised mine plan with a large initial pre-strip in Year 1 of operations, followed by a consistent 11 million tonnes per annum over the life of the mine, which is more practical from a mine planning and contractor management point of view. Additional operating cost savings were achieved through the

[8] Although the plant design allows production to be flexed up to these levels for either cobalt or nickel in any given year, overall refining capacity is limited to a total combined maximum of 30,000 tonnes per annum metal equivalent production

cessation of mining in Year 18. From Year 19 onwards, mill feed will be sourced exclusively from ore stockpiles.

Figure 1: Ore and Waste Movements (Years 0 – 25)

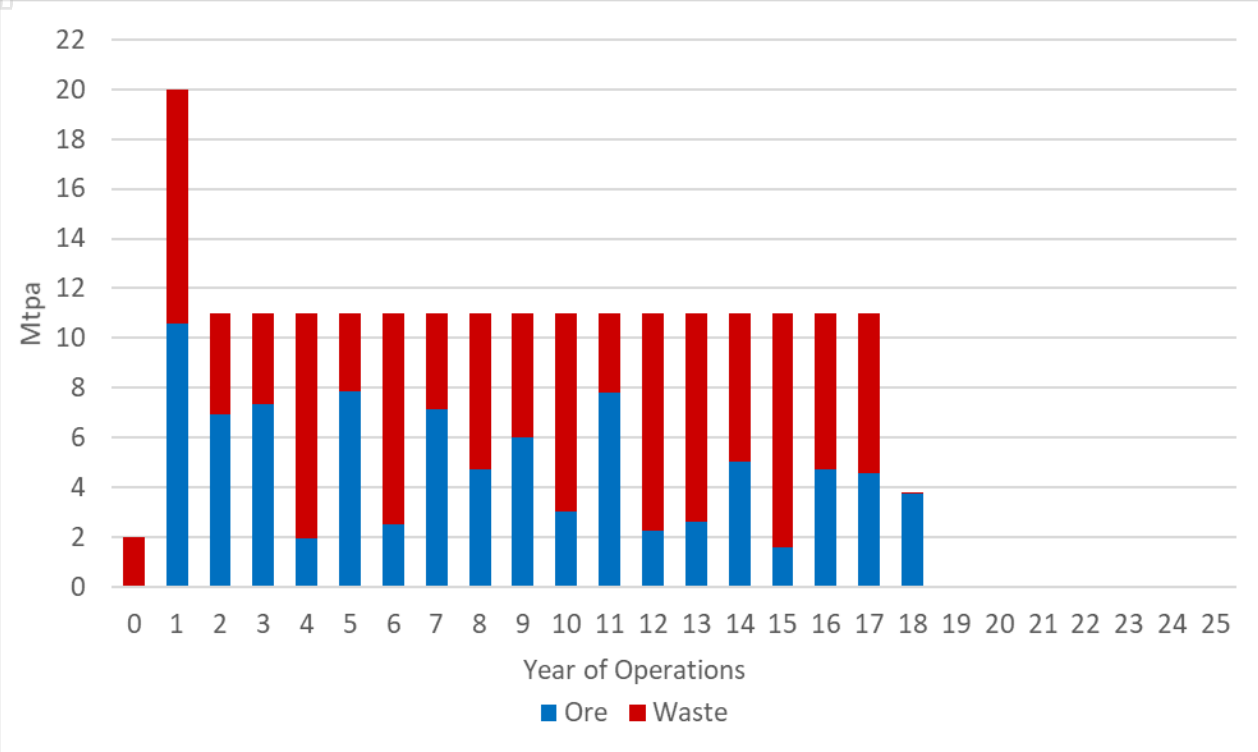
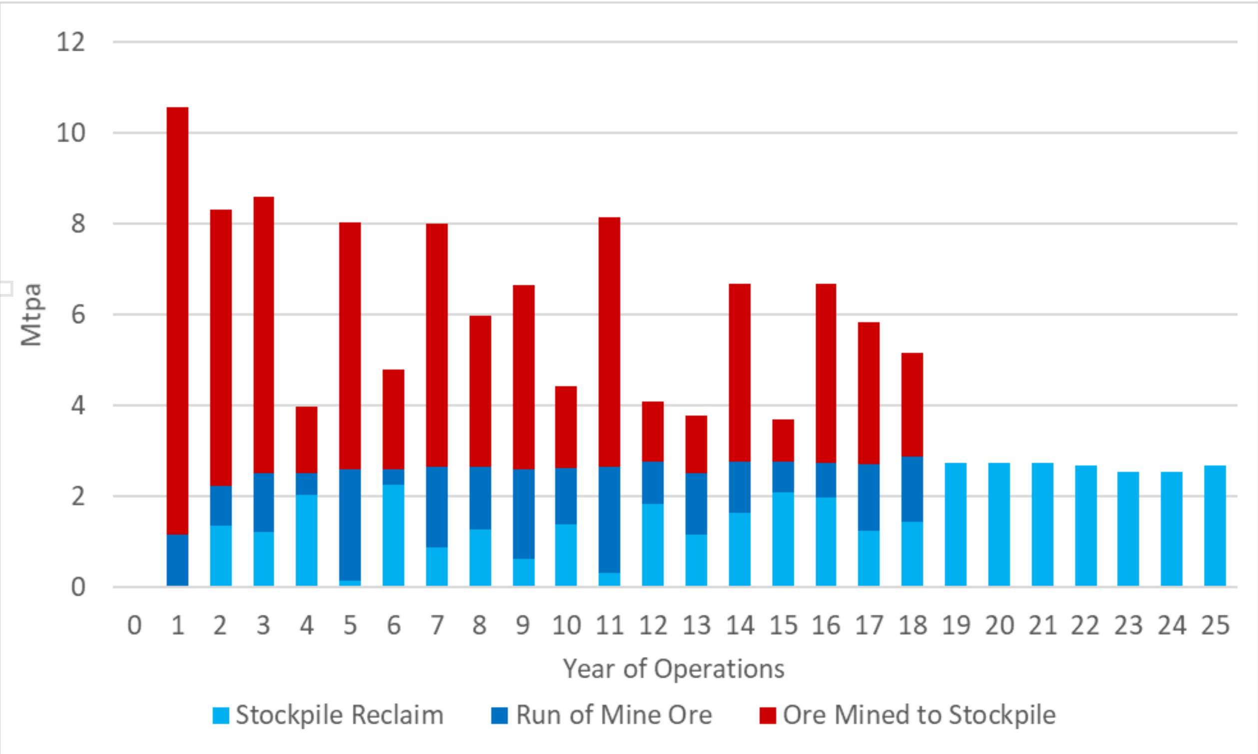


Figure 2: Ore Movements (Years 1 – 25)

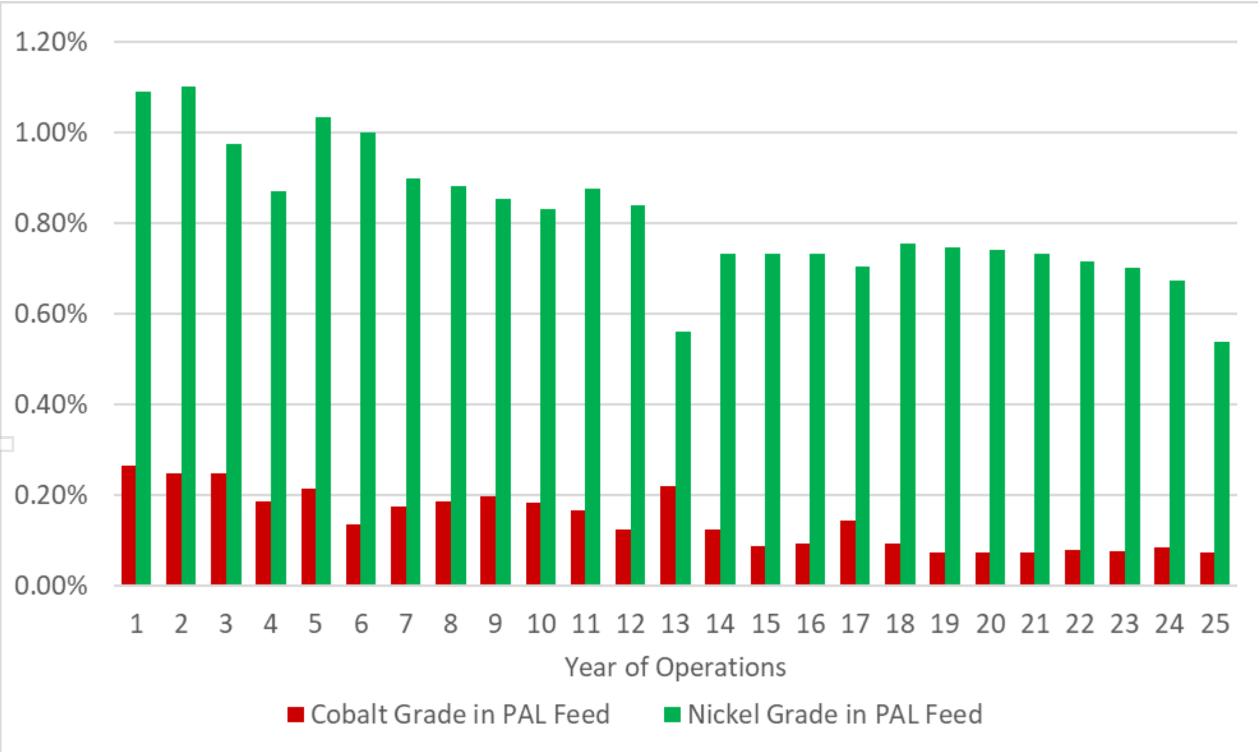


The PEP estimates of optimal mining, processing and recovery metrics are tabled below:

Physicals	Average Annual Years 2-11	Average Annual Years 2-25
Ore mined (tonnes)[9]	5,535,018	3,328,300[10]
Ore mill feed (tonnes)	2,556,090	2,639,209
Nickel grade: mill feed	0.91%	0.77%
Cobalt grade: mill feed	0.19%	0.13%
Ore PAL feed (tonnes)	2,472,405	2,488,775
Nickel grade: PAL feed	0.93%	0.80%
Cobalt grade: PAL feed	0.19%	0.14%
Nickel recovery: PAL feed	92.50%	92.55%
Cobalt recovery: PAL feed	91.09%	91.14%

The Sunrise Project Development Consent stipulates a limit of 2.5 million tonnes per annum of Pressure Acid Leach ('PAL') feed. Mined ore is milled and processed through a beneficiation plant to remove barren silica prior to being introduced into the PAL circuit. The beneficiation process results in a moderate uplift in metal grades in the PAL feed relative to the mill feed.

Figure 3: PAL Feed Nickel and Cobalt Grades (Years 1 – 25)



[9] The optimised mine plan involves stockpiling of intermediate material in early years for processing in later years.

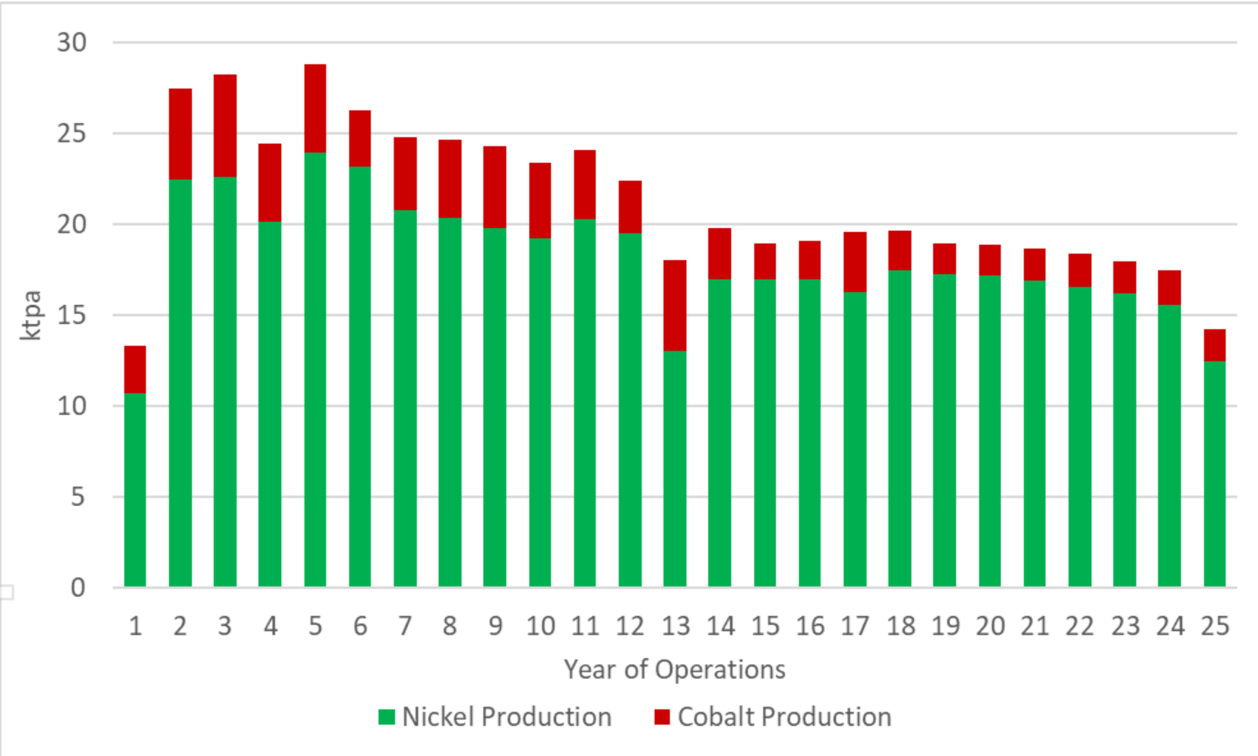
[10] Figure represents total ore mined over life of mine averaged over the 24 year period. In reality, mining ceases in year 18 and from year 19 ore is reclaimed from stockpiles of ore mined in earlier years

Nickel and Cobalt Sulphate Production

The Project will become a globally significant producer of nickel sulphate and cobalt sulphate for the EV lithium-ion battery market. Average production rates for the first 10 years of full production (Years 2 – 11) are tabled below.

Production and Sales	**Average Annual Years 2-11**	**Average Annual Years 2-25**
Nickel Sulphate (tonnes)	96,784	83,814
Cobalt Sulphate (tonnes)	20,992	15,286
Nickel metal content (tonnes)	21,293	18,439
Cobalt metal content (tonnes)	4,366	3,179
Scandium oxide recovered as $Sc(OH)_3$ (kg)[11]	18,000	19,167
Scandium oxide sold (kg)[12]	9,600	15,667
Ammonium sulphate (tonnes)	60,365	50,594

Figure 4: Nickel and Cobalt Production Volumes (Years 1 – 25)



[11] Scandium is recovered as a by-product of nickel and cobalt production initially as a scandium hydroxide concentrate which is stored on-site until required for conversion to scandium oxide. The figures quoted are scandium oxide (Sc_2O_3) equivalent.

[12] Scandium hydroxide stored on-site is refined and sold to order. The Company has assumed sales of scandium oxide will ramp-up progressively from 2 tonnes per annum in Year 3 to 20 tonnes per annum by Year 10.

<u>Oversized Autoclaves Provide De-bottlenecking Opportunity to Boost Nickel/Cobalt Production</u>

Ore processing rates and production numbers are based on the current Development Consent approval limit of 2.5 million tonnes per annum limit of PAL feed. Refinery capacity has been sized based on the optimal production rates in light of that fixed PAL feed rate and planned mined ore grades in the earlier years of operations. This results in surplus refining capacity in the later years of the operation as ore grades begin to decline.

The Company has already acquired the autoclaves for the Project – the key component of the PAL circuit. Those autoclaves have the capacity to treat up to approximately 3.3 million tonnes per annum of PAL feed. In later years, when ore grades begin to decline, the surplus capacity in the autoclaves and Sunrise's large mineral resource provide the Company with the potential opportunity to undertake a de-bottlenecking exercise to boost production by increasing PAL feed to 3.0 million tonnes per annum, subject to obtaining relevant regulatory approvals.

The Sunrise processing plant has been designed to readily accommodate this de-bottlenecking with relatively modest plant upgrades required to support the additional 20% ore throughput. The Clean TeQ and Fluor team undertook a scoping study level of accuracy estimate of the likely cost and benefit of the de-bottlenecking exercise. The study outcome indicated that a ~A$95 million de-bottlenecking capital investment in Year 4 would result in a post-tax NPV boost (as assessed at the beginning of Year 4 based on the other assumptions detailed herein) of approximately A$580 million.

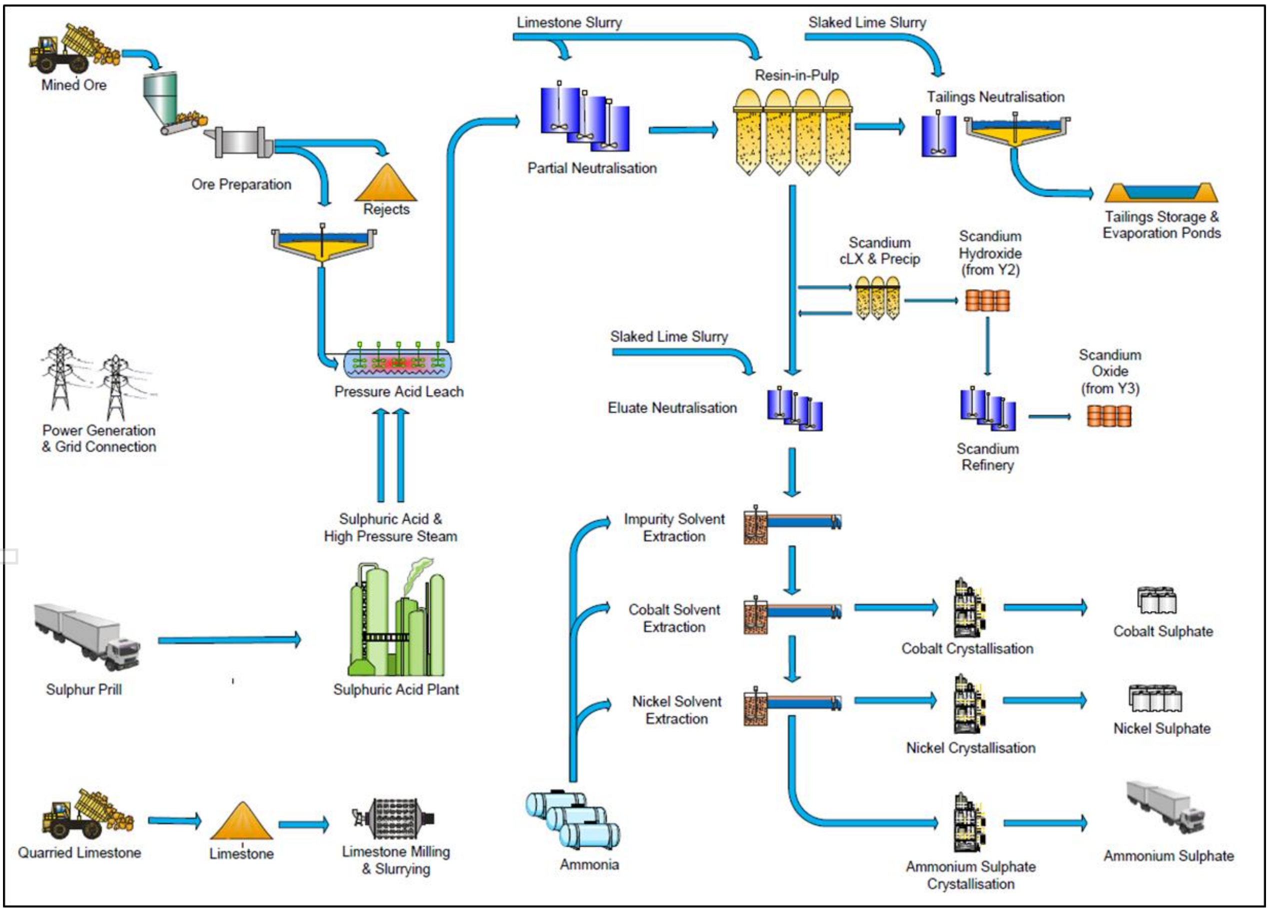
Figure 5: Sunrise Autoclaves Being Unloaded at Port Pirie

Scandium Production

The Project will have the capacity to recover an average of up to approximately 20 tonnes per annum of scandium oxide equivalent by-product, stockpiled as a scandium hydroxide intermediate concentrate. A dedicated scandium refinery with 20 tonnes per annum high purity scandium oxide refining capacity is included in the PEP sustaining capital in Year 3. Given the relative immaturity of the scandium market, the decision was made to defer the high purity scandium oxide refinery until after the nickel/cobalt refinery is completed. Subject to receiving firm orders for scandium oxide offtake, the Company can build the scandium refinery earlier than Year 3 if required.

Refined scandium oxide production capacity can readily be expanded to 80 tonnes per annum with approximately A$25 million capital expenditure on additional refining capacity. As the scandium market grows, future investment in a dedicated resin-in-pulp scandium extraction circuit and further refining capacity offers the potential to increase by-product scandium production to up to approximately 150 tonnes per annum.

Figure 6: Sunrise Processing Flow Sheet Diagram



The PEP financial model assumes 2 tonnes per annum of high purity scandium oxide will be refined and sold to end users in Year 3, ramping up to 20 tonnes per annum by Year

10. This conservative estimate of sales volumes reflects the relative immaturity of the scandium market and the likelihood that end users will want to see long-term reliable supply before high volume commitments can be made. The unsold scandium hydroxide intermediate will be warehoused on site, and batch processed to meet orders as the market grows.

Clean TeQ has existing offtake heads of agreement with companies including Panasonic Corporation Global Procurement Company and Relativity Space, Inc. and programs underway with a range of additional parties to develop new light-weight aluminum scandium alloys for the aerospace, additive layer manufacturing, consumer electronics and automotive sectors.

Ammonium Sulphate Production

Clean TeQ Sunrise will also produce approximately 50,000 tonnes per annum of ammonium sulphate from Year 2. This will be sold primarily to the agricultural fertilizer market in the eastern states of Australia. The sales price for ammonium sulphate assumed for the PEP is US$130/tonne (FOB).

Capital Cost

The PEP capital cost estimate is tabled below:

Capital Cost	**A$ millions**	**US$ millions[13]**
Site Development Costs	28	20
Mining Costs	35	25
Ore Leach Costs	413	289
Refinery Costs	271	190
Reagents Costs	252	176
Services and Infrastructure Costs	424	297
Offsite Operations Facilities	84	59
Total Direct Costs	1,507	1,055
EPCM	264	185
Owner's Costs	157	110
Other Indirect Costs	441	309
Total Direct and Indirect Costs	2,368	1,658
Contingency	241	168
Total Including Contingency	2,609	1,826

The PEP pre-production capital cost estimate for the Project has been estimated at AACE Class 3 at a p50 (-10/+15%) level of accuracy. The formal engineering, procurement and

[13] Assumes AUD/USD 0.70

construction period, including early works to establish site power, water and the accommodation camp, is estimated to be 38 months (including contingency) following the appointment of an EPCM contractor and a two year ramp-up to full production.

The capital estimate includes all mine and process plant utilities and infrastructure, power electrical transmission line, water pipeline, rail siding, road upgrades and commitments to local governments, as well as contractor and owner's costs. Sustaining capital is included in the forecast cash flows as required in future years but is not included in the up-front capital estimate.

The pre-production capital development cost is approximately US$1.66 billion, excluding US$168 million contingency. This represents an approximately 23% increase on the 2018 DFS estimate, driven by a number of factors:

- Engineering and design scope changes to de-risk the plant and supporting infrastructure, and to ensure successful ramp-up.
- Variations to materials of construction, designs to enhance ease of access for plant maintenance and increases in equipment redundancy at key process interfaces.
- Updating the refinery design to give flexibility to enable potential future treatment of primary, intermediate and secondary (recycled) metal. The Sunrise flow sheet has the capability to reject a large range of impurities, and hence has the flexibility to potentially treat different feedstocks in the future.
- Construction of a longer electrical transmission line from the regional centre of Parkes to site. The connection to the NSW electrical grid at Parkes is an important enabler for providing options for 100% renewable power supply.
- Escalation of indirect costs, particularly schedule-dependent assumptions such as labour costs, construction methodology and workforce requirements.

The current estimate of capital intensity for Sunrise has been benchmarked, using publicly available data, against the construction cost and actual production capacity of a number of successfully operating nickel/cobalt plants of similar scale in Australia, Philippines, Cuba and Papua New Guinea. While Sunrise's capital intensity, at US$60k/t Ni-equivalent[14], sits at the higher end of that comparable range, it is worth noting that the Project incorporates a number of safety, environmental and operability design features that differentiate it substantially from other assets in the industry and are intended to ensure a rapid ramp-up with stable production at nameplate capacity thereafter.

[14] Based on average annual forecast nickel and cobalt production rates over the life of mine

Operating costs

Sunrise is designed to deliver some of the lowest cost metal units into the global battery supply chain. Supported by an integrated mining/refining operation and strong by-product credits, Sunrise will maintain first quartile average nickel production costs over its initial 25-year mine life.

The PEP has estimated a steady-state operations work force of approximately 377 people (not including maintenance support and mining and drilling contractors), an increase of around 25% from the DFS. Much of this increase has resulted from moving from a 3-panel shift roster to a 4-panel shift roster, which the Company expects to be viewed far more favourably by the workforce, the majority of which are expected to reside in local communities.

Processing inputs, primarily reagents such as sulphur and limestone, as well as other consumables were based on updated supplier quotes. An increase in electricity consumption from the updated energy balance model was also factored into the operating expenditure. Sulphur is assumed to be sourced from either Canada or the Middle East and shipped in bulk to Newcastle where it will be railed to the rail siding before being transported by road to site. High quality limestone supply will be sourced from a local supplier and transported by road to site.

The PEP estimate of the Project's operating costs are tabled below:

Operating Costs	**US$/lb Ni Years 2-11**	**US$/lb Ni Years 2-25**
Mining costs	0.84	0.76
Processing costs	3.14	3.47
General, Admin & Other Site Overheads	0.18	0.21
Haulage & Port	0.15	0.14
C1 Operating Costs (before by-products)	**4.31**	**4.58**
By-product credits		
Cobalt Credits	(5.81)	(4.64)
Scandium Credits	(0.31)	(0.58)
Ammonium Sulphate Credits	(0.17)	(0.16)
Total By-product credits	**(6.28)**	**(5.38)**
Total C1 cost net of by-product credits	**(1.97)**	**(0.80)**

Note: By-product credits based on US$59,236/t Co (metal equivalent), US$1,500/kg Sc_2O_3 and US$130/t amsul.

Figure 7: Sunrise C1 Cash Costs (Years 1 – 25)

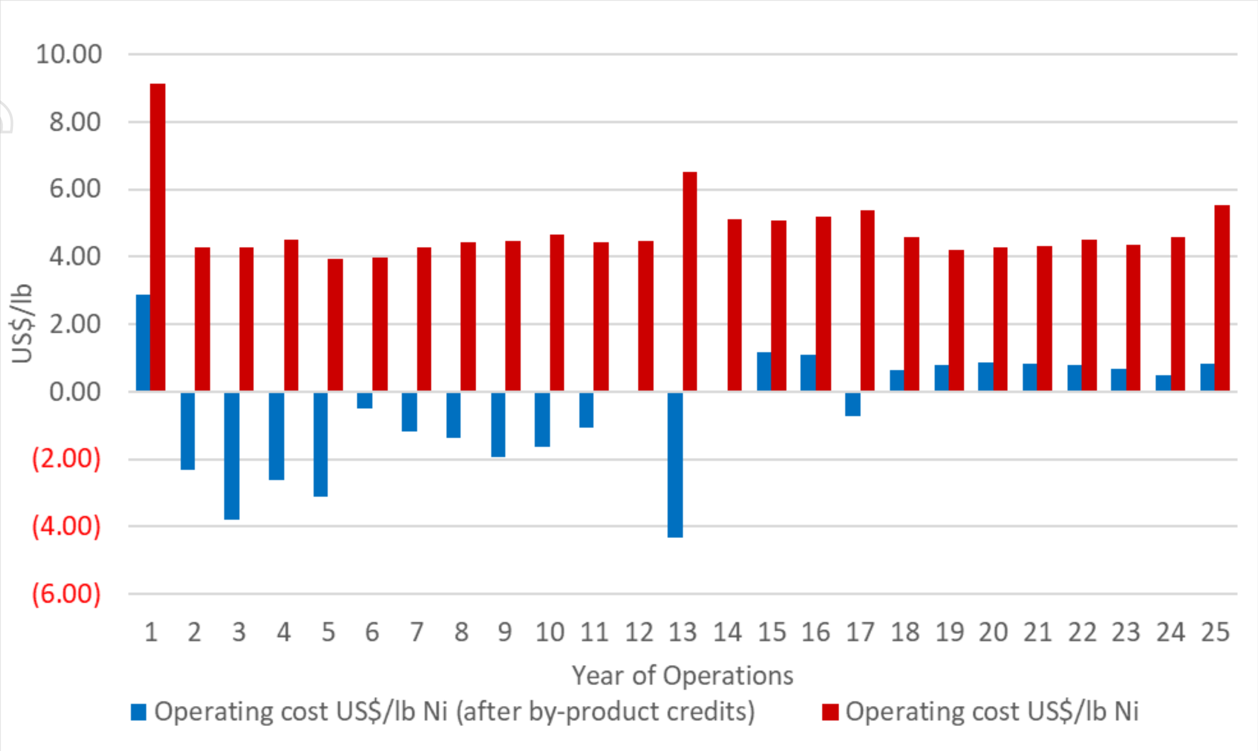
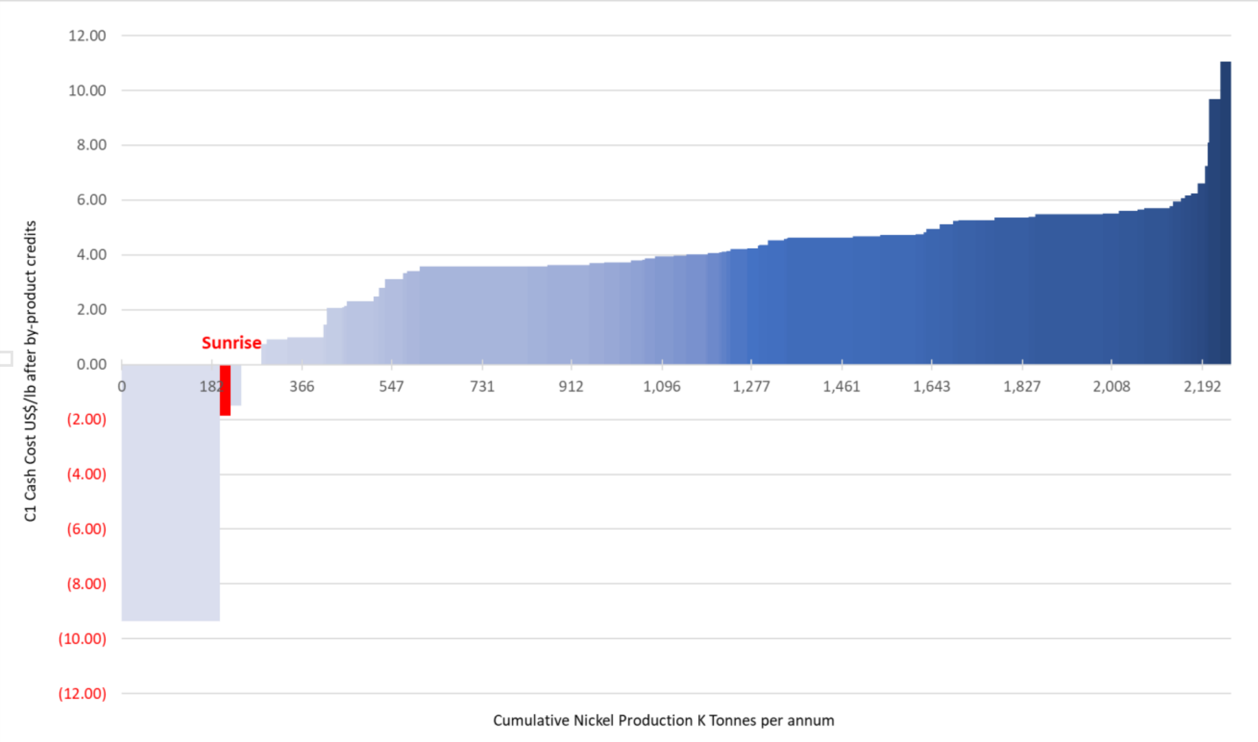


Figure 8: 2019 Nickel Industry Cost Curve



Source: Wood Mackenzie

Compared to the DFS, significant additional maintenance allowances are also included in the PEP model, based on a detailed bottom-up maintenance assessment conducted through the PEP phase which was supported by benchmarking of comparable operations. Sustaining capital includes construction of additional tailings storage capacity in future years as well as ongoing site rehabilitation costs. A total allowance of US$32 million per annum for maintenance and sustaining capital is included in the financial analysis during Years 2-25. A mine closure and decommissioning allowance of US$116 million has also been included in Year 26 of the financial model, even though the mine has a Proven and Probable Reserve life in excess of 50 years.

Although by definition not included in the C1 unit operating cost, all Australian Commonwealth, state and local government charges and levies are included in the cost estimate, including the 4% (less allowable deductions) NSW state revenue royalty and a 2.5% gross revenue royalty payable to Ivanhoe Mines.

Revenue

The Sunrise Project is a poly-metallic deposit, with multiple product revenue streams. Project revenues estimated at the PEP assumptions are tabled below:

Revenue and Earnings	**Total Life of Mine US$B Years 1-25**	**Average Annual US$M Years 2-11**	**Average Annual US$M Years 2-25**
Nickel Sulphate	10.95	510	446
Cobalt Sulphate	4.67	273	189
Scandium Oxide	0.56	14	24
Ammonium Sulphate	0.16	8	7
Total Revenue	**16.35**	**805**	**665**
EBITDA	10.79	559	443
Pre-tax Free Cashflow	**8.04**	524	412
Post-tax Free Cashflow	**5.56**	398	308

Note: By-product credits based on US$59,236/t Co (metal equivalent), US$1,500/kg Sc_2O_3 and US$130/t amsul.

Figure 9: Sunrise Total Revenue Split US$ billions (Years 1 – 25)

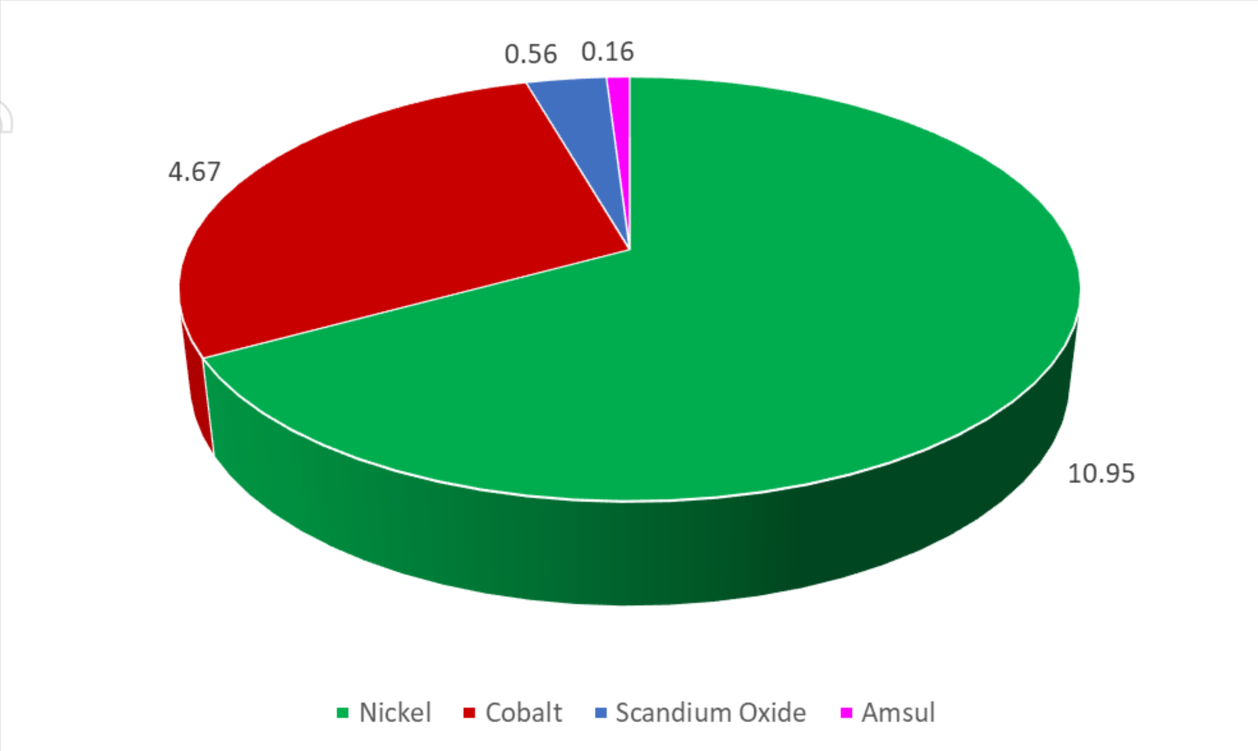
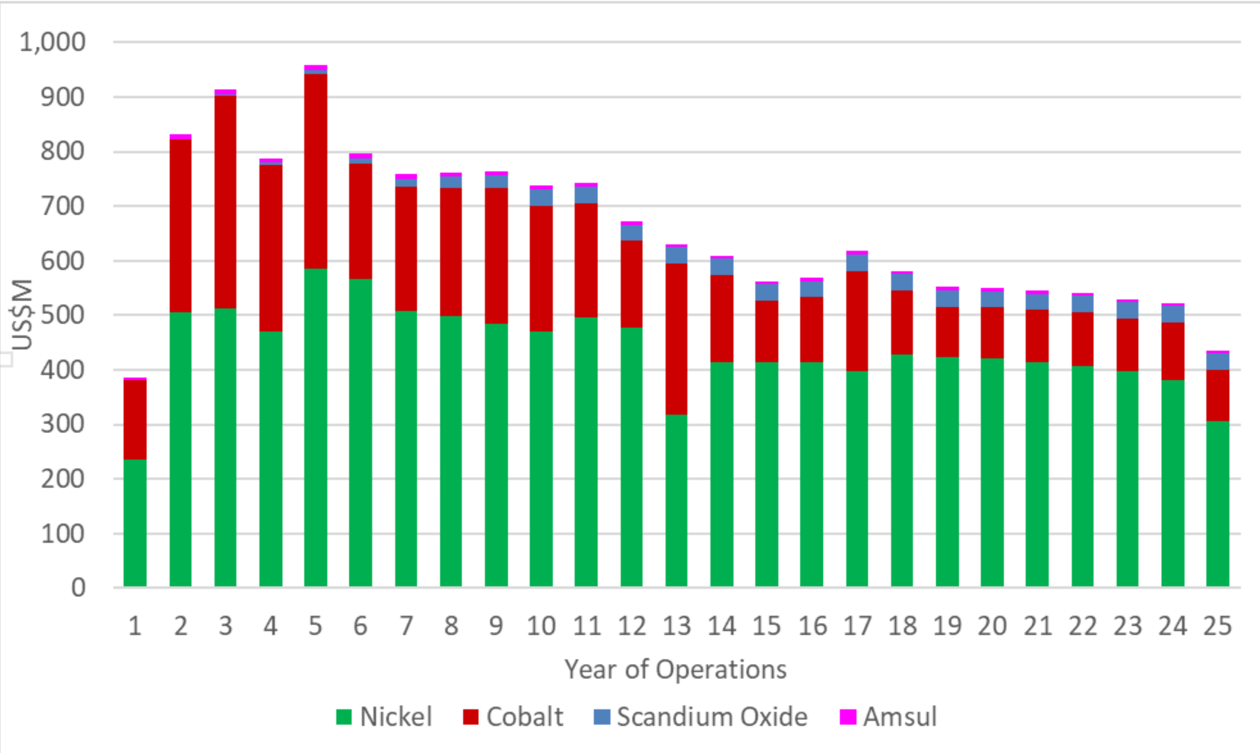


Figure 10: Revenue (Years 1 – 25)



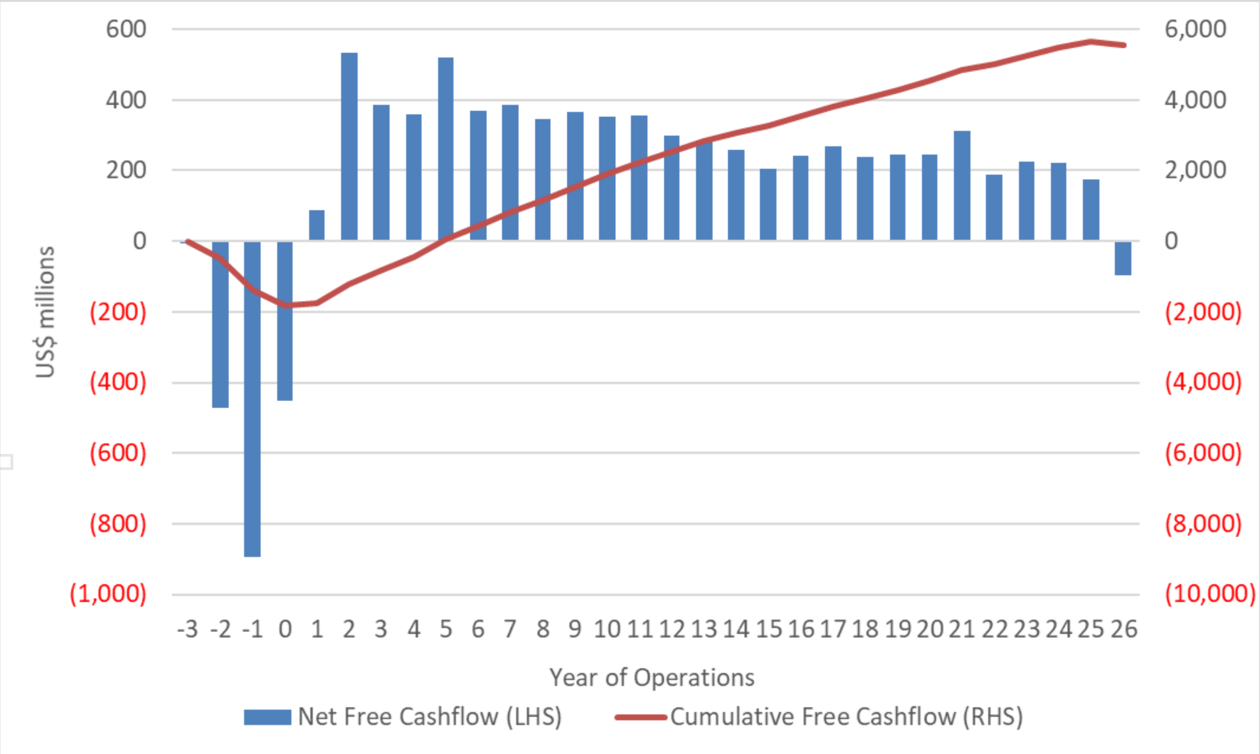
Financial Evaluation

The financial evaluation of the Project was conducted using a discounted cash flow ('DCF') methodology over an initial 25-year mine life. The financial model assumed a real 8% discount rate, 100% equity finance and a 30% corporate tax rate. Based on this analysis, the Project returns a NPV8 (real, ungeared post-tax) of US$1.21 billion (A$1.72 billion) and a real post-tax internal rate of return of 15.44%. Alternative economic outcomes based on a range of sensitivities are tabled below.

NPV Sensitivity Analysis (A$ billions)

NPV8[15]	-15%	-10%	-5%	Base Case	+5%	+10%	+15%
Nickel Sulphate Price	1.18	1.36	1.54	1.72	1.91	2.09	2.27
Cobalt Sulphate Price	1.45	1.54	1.63	1.72	1.81	1.91	2.00
Capital Cost	2.07	1.96	1.84	1.72	1.61	1.49	1.38
Operating Cost	1.88	1.83	1.78	1.72	1.67	1.62	1.57
AUD/USD	2.69	2.33	2.01	1.72	1.46	1.23	1.01

Figure 11: Life of Mine Cashflow (Real Post-Tax)



[15] Real post-tax ungeared

FUNDING AND DEVELOPMENT

COVID-19 has presented difficult conditions for financial markets and challenges for funding new projects. Pleasingly, though, engagement with the automotive and mining sectors on Sunrise remains on-going, despite these challenges.

While the timing for completion of a transaction is not possible to forecast, Clean TeQ will continue to engage with potential partners across the supply chain.

For more information, please contact:
Ben Stockdale, CFO and Investor Relations +61 3 9797 6700

This announcement is authorised for release to the market by the Board of Directors of Clean TeQ Holdings Limited.

About Clean TeQ Holdings Limited (ASX/TSX: CLQ) – Based in Melbourne, Australia, Clean TeQ is a global leader in metals recovery and industrial water treatment through the application of its proprietary Clean-iX® continuous ion exchange technology. For more information about Clean TeQ please visit the Company's website www.cleanteq.com.

About the Clean TeQ Sunrise Project – Clean TeQ is the 100% owner of the Clean TeQ Sunrise Project, located in New South Wales. Clean TeQ Sunrise is one of the largest cobalt deposits outside of Africa, and one of the largest and highest-grade accumulations of scandium ever discovered.

About Clean TeQ Water – Through its wholly owned subsidiary Clean TeQ Water, Clean TeQ is also providing innovative wastewater treatment solutions for removing hardness, desalination, nutrient removal and zero liquid discharge. The sectors of focus include municipal wastewater, surface water, industrial waste water and mining waste water. For more information about Clean TeQ Water please visit www.cleanteqwater.com.

COMPETENT PERSONS' STATEMENT

The information in this report that relates to Mineral Resources is based on information compiled by Mr John Winterbottom, a Member of the Australian Institute of Geoscientists. Mr Winterbottom is a full-time employee of Clean TeQ Sunrise Pty Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

The information in this report that relates to Ore Reserves is based on information compiled by Mr Luke Cox, a Fellow of the Australasian Institute of Mining and Metallurgy, and Mr Lee White, a Member of the Australasian Institute of Mining and Metallurgy. Mr Cox is a full-time employee of Clean TeQ. Sunrise Pty Ltd and holds performance rights in that company's ultimate parent entity Clean TeQ Holdings Limited. Mr White is employed by Kalem Group Pty Ltd and is engaged as an internal consultant to Clean TeQ. Sunrise Pty Ltd. Messers Cox and White have sufficient experience relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code 2012.

The information in this report that relates to metallurgy and mineral processing is based on information compiled by Dr James Kyle, a Fellow of the Australasian Institute of Mining and Metallurgy. Dr Kyle is a casual employee of Clean TeQ Sunrise Pty Ltd. Dr Kyle has sufficient experience relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code 2012.

The information in this report that relates to the Sunrise Project capital cost estimate is based on information compiled by Mr Simon Donegan, a Member of the Australasian Institute of Mining and Metallurgy. Mr Donegan is employed by BDB Process Pty Ltd and is engaged as an internal consultant to Clean TeQ. Sunrise Pty Ltd. Mr Donegan has sufficient experience relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code 2012.

Messers Winterbottom, Cox, White, Kyle and Donegan consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.

FORWARD-LOOKING STATEMENTS

Certain statements in this news release 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 the Company 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 new release.

Statements in this news release that constitute forward-looking statements or information include, but are not limited to, statements regarding: financing of the Sunrise Project; the outlook for electric vehicle markets and demand for nickel and cobalt; completing final design and detailed engineering; making a Final Investment Decision; the timing of commencement and/or completion of construction, commissioning, first production and ramp up of the Project; the potential for a scandium market to develop and increase; metal price assumptions; cash flow forecasts; projected capital and operating costs; metal recoveries; mine life and production rates; and the financial results of the PEP including 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; capital cost; average operating costs before and after by-product credits; proposed mining plans and methods; the negotiation and execution of offtake agreements; a mine life estimate; 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.

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; 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 news release 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 news release 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 news release.

Appendix A – JORC Table

Section 1 Sampling Techniques and Data

(Criteria listed in Section 1, and where relevant in Section 2, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Available drill hole data was accumulated from multiple phases of drilling conducted by several operators over a period of more than 25 years, between 1988 and 2015. Due to the passage of time, some details of procedures followed during early phases of drilling are uncertain. • The overwhelming bulk of data accepted for use in resource estimation was obtained by reverse circulation (RC) drilling (1354 holes), predominantly using face sampling hammers, but with a small proportion of aircore drilling (148 holes). • Drill cuttings samples were normally collected over 1m intervals (73%). A small proportion of holes were sampled over 2m intervals (23%) and an even smaller amount over 4m (4%) • Approximately 2-4 kg field samples were obtained by riffling and submitted to independent commercial laboratories for sample preparation and assaying. • As recorded, procedures were consistent with normal industry practices.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Early programmes of rotary air blast (RAB) drilling were superseded by systematic patterns of vertical reverse circulation (RC) drilling, initially using aircore rigs, but predominantly using face sampling, down hole hammer bits with a nominal hole diameter of about 135mm. • The overwhelming bulk of the RC drilling on which the resource estimate is based was carried out in 6 phases between 1997 and 2015, most of it in 2 major phases between 1997 and 2000. • A total of 1,354 RC holes and 148 aircore holes were used for resource grade estimation. • Additional phases of RC drilling were undertaken between February 2016 and February 2018. These programs further delineated the Scandium Resource, sterilised the mineral resource southern extents, provided twin hole RC data for evaluation. The 2018 program provided close spaced RC data on a nominal 20x20m grid pattern in 4 selected areas of the mineral resource (Areas A-D) to provide detailed information on mineralisation variability. This drilling was not used in the April 2020 mineral resource update due to the limited areal extent of the programs. • A total of 13 shallow, vertical diamond core holes were

Criteria	JORC Code Explanation	Commentary
		drilled between 1997 and 2000 to provide material for metallurgical test work and bulk density measurements. • In 1999, nine large diameter (approximately 770 mm) holes were drilled with a Calweld rig to provide large samples for metallurgical test work and bulk density determination. Five (5) of the holes were bulk sampled to obtain Ni and Co grades.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• RC sample recoveries were recorded. Samples were weighed in 1998-2000, but the equipment used proved to be unsuitable and results were found to be unreliable. Recoveries were subsequently estimated by visual assessment during drilling. Recoveries were not consistently quantified in the drill hole database but were reported to have been satisfactory. In 2005 average estimated recoveries ranged from 87% to 94% in the main mineralised zones. • Much of the mineralised material is extremely fine grained. Potential for biases due to loss of sample during RC drilling was recognised and investigated at several stages. • In 2000, a statistical study of the relationship between subsample weights and Ni-Co grades concluded that any biases were unlikely to be large enough to have a material impact on resource grade estimates for Ni or Co. However, the study was clouded by unreliable weight data and a distinct negative correlation between bulk density and Ni-Co grades. It was noted that any apparent biases could have been artefacts of the data. • Subsequently, in 2005, as a practical test a total of 20 close-spaced RC twin holes were drilled around 5 bulk sampled, large diameter Calweld holes (4 RC holes in each case, which were averaged). They yielded average Ni and Co grades that were extremely similar to average bulk sample grades: Aggregated Calweld Bulk Samples 88.82 m, 0.88% Ni 0.13% Co. Averaged & Aggregated RC Twin holes 90.0 m 0.89% Ni 0.13% Co • At the same time, 7 RC holes dating from 1998-2000 were also drilled as twin holes with good results: Aggregated Old RC Holes 156 m 0.74% Ni 0.12% Co Aggregated 2005 RC twin drillholes 156 m 0.75% Ni 0.12% Co • The 2005 twin drillhole programme indicated that RC samples were unlikely to have been affected by significant sampling biases. • In 2017, 44 RC holes were drilled largely to determine the extent of the southern mineralisation extents outside the Indicated and Inferred mineral boundaries. No recovery data was recorded, however, 10 holes were twinned RC holes from earlier programs within the Indicated and Measured areas and found little difference between the mineralised intercepts. Given most of the holes were outside the Measured and Indicated areas of the resource it was decided to include them in the Inferred portion of the estimate. 8 diamond holes were also drilled within the mineral resource project areas but were not sampled. • 2018 RC drilling recoveries were recorded and generally

Criteria	JORC Code Explanation	Commentary
		found to have reasonable recoveries with insignificant sample splitter bias.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All holes were geologically logged. • Checking of stored RC cuttings in the field showed that some logging had been of dubious quality, but distinct geological changes were clearly reflected in multi-element sample assay results. Where contradictions occurred, analytical data were preferred as a guide to geological interpretations. • 2018 geological logging was performed under strict, documented logging protocols
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No diamond core samples were used for resource grade estimation. • RC holes were usually dry and field samples of approximately 2-4 kg were collected by riffling, consistent with common industry practice. • Some damp or wet intervals were sampled by spear or grab sampling. These samples would not be reliable. The proportion of wet intervals was reported to have been very small, but they were not identified in the drill hole database, so they could not be quantified. 2017 drilling stated wet samples tended to be more common in the SGZ latzone but infrequent. • 2018 drilling wet intervals were air dried before manually riffling. • Sample preparation at all the laboratories used reportedly involved pulverising the total received sample to nominal minus 75µm. In 2014-2015, if necessary, the received sample was riffle split to a maximum of 3 kg. Procedures were apparently similar at all stages and consistent with normal industry practices. • Field duplicate samples were collected, normally at a rate of 1 per hole, approximating 1 in 25 to 1 in 35 samples. Results were located for 619 duplicates from the 1998-2000 period, 117 from 2005 and 105 from 2014-2015. On average, duplicate sample grades for Ni and Co compared closely with originals, indicating that sub-sampling procedures had been free of significant bias. • In 2014-2015 field duplicates samples were routinely collected, apparently by spear sampling • In 2000, 204 duplicate samples from 5 RC holes were collected by independent consultants and submitted for independent assay. The results correlated well with those from the original samples. They also indicated that field sub-sampling procedures were free of significant bias. • In 2005 another programme of independent duplicate sampling and assaying was conducted involving 149 samples from 4 RC holes, with similar good results. • In 2014–2015, field duplicate samples were routinely collected, apparently by spear sampling. This procedure was unsatisfactory. • 2016 holes SRC1369-SRC1383 drill sample splitting protocols could not be verified but were likely to have utilised a riffle splitter as in previous campaigns. • 2017 holes SRC1418-SRC1427 drilling was sampled

Criteria	JORC Code Explanation	Commentary
		with Riffle splitter located underneath the cyclone. Duplicates were taken through a second riffle splitter to produce a duplicate sample. 2 duplicates were produced for each hole. • 2018 RC holes SRC1428-SRC1552 were sampled predominantly with a Riffle splitter located underneath the cyclone after trialling a rotary splitter on the first 3 holes. The last hole, SRC1552, was used for metallurgical studies. Drilling duplicates were taken for every sample ending in 5 (1:10) and weighed to ensure appropriates splitting was occurring. • The mineralised material is predominantly fine to very fine grained. Sizing analysis of typical RC cuttings showed that on average approximately 60-75% by weight was minus 0.1mm. Sample sizes were appropriate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Prior to late-1998 samples were assayed at Australian Laboratory Services Pty Ltd (ALS), Orange, New South Wales, by AAS after perchloric acid digest of a 0.25 gm aliquot. Ni, Co & Cr were routinely determined. Mn was determined for most samples and some Cu assays were reported. Selected samples were assayed for Mg, Ca & Fe by ICP-OES (Inductively Coupled Plasma Optical Electron Spectroscopy) after aqua regia (a mixture of hydrochloric and nitric acids) digest of a 0.25 gm aliquot. Pt was determined by 50gm fire assay with an AAS (Atomic Absorption Spectroscopy) finish. • From late 1998 to 2005 samples were assayed at Ultratrace Analytical Laboratories (Ultratrace), Canning Vale, Western Australia. Samples were routinely assayed for Ni, Co, Cr, Mn, Mg, Ca, Al, Fe, Sc, Zn, As and Cu by digestion of 0.3gm of sample pulp in a mixture of hot Hydrochloric, Nitric, Perchloric and Hydrofluoric acids, with an ICP-OES finish. • In 2014-2017 samples were reportedly assayed at Australian Laboratory Services Pty Ltd (ALS), Brisbane, Queensland, after sample preparation at their Orange, New South Wales, facility. An aliquot of 0.25 gm was digested in a mixture of Perchloric, Nitric, Hydrofluoric and Hydrochloric acids, and analysed for Sc and 32 other elements, including Ni and Co, by Inductively Coupled Plasma – Atomic Emission Spectroscopy (ICP-AES). • In 2018 samples were assayed at Australian Laboratory Services Pty Ltd (ALS), Perth, Western Australia or Adelaide, South Australia, after sample preparation at their Orange, New South Wales, facility. All assaying methods were appropriate for Ni, Co and Pt, and were regarded as total determinations. • Between late 1998 and 2005 a small proportion of samples were assayed for Si by sodium peroxide fusion of a 0.3 gm sample with an ICP-OES finish. The results were used to develop a regression equation to calculate Si values. The great majority of Si values in the drill hole database are calculated and can only be regarded as semi-quantitative. Si values had no direct influence on resource grade estimation. • No analyses were obtained using Geophysical tools. • Sampling and assaying quality controls routinely imposed during drilling programmes in 1998–2000 and in 2005 consisted of field duplicate samples, extensive check assaying at independent laboratories and submission of

Criteria	JORC Code Explanation	Commentary
		a range of certified standard samples. • In 2014–2015, field duplicate samples were routinely collected, apparently by spear sampling. This procedure was unsatisfactory. No check assaying was done. Only a single standard sample was used, which was intended primarily for monitoring Sc results. Ni and Co grades of the standard were far too low to provide useful data. • The 2014–2015 programmes only contributed some 8% of drill holes accepted for use in Ni-Co resource estimation. • Duplicate sampling results indicated that sub-sampling procedures were unbiased at all stages. • Duplicate sampling demonstrated that precision levels were satisfactory in 1998–2000 and in 2005. Data from 2014–2015 indicated poorer precision levels, but results were possibly distorted by an unsatisfactory duplicate sampling procedure. • Check assaying results prior to 1998, in 1998–2000 and in 2005 were consistently good and showed close agreement at all stages between the 3 reputable laboratories that were involved. Mean relative differences for Ni and Co were within +/- 2%. • On average, standard sample results for Ni and Co in 1998–2000 and 2005 were higher than the expected values. Two sets of certified standards were used. • One set consisted of 5 standards, prepared from Sunrise material and inserted into sample batches at the laboratory in 1998–2000 and in 2005. On average results were about 3%–5% relative higher than the expected values for both Ni and Co, during both time periods. • Another set of 5 standards, prepared from material from other lateritic Ni-Co deposits, were inserted on site, blind to the laboratory, during 2005. They gave Ni and Co results averaging about 8% relative higher than the expected values. • The apparent biases shown by standard samples were of serious concern, but completely at odds with consistently good check assaying results. • An investigation into the standard samples in 2005 substantiated the laboratory results and failed to explain the differences from expected values. It was concluded that they were probably due to more effective digestion techniques at the 3 laboratories involved in check assaying programmes than at some of the other laboratories involved in establishing expected values for the standards. However, the possibility of some bias could not be entirely ruled out. Prior to late-1998 samples were assayed at Australian Laboratory Services Pty Ltd (ALS), Orange, New South Wales, by AAS after perchloric acid digest of a 0.25 gm aliquot. Ni, Co & Cr were routinely determined. Mn was determined for most samples and some Cu assays were reported. Selected samples were assayed for Mg, Ca & Fe by ICP-OES (Inductively Coupled Plasma Optical Electron Spectroscopy) after aqua regia (a mixture of hydrochloric and nitric acids) digest of a 0.25 gm aliquot. Pt was determined by 50gm fire assay with an AAS (Atomic Absorption Spectroscopy) finish. • From late 1998 to 2005 samples were assayed at Ultratrace Analytical Laboratories (Ultratrace), Canning

Criteria	JORC Code Explanation	Commentary
		Vale, Western Australia. Samples were routinely assayed for Ni, Co, Cr, Mn, Mg, Ca, Al, Fe, Sc, Zn, As and Cu by digestion of 0.3gm of sample pulp in a mixture of hot Hydrochloric, Nitric, Perchloric and Hydrofluoric acids, with an ICP-OES finish. • In 2014-2017 samples were reportedly assayed at Australian Laboratory Services Pty Ltd (ALS), Brisbane, Queensland, after sample preparation at their Orange, New South Wales, facility. An aliquot of 0.25 gm was digested in a mixture of Perchloric, Nitric, Hydrofluoric and Hydrochloric acids, and analysed for Sc and 32 other elements, including Ni and Co, by Inductively Coupled Plasma – Atomic Emission Spectroscopy (ICP-AES). • In 2018 samples were assayed at Australian Laboratory Services Pty Ltd (ALS), Perth, Western Australia or Adelaide, South Australia, after sample preparation at their Orange, New South Wales, facility. • All assaying methods were appropriate for Ni, Co and Pt, and were regarded as total determinations. • Between late 1998 and 2005 a small proportion of samples were assayed for Si by sodium peroxide fusion of a 0.3 gm sample with an ICP-OES finish. The results were used to develop a regression equation to calculate Si values. The great majority of Si values in the drill hole database are calculated and can only be regarded as semi-quantitative. Si values had no direct influence on resource grade estimation. • No analyses were obtained using Geophysical tools. • Sampling and assaying quality controls routinely imposed during drilling programmes in 1998–2000 and in 2005 consisted of field duplicate samples, extensive check assaying at independent laboratories and submission of a range of certified standard samples. • In 2014–2015, no check assaying was done. Only a single standard sample was used, which was intended primarily for monitoring Sc results. Ni and Co grades of the standard were far too low to provide useful data. • The 2014–2015 programmes only contributed some 8% of drill holes accepted for use in Ni-Co resource estimation. • Duplicate sampling results indicated that sub-sampling procedures were unbiased at all stages. • Duplicate sampling demonstrated that precision levels were satisfactory in 1998–2000 and in 2005. Data from 2014–2015 indicated poorer precision levels, but results were possibly distorted by an unsatisfactory duplicate sampling procedure. • Check assaying results prior to 1998, in 1998–2000 and in 2005 were consistently good and showed close agreement at all stages between the 3 reputable laboratories that were involved. Mean relative differences for Ni and Co were within +/- 2%. • On average, standard sample results for Ni and Co in 1998–2000 and 2005 were higher than the expected values. Two sets of certified standards were used. • One set consisted of 5 standards, prepared from Sunrise material and inserted into sample batches at the laboratory in 1998–2000 and in 2005. On average results were about 3%–5% relative higher than the expected

Criteria	JORC Code Explanation	Commentary
		values for both Ni and Co, during both time periods. • Another set of 5 standards, prepared from material from other lateritic Ni-Co deposits, were inserted on site, blind to the laboratory, during 2005. They gave Ni and Co results averaging about 8% relative higher than the expected values. • The apparent biases shown by standard samples were of serious concern, but completely at odds with consistently good check assaying results. • An investigation into the standard samples in 2005 substantiated the laboratory results and failed to explain the differences from expected values. It was concluded that they were probably due to more effective digestion techniques at the 3 laboratories involved in check assaying programmes than at some of the other laboratories involved in establishing expected values for the standards. However, the possibility of some bias could not be entirely ruled out. • 2017 drilling of holes SRC1418-1427 used 1 standard and 1 blank type. 2 duplicates were taken per hole collected at static hole depths of 5-6m and 21-21m. • 2018 drilling campaigns had comprehensive QAQC protocols utilising 6 certified standards placed at regular intervals in the drilling sequence Umpire checks were also made using an independent laboratory. All samples were processed by ALS Orange and tested by ALS Brisbane or Adelaide. A small number of batches contained outlier standard results against certified values and require re-analysing. Approximately 10% (2,178 samples) of the 2018 drill samples were randomly selected for re-testing by ITS (Intertek) laboratories. Umpire checks were independently reviewed by Portal Spectral Services Geochemist who concluded that there were no precision or bias issues with the ALS results for all elements tested.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Independent custody sampling programmes were conducted by two different groups of independent consultants in 2000 and 2005. They involved a total of 253 metres from 9 RC drill holes. Results verified the original intercepts. • Drilling of twin holes in 2005 is discussed above. • Due to the age of much of the data and changes in project ownership, details of primary data entry procedures were largely obscure. • In 2000, independent consultants conducted validation checks against original sources for 66 holes. Some collar coordinates could not be validated because original records were not located. No significant errors were found in the assay data. • In 2005 a drill hole database created by the previous owner was subjected it to extensive tests for internal errors and inconsistencies. Very few problems were detected. • In 2005 validation checks were carried out on 100 holes. • Collar coordinates were checked against surveyors' reports and/or drill logs. No survey records could be located for the 16 aircore holes involved and some early RC holes. A total of 17 early, predominantly aircore holes showed significant coordinate discrepancies against drill

Criteria	JORC Code Explanation	Commentary
		logs that could not be resolved. Where original survey reports were available, all database coordinates were found to be correct. The quality of the survey database was open to doubt for holes drilled before about 1997. The great majority of holes accepted for use in resource estimation were drilled later. • Database assay records were checked against original laboratory reports for 1,673 pre-2005 samples and 908 samples from 2005 drilling. Only a single incorrect Si value was detected. The assay database seemed to be of good quality. • No adjustments to laboratory assay data were required. • In 2017, 10 RC holes were drilled to twin historical RC holes and a further 8 diamond twin holes were drilled adjacent to the same twin historical RC holes. Both the RC and Diamond holes were offset 5m diagonally from the original RC holes. The results have indicated only minor variation between the original and twin holes. • In 2017, a new Micromine Geobank (CLQGB) database was created with hole details from historic database and other sources; collars imported from original surveyor's report (60% identified in either AMG84 or MGA coordinates); and assay from original sif or csv lab assay report files with full metadata (67%) with balance from csv assay report files with metadata added. 35,135 records were imported for SAC and SRC hole series. • All 2018 drilling data was added directly to the Geobank database from source and reviewed by CleanteQ geologists for consistency. Assay results were downloaded directly from ALS's secure webtrieve website and uploaded directly into the Geobase database and QAQC performance verified against certified values
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Collar survey procedures prior to 1998 were unclear. • For drilling programmes between 1998 and 2000, collars were picked up by contract licensed surveyors. • In 2005, collar positions were pegged out by contract licensed surveyors. Holes were collared within 0.1m of pegs or offsets were measured by steel tape to 0.1m. • In 2014-2015 drill hole collars were surveyed by licensed surveyors (Geolyse Pty Ltd). • Local project grid coordinates have been used throughout. A transformation between local grid and national coordinates (Datum: AGD84; Projection: AMG84 Zone 55) was established by licensed surveyors around late 1998. • A new national grid system has since been adopted (Datum: GDA94; Projection: MGA Zone 55). Care is required to ensure that any national coordinates used in connection with the project are all in the same system. • Local topographic survey control is adequate, based on a photogrammetric survey flown in 1999 by Geo-Spectrum. • In 2017, all available surveyor's reports were identified with majority of holes surveyed in AMG84 grid with 2014-2016 holes surveyed in MGA grid and imported into Geobank database. • The AAM geospatial services company provided additional geodetic survey control in 2017 for proposed

Criteria	JORC Code Explanation	Commentary
		Lidar Survey. This also provided an independent check against former licensed surveyor (Geolyse Pty Ltd) survey control points. • In 2018 all drill collars were surveyed by Geolyse Pty Ltd in MGA grid and the coordinates retained in the Geobase database
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Most of the deposit area has been covered by vertical RC drilling on a 120m x 120m pattern. A substantial proportion of the more strongly mineralised areas have been covered by vertical RC drilling on a 60m x 60m pattern and some limited areas have been infilled to 30m x 30m. This is sufficient to establish geological and grade continuity appropriate for the resource estimation procedures used and resource classifications applied. • For resource estimation purposes drill hole samples were composited over 1m down hole intervals to reflect block model parameters and likely open pit working bench heights.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Vertical drill holes were appropriate for delineation of the broadly sub-horizontal laterite hosted Ni-Co mineralisation. • There was no definitive evidence of the Co mineralisation being structurally controlled in the revised geological interpretation. • 30m infill drilling programmes conducted in early 2005 were intended to better understand the distribution of the Co values.
Sample security	• *The measures taken to ensure sample security.*	• As far as could be determined, no specific security measures were imposed prior to 2005. However, independent custody sampling by consultants in 2000 indicated that tampering was unlikely to have occurred. • In 2005, a system of security tags was used to prevent any tampering with bagged samples between the project site and the laboratory. • Independent custody sampling in 2005 confirmed that tampering was unlikely to have occurred. • In 2014-2015 the drilling program was under the supervision of a site geologist and overseen by a principal geologist to ensure that sample protocols including sample custody were monitored.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Technical reviews by independent consultants • SNC-Lavalin Australia Pty Ltd (SLA) in 2000 and by McDonald Speijers (MS) in 2005 concluded that data collection procedures since late 1998 had been generally satisfactory and consistent with normal industry practices. • Behre Dolbear Australia also undertook a due diligence review in November 2018 and found no critical issues. • The GZ latzone dry bulk density assumption has been updated since these reviews but all other parameters remain unchanged.

Section 2 Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Sunrise Ni-Co deposit Mineral Resource/Reserve area is covered entirely by Mining Lease ML 1770 (2,676 .0 ha). This Mining Lease is held 100% by Clean TeQ Sunrise Pty Ltd. ML 1770 has an initial validity period of 21 years and may be extended by future applications for renewal. • The boundaries of Mining Lease Application MLA 113 were approved by the NSW Department of Planning and Environment in February 2018 and now form part of ML 1770. • Mining Leases ML 1769 and ML 1770 were granted on 15 and 16 February 2018 respectively and cover the main project area (ML 1770) and the Westella limestone deposit (ML 1769). • The majority of land within ML 1770 is freehold land owned by Clean TeQ Sunrise Pty Ltd. The use of Crown Land within ML 1770 is subject to a Mining Lease Compensation Agreement between Clean TeQ Sunrise, The Minister administering the Crown Land Management Act 2016 (NSW) and the Local Land Services. This agreement was executed on 20 March 2020. Disturbance of the Fifield State Forest within ML 1770 is authorised under a Compensation Agreement between Clean TeQ Sunrise and Forestry Corporation of NSW executed in January 2019. Land to the west of Wilmatha Road and within the recently extended area of ML 1770, is owned by a third party. • Development Consent (DA 374-11-00) for the Sunrise Project was granted under Part 4 of the Environmental Planning and Assessment Act 1979 in 2001. Six modifications to the Development Consent have since been granted. A Mining Operations Plan (MOP) is approved for ML 1770 describing care and maintenance activities. An amendment to this MOP is currently under assessment by the Regulator to allow for exploration drilling activities to take place. • Clean TeQ also owns a number of freehold farming properties in and around the area of the deposit. • There appear to be no impediments to obtaining a licence to operate.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The deposit has been subjected to multiple drilling programmes by 5 different owners since 1988. • About 97% of the drill hole data accepted for use in this resource grade estimation dates from mid-1997 or are more recent (SRC series Reverse Circulation (RC) drilling). • Air core drilling during the 1993-1996 period (SAC-series holes) was used to assist interpretation of geological and geochemical boundaries for the estimation. • Earlier exploration drilling undertaken between 1988 and 1993 was predominately Rotary Air Blast Drilling (RAB) and this data was deemed unreliable and was therefore not used in the estimation.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Sunrise is an iron-rich ‘oxide type’ nickel laterite deposit with higher than normal levels of associated Co and

Criteria	JORC Code Explanation	Commentary
		local elevated Pt and Sc values. It has developed over an ultramafic intrusive complex. • The laterite profile is best developed over a Dunite core and thins over peripheral Pyroxenites. • The laterite profile is partly overlain by transported alluvium. • The laterite profile is interpreted to consist of 5 sub-horizontal zones: • Residual Overburden (OVB): This zone is characterised by nickel values <0.2% nickel and very low cobalt values (<0.02% cobalt) with silicon values similar or slightly higher than the underlying TZ but relatively higher aluminium content. The OVB zone contains mean values for nickel and cobalt of 0.11% and 0.015% respectively. • Transitional Zone (TZ): The TZ represents weathered GZ material and was defined by the Al values as they increase significantly within the TZ from 2-3% Al to >4%. The nickel values dropped below 0.46% nickel and cobalt values fell below 0.03% cobalt compared with the nickel and cobalt values of 0.75% and 0.17% respectively from the underlying GZ. The mean values of the TZ for nickel and cobalt are 0.36% and 0.04% respectively. • Goethite Zone (GZ): The GZ is characterised by high iron and low silicon and variable aluminium values. The most significant difference is the increased nickel and cobalt values where the mean nickel and cobalt values are 0.75% and 0.15% respectively. The GZ/TZ boundary is gradational but an aluminium cut-over value of 2-3% has been used with the result that the mean aluminium value in the GZ is 3%. The GZ/SGZ is well defined with silicon values increasing from approximately 10% to >20% silicon being the principal criterion. • Silicified Goethite Zone (SGZ): The SGZ is characterised by high Si, generally >20% Si and low Al values (<2%). The nickel and cobalt values are lower than the GZ with the mean nickel and cobalt values being 0.6% and 0.07% respectively. • Saprolite Zone (SAP): The SAP Zone represents the saprolite horizon of the underlying dunite source rock. Its principal characteristic is the significant increase in magnesium (>5%) together with a commensurate lower iron content (<10%). The nickel and cobalt are lower than the overlying SGZ with the mean nickel and cobalt values being 0.25% and 0.025% respectively. • Nickel-cobalt mineralisation is best developed in the GZ and SGZ, overlying the dunite.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  o *easting and northing of the drill hole collar.*
	  o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar.*
		• Exploration results are not being reported.

Criteria	JORC Code Explanation	Commentary
	○ *dip and azimuth of the hole.* ○ *down hole length and interception depth.* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Exploration results are not being reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Exploration results are not being reported.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Exploration results are not being reported.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Exploration results are not being reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey*	• Exploration results are not being reported.

Criteria	JORC Code Explanation	Commentary
	results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Addition geological and mine development work is planned post completion of the PEP.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Input data was a validated Micromine Database. • Extensive validation routines were run to confirm validity of all data. • Collar, down hole survey and assay data has been sourced from original survey and laboratory files where possible and extensively validated.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• A site visit was undertaken by the Competent Person (John Winterbottom) between 7th and 9th May 2019; general site layout, open bulk sampling pits and diamond drilling operations were viewed, plus chip trays in the storage facility.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.*	• There is good confidence in the geological interpretation of the deposit in most areas; there are some areas of uncertainty at the outer limits of the deposit where drill spacing is sparse. • The geological logging and the geochemical signatures of the various alluvial, overburden, lateritised and saprolite zones has been used to generate a reliable geological coding system for the drill hole data. • Alternative geological interpretation would have a minimal effect on the resource estimate. • Geological domain boundaries are used to flag data for use in estimation and as hard boundaries to interpolate block grades. • The underlying bedrock geology (Dunite Complex) is also used to constrain some of the block model generation.

Criteria	JORC Code Explanation	Commentary
	• *The factors affecting continuity both of grade and geology.*	• Continuity of grade and geology is strongly tied to the horizontal weathering profile which has created the mineralised laterite zones; the boundary between underlying Dunite complex and the surrounding pyroxenite also has an effect on the geochemical distribution.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The extent and orientation of the resources at Sunrise are illustrated in the diagrams in the body of this release. The mineralisation is essentially horizontal with local dips of a few degrees in various directions. The resource extends over an area approximately 4km x 4km; thickness of the lateritised zones varies from a few metres to a total of over 30m. The base of the mineralisation varies from a few metres to more than 60m below natural surface.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation*	• An Ordinary Kriging grade estimation methodology has been used for the main elements in the Mineral Resource Estimate (Ni, Co, Sc, Fe, Al, Si, Mn, Mg). Other elements have been estimated using an Inverse Distance Cubed methodology. • Micromine 2016.1 software was used for estimation; GeoAccess 2016 software was used for statistical and geostatistical data analysis. • Geological surfaces have been used to produce discrete domain-based block estimates. In addition, Indicator Models were used to define a high-grade cobalt domain in the Goethitic Laterite Zone and a high-grade scandium domain to the north and west of the main Dunite Complex footprint. • Variography was carried out to define the variogram models for the Ordinary Kriging (OK) interpolation. • Block size is generally one quarter of the drill hole spacing. Three parent cell sizes are used dependent on the local drilling pattern. In very close spaced drilling a 5m x 5m x 2m block size is used. In 60m x 60m drilled areas, a 15m x 15m x 2m block size is used. In 120m x 120m and wider spaced areas a 30m x 30m x 2m block size is used. • All potentially deleterious elements have been modelled. • Recovery of by-products will be determined following detailed metallurgical testwork. All potential value-adding by-products have been included in the estimation. • Search ellipsoids use multiple passes to ensure blocks are filled in areas with sparser drilling. The first pass used a search of 60m x 60 x 10m, A second pass used a search of 125m x 125m x 10m and a third pass of 250m x 250m x 10m was used to ensure complete filling of blocks. • A “flattening” or “unfolding” methodology was applied to simplify the orientation of search ellipses in areas of variable dip. • Sample data was composited to 1m down-hole composites, while honouring breaks in mineralised zone interpretation.

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td></td><td>was used to control the resource estimates.
Discussion of basis for using or not using grade cutting or capping.
The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</td><td>Top cut analysis was carried out to identify extreme outliers, using a combination log probability plots, and log histograms and the effect of top cuts on cut mean and coefficient of variation. Variable top cuts have been applied by domain and element, as follows:
<table>
<tr><th colspan="3">HIGH GRADE CAPS BY LATZONE</th></tr>
<tr><td>LATZONE</td><td>Ni%</td><td>Co%</td></tr>
<tr><td>GZ</td><td>2.50</td><td>1.30</td></tr>
<tr><td>SGZ</td><td>2.50</td><td>0.75</td></tr>
<tr><td>TZ</td><td>1.00</td><td>0.70</td></tr>
<tr><td>AV</td><td>None</td><td>0.40</td></tr>
<tr><td>OVB</td><td>1.25</td><td>0.40</td></tr>
<tr><td>SAP</td><td>2.00</td><td>0.70</td></tr>
</table>
<table>
<tr><th colspan="2">Minor Variables</th></tr>
<tr><td>Sc_ppm</td><td>900</td></tr>
<tr><td>Pt_ppm</td><td>30</td></tr>
<tr><td>Pd_ppb</td><td>600</td></tr>
<tr><td>Au_ppb</td><td>600</td></tr>
<tr><td>Mn_ppm</td><td>15000</td></tr>
<tr><td>Zn_ppm</td><td>1500</td></tr>
<tr><td>Cu_ppm</td><td>6000</td></tr>
<tr><td>Cr_ppm</td><td>10000</td></tr>
<tr><td>As_ppm</td><td>70</td></tr>
</table>
Validation was carried out in a number of ways, including
Visual inspection section, plan and 3D
Swathe plot validation
Model vs composite statistics
ID2 vs OK model checks
No reconciliation data is available.</td></tr>
<tr><td>Moisture</td><td>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</td><td>Tonnages are estimated on a dry basis.</td></tr>
<tr><td>Cut-off parameters</td><td>The basis of the adopted cut-off grade(s) or quality parameters applied.</td><td>The 2020 Mineral Resource Estimate is reported using a Nickel Equivalent cut-off of 0.35% and includes Nickel, Cobalt, Scandium and Platinum above this cut-off and is based on the 2018 DFS block model prepared by Lynn Widenbar of Widenbar and Associates. The mineral resource has been modified to update the GZ dry bulk density from 1.20 to 1.30 and re-reported to a nickel equivalent basis to reflect the potential economics of the project with competent person now reverting from Lynn Widenbar to John Winterbottom.
All reported figures are restricted to within the transition, goethite and silicified goethite zones.
Nickel Equivalent was calculated using the following assumptions and factors:
NiEq (Nickel Equivalent grade) = Nickel grade plus Cobalt grade x (Cobalt Price / Nickel Price x Cobalt Recovery / Nickel Recovery)
Assuming:
Cobalt Price ($US/lb) $30
Cobalt Recovery 91.2%
Nickel Price ($US/lb) $8</td></tr>
</table>

Criteria	JORC Code Explanation	Commentary
		Nickel Recovery 92.6% • The Mineral Resource Estimate at a cut off of 0.35% Nickel Equivalent, is 180Mt at 0.10% cobalt for contained cobalt metal of 170,000t. The nickel grade of the resource is 0.53% nickel for 940,000t of contained nickel. Of this total resource, 83% is in the Measured and Indicated categories • The 2020 Ore Reserve Estimate is based on the Measured and Indicated Mineral Resources of the Global Mineral Resource estimate after applying "economic factors". No platinum or scandium outside the Global Mineral Resource Estimate is reported as part of the Ore Reserves
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Due to the proximity of the mineralisation to surface, the deposit is amenable to conventional open pit mining. Two feasibility studies have developed practicable staged open pit mine plans based on conventional open pit mining by contractor, using large backhoes and trucks, operating on working benches 2m in height. The most recent study assumed about 2.5 Mtpa of feed to a processing plant. • No dilution or ore loss is specifically included in the resource model, other than that inherent in the smoothing introduced by the kriging interpolation methodology and the inherent dilution built into the geological modelling as precursor to the Resource Modelling and Estimation.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical test work has been carried out on diamond, reverse circulation, Calweld and sonic core samples from geographically dispersed drill holes, with coverage of all geological domains. • Metallurgical Test work on the nickel, cobalt and platinum material for the Sunrise project was completed by Black Range Minerals and Ivanplats, through ALS Metallurgy, SGS Metallurgy, Hazen Laboratories and other laboratories as part of the feasibility studies conducted in 2000 and 2005. • Additional test work for metallurgical recovery determination, including Pilot Scale test work, was carried out on the nickel, cobalt and scandium material by ALS Metallurgy, SGS Metallurgy and other laboratories during the Definitive Feasibility Study (FS) in 2016-18. • A comprehensive suite of metallurgical test work, including further Pilot Scale test work and specific equipment vendor test work was completed in Q4 2018

Criteria	JORC Code Explanation	Commentary
		with results incorporated into the Project Execution Plan (PEP) phase study undertaken by Clean TeQ. • Average overall PAL feed metallurgical recoveries to final product were derived from a process mass balance calibrated using testwork results. These are 92.6% for nickel and 91.2% for cobalt and 12.7% for scandium. The metallurgical recoveries for nickel and cobalt were derived from metallurgical test work comprising over 150 ore variability batch tests and 4 separate pilot plant campaigns testing 10 bulk ore composites as part of three feasibility studies completed in 2000, 2005 and 2018. • Results of average feed grades support resource grades. • Sufficient work has been undertaken to demonstrate that a viable treatment process is available for the Sunrise lateritic nickel, cobalt and scandium mineralisation. The proposed process for nickel, cobalt and scandium recovery involves high pressure acid leaching, followed by continuous RIP process for the extraction of nickel, cobalt and scandium from solution, which is then purified via separation of scandium via ion exchange, followed by solvent extraction separation and purification, prior to crystallisation to produce battery grade nickel and cobalt sulphates. The proposed process for the scandium refining involves precipitation of scandium hydroxide from the scandium eluate followed by a multi-stage purification process to produce high purity scandium oxide.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The area in which the deposit occurs does not seem to have any unusual environmental significance. • An Environmental Impact Statement (EIS) was prepared for the Project and the Project granted Development Consent (DA 374-11-00) under the NSW Environmental Planning and Assessment Act 1979 (EP&A Act) in 2001. • The granting of the Development Consent indicates that there are unlikely to be any insurmountable environmental obstacles. • Additional permits and licences would have to be obtained before operations could commence. • As part of Modifications to the Development Consent additional environmental assessments have been undertaken to assess potential environmental impacts of the mining and processing operations. • There are no obvious environmental factors that would prevent the deposit being reported as an identified mineral resource.

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td>Bulk density</td><td>

Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.
The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.
Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.

</td><td>

Dry bulk density factors used for previous Mineral Resource estimates have been used for this update with the exception of GZ which was revised from 1.20 to 1.30 based on gamma-gamma and BMR downhole results from 77 RC drillholes within areas A-D.
In-situ bulk densities have been determined by measurements carried out on core, measurements at external laboratories and down-hole geophysical logging (gamma-gamma).
Measurements on bulk material were obtained by weighing total material recovered from over 100 m of drilling in mineralised zones by 6 large diameter Calweld holes, adjusted for moisture content determined by oven drying quickly sealed grab samples. As documented, the procedures used seemed appropriate. Due to the relatively large volumes involved these should have been the most reliable measurements available.
Measurements made after drying small core samples from 5 diamond drill holes were given some influence.
Factors applied to the more mineralised zones tended to be slightly rounded downwards. This was prudent in view of the general tendency for a negative correlation between bulk density and grade.
A higher average value was assumed for the SGZ than indicated by the Calweld holes. This was reasonable because they failed to fully penetrate the zone and we would expect average density to increase in its lowermost parts.
Density determination by down-hole geophysical logging were conducted in a total of seven diamond drill holes and about 137 RC holes by either Down Hole Surveys Pty Ltd or Surtron Technologies Pty Ltd. In 1999
Bulk density was assigned by geological domain as tabulated below:

<table>
<tr><th>Domain</th><th>Code</th><th>Dry Bulk Density</th></tr>
<tr><td>Alluvials</td><td>AV</td><td>1.80</td></tr>
<tr><td>Overburden</td><td>OVB</td><td>1.80</td></tr>
<tr><td>Transition Zone</td><td>TZ</td><td>1.70</td></tr>
<tr><td>Goethitic Zone</td><td>GZ</td><td>1.30</td></tr>
<tr><td>Silicified Goethitic Zone</td><td>SGZ</td><td>1.25</td></tr>
<tr><td>Saprolite</td><td>SAP</td><td>2.00</td></tr>
</table>
</td></tr>
<tr><td>Classification</td><td>

The basis for the classification of the Mineral Resources into varying confidence categories.
Whether appropriate

</td><td>

The Mineral Resources have been classified as Measured, Indicated and Inferred based on drill spacing and geological continuity.
The Resource model uses a classification scheme based upon drill hole spacing plus block estimation parameters,

</td></tr>
</table>

Criteria	JORC Code Explanation	Commentary
	account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	including kriging variance, number of composites in search ellipsoid informing the block cell and average distance of data to block centroid. • The results of the Mineral Resource Estimation reflect the views of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The 2018 DFS mineral resource model was reviewed by Behre Dolbear in 2018. No material issues were identified. • In 2018 SRK undertook a further review as part of their due diligence process to assume Qualified Person (QP) for the subsequent NI43-101Technical Report release. • Since the 2018 DFS model the only change has been the revision of the GZ dry bulk density from 1.20 to 1.30 in April 2020.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with*	• The relative accuracy of the Mineral Resource is reflected in the reporting of the Mineral Resource as being in line with the guidelines of the 2012 JORC Code. • The statement relates to local estimates of tonnes and grade, with reference made to resources above a certain cut-off that are intended to assist mining studies.

Criteria	JORC Code Explanation	Commentary
	production data, where available.	

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in section 2 and 3, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• Data collection which was the basis for Mineral Resource estimation, was completed by Black Range Minerals, Ivanplats and Clean TeQ for the Sunrise Deposit • Geological interpretation, material classification, grade estimation, quality checks and final JORC Code classification for the Mineral Resource estimation were reviewed by Mr John Winterbottom, a full time employee of Clean TeQ and a member of the Australasian Institute of Geologists (AIG) with sufficient relevant experience to qualify as a Competent Person • The Mineral Resource for the Clean TeQ Sunrise Project was completed in September 2020. • The Mineral Resource contains Measured, Indicated and Inferred classifications but only the Measured and Indicated Mineral Resource was used to generate the Ore Reserves. • The Mineral Resource was reported using both a 0.35% Nickel equivalent but only the 0% cobalt cut-off was used to generate the 2020 Ore Reserves The Mineral Resources reported are inclusive of the Ore Reserves for the Project
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Persons for the estimation and reporting of Ore Reserves are Dr James Kyle (Principal Metallurgist), Mr Luke Cox (Manager Geology and Mining) and Mr Lee White (Principal Mining Engineer), and all are members of the AusIMM. Mr Cox is a full time employee of Clean TeQ while Dr Kyle is engaged as a casual employee to Clean TeQ. Mr White is an

Criteria	JORC Code Explanation	Commentary
		employee of Kalem Group Pty Ltd and is engaged as an internal consultant to Clean TeQ. • Mr Cox has made numerous extended visits to site between 2018 and 2019. Mr White has visit site in July 2018. Dr Kyle has not yet visited site but has attended the Pilot Plant at ALS Metallurgy in May and November 2018. Mr Donegan has not yet visited site but has attended the SGS Lakefield refinery pilot plant regularly from September to November 2017 and attended the ALS pilot plant regularly from June to September 2018.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• In June 2018, Clean TeQ completed a Definitive Feasibility Study (DFS) prepared by SNC-Lavalin Australia, Clean TeQ employees and other internal and external consultants. In June 2020, the DFS was updated with a Project Execution Plan (PEP), revised Capital and Operating costs and engineering study prepared by Fluor Australia Clean TeQ employees and other internal and external consultants. • The project development consists of an open cut mine, hydrometallurgical processing plant and associated infrastructure, including: ○ Ore crushing and preparation plant producing up to 2.5 Mtpa of ore feed to the pressure acid leach (PAL) circuits ○ 2 x PAL trains and associated sulphuric acid plant to leach the target minerals ○ Partial neutralisation tanks using limestone slurry ○ Continuous resin-in-pulp (cRIP) extraction of nickel, cobalt and scandium from the neutralised leach pulp, producing an eluate liquor for further refining ○ Separation of scandium, using continuous ion exchange process technology, and subseuqnet precipitation and refining to produce scandium oxide ○ Extraction and separation of nickel, cobalt using solvent extraction process technology ○ Crystallisation of nickel and cobalt sulphate products ○ Tailings storage, evaporation and water storage facilities ○ Back-up steam and power generation ○ 40km of road upgrades, 80 km 132 kV power tie-line, borefields and 70km water supply pipeline ○ New rail siding ○ Construction camp to accommodate 1,900 people • A detailed and practical mine plan was developed following Multimine optimisation using CAE NPVS

Criteria	JORC Code Explanation	Commentary
		software to determine an economic block models for Sunrise. The Sunrise deposit was scheduled to meet quality targets and processing constraints. • Conventional open pit mining is planned using hydraulic excavators and dump trucks.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• For the October 2020 Ore Reserves, no cut-off was applied as the Ore Reserve was optimised by maximising resource tonnages with all material processed through the Ore Preparation plant prior to HPAL with performance as per cut-off criteria applied below. • Cut-over criteria have been applied during pit optimisation and mine scheduling for plant destination determination: ○ For Ore blocks with a Silicon Alumina (Si/Al) ratio <2.65, a mass rejection of 0%, a Nickel and Cobalt metal loss of 0% has been applied to the block; ○ For Ore blocks with 2.65<=Si/Al<100, a mass rejection of (1.00 x Si/Al-2.49)%, a Nickel metal loss of (0.37 x Si/Al – 0.19)% and a Cobalt metal loss of (0.34 x Si/Al – 0.39)% has been applied to the block; • Alluvial, Overburden and Inferred Mineral Resource material are all classified as waste prior to pit optimisation.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.*	• The economic portions of the Mineral Resources were converted to Ore Reserves from pit optimisation, mine scheduling and pit design studies. • Clean TeQ proposes to mine the Sunrise Deposit by conventional open pit mining methods using a selective mining approach. • Mining of Ore is planned to be undertaken on 2 m benches. • The mine designs include pits, haul roads, dump and stockpile designs and water management bunds and dams. • An allowance for grade control and pre-production drilling was included in the mining cost. • A regularised mining block model, as distinct from the sub-blocked resource model, was developed from the resource model by the application of a regular block size and estimation of the Mineral Resource model to a Standard Mining Unit (SMU) mining block model; An SMU of 10.0 m (X) by 10.0m (Y) by 2.0 m (Z) was used for the Sunrise Deposit. Grades were re-estimated into the SMU but no other dilution is applied other than the inherent dilution built within the geological modelling as precursor to the Resource Modelling and Estimation. • Appropriate factors have been added to the regularised mining block model, which has been optimised using

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	• *The infrastructure requirements of the selected mining methods.*	Datamine NPVS Optimisation software. The resultant optimal shell was then used as the basis for the detailed design to include pit wall angles and access ramps. • The Ore Reserve model is a recoverable reserve estimate that takes into account estimation of dilution and ore losses in the estimation based on a SMU. • The Sunrise Nickel & Cobalt DFS considered infrastructure requirements associated with the conventional excavator and truck mining operation including: crushing and conveying systems, dump & stockpile locations, plant and maintenance facilities, access routes, fuel, water and power, which have been retained for this PEP Phase.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	• The flowsheet will process goethite and silicified goethite feed via ore preparation, PAL, continuous resin-in-pulp, continuous liquid exchange for scandium, and solvent extraction and crystallisation to produce high purity nickel and cobalt sulphate products. High purity scandium oxide will also be produced. Waste streams are neutralised prior to disposal in a Tailings Storage Facility. Chloride waste will go to an evaporation pond. • The process has been demonstrated in both bench scale batch and continuous pilot plant operations, the results of which have been used to develop the process design criteria for the process plant design. • The technologies used in the Clean TeQ Sunrise flowsheet have been demonstrated at commercial scale. The use of Pressure Acid Leach (PAL) for laterite mineralisation is widely used within industry, as is solvent extraction and crystallisation. The use of continuous resin-in-pulp (cRIP) has been widely used in former Soviet Union states for the recovery and production of gold and uranium. The application of this technology on laterite ores for the extraction of nickel, cobalt and scandium represents a novel use of the technology which has been successfully demonstrated at pilot scale by Clean TeQ Sunrise. Clean TeQ has developed the continuous resin-in-pulp process for nickel and cobalt laterite ore treatment over 14 years, which has included multiple large scale pilot plants on several laterite deposits. • Extensive metallurgical test work and piloting has previously been carried out on several ore types and composites over the Project. Variability testing was completed on mineral samples which represented the first 5 to 10 years of production. • Based on the results of the metallurgical testing and process modelling, average overall PAL feed metallurgical recoveries to final product were estimated to be 92.6% for nickel and 91.2% for cobalt and 12.7% for scandium.

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		• A 24-month commissioning and ramp up period was assumed. • The acid consumption calculation used for the Project was developed from bench scale and pilot testwork chemistry with consideration for the main elements in the orebody contributing to acid consumption. The factors applied to each element were based on analysis of multiple samples and composites over the deposit. • Two large scale pilot plant operations have been carried out on Sunrise bulk sample, representing material likely to be processed in the first 10 years of operation. This clearly demonstrated the PAL characteristics of the mineralisation, recovery of nickel, cobalt and scandium via continuous resin-in-pulp, and demonstrating the Ni/Co refinery flowsheet's capacity to extract and purify eluate to produce high purity nickel and cobalt sulphate plus high purity scandium oxide. • Deleterious elements are managed through the Clean TeQ Sunrise flowsheet process chemistry and rejected via unit operations and process conditions employed. No assumptions have been made on the behaviour of deleterious elements as this has been demonstrated through testwork at bench scale and continuous pilot plant operation. Impurity elements are identified through the process testwork at bench scale and pilot testwork and are managed though the current process design.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• The Project completed an Environment Impact Statement (EIS) in 2000 and was granted Development Consent by the NSW Government in May 2001. • Waste material will be used in the construction of the TSF. Waste material has been characterised as part of the EIS. The study has allowed for rehabilitation of the waste dumps, TSF and other surface facilities in line with the EIS and reflected in Development Consent conditions in place. • A design for the TSF has been developed, and initial submissions have been made to NSW Dam Safety.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• The main project area is covered by Mining Lease (ML) 1770. The (ML)1770 tenement is underlain by Exploration Licence (EL) 4573. ML 1769 covers the Westella Limestone deposit. All of the ML's and EL's covering the main project area are 100% controlled by Clean TeQ, as well as freehold ownership of the majority of the project area and water rights for the Project. • Land not currently owned on ML 1770 a Compensation Agreement was signed with the Forestry Corporation of New South Wales in January 2019 and a Mining Lease

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		Compensation Agreement was signed with NSW DPIE – Crown Lands and Local Land Services (LLS) in March 2020. • The company has a water licence for 3154 ML. from borefields located approximately 70km south of the Project. A water pipeline will be constructed to supply water to the Project and has been allowed for in the capital estimate. The borefield and water pipeline were a part of the EIS completed on the Project. • The Project is well-serviced by roads, both for transport and access to the local communities for labour accommodation. As a part of the Project Development Consent, upgrades to certain sections of roads have been agreed via a Voluntary Planning Agreement with the Lachlan, Parkes and Forbes Shire Councils. The costs for these upgrades have been accounted for in the PEP capital cost. • Transport of all bulk commodities and reagents to site are via rail and road, with the main transport routes identified.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Clean TeQ developed detailed Project Financial, Capital Cost and Operating cost models for the Project Execution Plan (PEP). • The PEP capital costs were estimated by Fluor Australia and Clean TeQ with expected accuracy of -10% to +15%. • The capital costs were derived from the engineering deliverables of the PEP, including process design criteria, equipment lists, material take-offs, electrical single line diagrams, process & Instrument diagrams, process flowsheets, specifications and updated budget pricing for equipment and bulk materials. Clean TeQ provided capital cost estimation for mining, borefields and pipeline, accommodation camp, first fills, and Owners Costs. • Operating costs were estimated within the PEP and include allowances for reagents and raw materials, mining, ore processing, non-processing-related infrastructure, administration, transport to port and shipping costs. • Exchange rates are derived from external economic forecasters. • Freight prices are derived from an independent logistic consultant for the PEP and include port costs and charges, rail line haul and road transportation. • The PEP assumes that nickel and cobalt sulphate will be produced on site together with scandium oxide (from year 3). No allowances were made for penalties for failure to meet specification.

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		• An allowance for a NSW State royalty of 4.0% (net of allowable deductions) and the 2.5% gross royalty payable to Ivanhoe Mines.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• Financial modelling is based on: o Long term product pricing was assumed for the life of project based on prices supplied by Benchmark Intelligence. o Nickel, cobalt and scandium oxide production and product quality are derived from the Life of Mine (LOM) schedule and metallurgy recoveries o Exchange rates are derived from external economic forecasts. • Treatment, refining and transportation charges were calculated via an operating cost model with estimates for costs calculated for each period. • No allowance was made for penalties.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• Clean TeQ has a 5 year off-take agreement with Beijing Easpring for the sale of 20% of the nickel sulphate and cobalt sulphate production from the Project. The binding offtake agreement is on a take-or-pay basis. • Clean TeQ is also in discussion with other potential customers and offtake partners and has developed as part of the PEP, a detailed marketing strategy for nickel and cobalt sulphate and scandium oxide markets.
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• Financial modelling demonstrates that, based on the assumptions set out above, the Sunrise Project will generate significant Net Present Value (NPV) after tax using a discount rate of 8%. • The NPV is most sensitive to cobalt and nickel price, operating and capital cost.
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• Clean TeQ has been exploring and undertaking project development since 2014 and have a good relationship with the local community, government and key stakeholders with the following agreements in place or under negotiation: • Development Consent DA 374 11 00 for the Project was issued under Part 4 of the NSW Environmental Planning and Assessment Act 1979 (EP&A Act) in 2001. Six modifications to Development Consent DA 374 11 00 have since been granted under the EP&A Act: • 2005 – to allow for an increase of the autoclave feed rate, limestone quarry extraction rate and adjustments to ore processing operations;

Criteria	JORC Code Explanation	Commentary
		• 2006 – to allow for the reconfiguration of the borefields; • 2017 (May) – to allow for the production of scandium oxide; • 2017 (December) – to amend hazard study requirements; • 2018 (May) – to relocate the accommodation area; and • 2018 (December) – to implement opportunities to improve the overall efficiency of the Project. • With commencement of the NSW Environmental Planning and Assessment (EP&A) Amendment Act 2017 on 1 March 2018, the Project became a State Significant Development (SSD) under the EP&A Act. Any future modification applications of the Project will comply with relevant SSD legislative requirements. • Mining Leases under the NSW Mining Act 1992 for the main project area and the limestone quarry have been granted. • Groundwater Water Access Licences (WALs) and associated works approvals under the NSW Water Management Act 2000 have been issued. • Surface water extraction from the Lachlan river is approved and surface water WALs have been issued. A surface water Water Supply Works Approval has been applied for and under assessment. • A Voluntary Planning Agreement (VPA) has been signed with Lachlan, Parkes and Forbes Shire Councils and the initial annual Community Enhancement Contributions payments have been forwarded to Councils. • For the State Forest within ML 1770, a Compensation Agreement has been signed with the Forestry Corporation of New South Wales. • A Mining Lease Compensation Agreement has been signed with NSW DPIE – Crown Lands and Local Land Services (LLS). • There are no registered Native Title claims over the various components of the Project.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality*	• Major Project risks are Cobalt and Nickel price variation, delays in construction and ramp up of operations, foreign exchange rates, capital cost of the project, production and operational factors. • Clean TeQ has a 5 year off-take agreement with Beijing Easpring for the sale of 20% of the nickel sulphate and cobalt sulphate production at Clean TeQ Sunrise. • Mining Leases under NSW Mining Act 1992 for the main project area and the limestone quarry have been granted and are in good standing

Criteria	JORC Code Explanation	Commentary
	of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories. • Whether the result appropriately reflects the Competent Person's view of the deposit. • The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• A total of 143 million tonnes of Ore Reserves, grading 0.59 Ni%, 0.10% Co and 47 ppm Sc have been classified as Proved and Probable. The Ore Reserves were based on the current inventory of Measured and Indicated Mineral Resources, comprising 160 million tonnes of Mineral Resources grading 0.56% Ni, 0.09% Co and 71 ppm Sc. • Dr James Kyle, Mr Luke Cox and Mr Lee White are satisfied that the stated Ore Reserves accurately reflect the outcome of mine planning and the input of economic parameters into pit optimisation studies.
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	• The currently reported Ore Reserve estimates have not been subject to third party review, but have been internally peer-reviewed.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The Ore Reserve estimate is the outcome of a study undertaken to a Definitive Feasibility Study level with geological, metallurgical, geotechnical, engineering and mining engineering considerations. It has a nominal accuracy of ± 15% and applies to global estimates. • Certain statements concerning the economic outlook for the nickel and cobalt mining industry, financing a large capital project, expectations regarding nickel and cobalt sulphate prices, production, cash costs and to the operating results, growth prospects and the outlook of Sunrise's operations including the likely financing and commencement of commercial operations of the Project and its liquidity and capital sources and expenditure, contain or comprise certain forward-looking statements regarding Sunrise's operations, economic performance and financial condition. • No assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out as a result of, among other factors: changes in economic and market conditions, deterioration in the nickel and cobalt market, deterioration in debt and equity markets that may lead to the Project not being able to be financed, success of business and operating initiatives, changes in the regulatory environment and other government action, fluctuations in nickel and cobalt sulphate prices and exchange rates, business and operational risk management, changes in equipment life, capability or access to infrastructure, emergence of previously underestimated technical challenges, environmental or social factors which may affect a license to operate. • As there has been no mining to date, no production data is available. • There are no undisclosed known areas of uncertainty.