25 June 2018

Clean TeQ Sunrise Definitive Feasibility Study completed

Results confirm the Clean TeQ Sunrise Project's global importance as a sustainable, long-life, low-cost source of high purity cobalt and nickel sulphates for the battery revolution

Outstanding technical and economic outcomes will underpin product offtake agreements, project financing and development

MELBOURNE, AUSTRALIA – Mr Robert Friedland and Mr Jiang Zhaobai, Co-Chairmen of Clean TeQ Holdings Limited (Clean TeQ or Company) (CLQ:ASX; CLQ:TSX; CTEQF:OTCQX), and Mr Sam Riggall, Chief Executive Officer, are pleased to announce the results of the Definitive Feasibility Study (DFS or Study) for the Clean TeQ Sunrise Project (Clean TeQ Sunrise or Project).

The Definitive Feasibility Study confirms Clean TeQ Sunrise's proven status as a globally significant cobalt, nickel and scandium resource which, once developed, will become a major supplier of critical raw materials to the lithium-ion battery market. Lithium-ion batteries represent an important enabler of the clean energy revolution, helping alleviate the profound environmental issues caused by the unconstrained burning of fossil fuels by the global transport sector. Being part of the solution is a core objective for Clean TeQ and a strategic driver to develop Clean TeQ Sunrise.

Study Highlights include:

- **The Definitive Feasibility Study models the first 25 years of production, with sufficient ore reserves to extend beyond 40 years**
- **Strong cash flow supports a post-tax Net Present Value[1] (NPV) of US$1.392 billion (A$1.856 billion[2]) and post-tax Internal Rate of Return (IRR) of 19.1%**
- **The DFS assumes long-term metal prices of:**
    - **Nickel: US$7/lb + US$1/lb sulphate premium (current nickel price[3]: US$6.73/lb)**
    - **Cobalt: US$30/lb (current cobalt price[3]: US$36.63/lb)**

[1] Net Present Value calculated using 8% discount rate
[2] AUD/USD 1/0.75 exchange rate of applied for life of mine
[3] London Metal Exchange price as at 20 June 2018

- **High relative cobalt production results in extremely low average C1[4] operating costs of negative US$1.46/lb Ni after credits[5] and US$4.68/lb Ni before credits[5]**
- **Average production post ramp-up of:**
  - **21,780 tpa nickel and 4,640 tpa cobalt (Year 2 – 6)**
  - **19,620 tpa nickel and 4,420 tpa cobalt (Year 2 – 11)**
  - **18,520 tpa nickel and 3,450 tpa cobalt (Year 2 – 25)**
- **Average scandium oxide production capacity of 80 tonnes per year, which can readily be expanded to 160 tonnes per year, with the DFS conservatively capping sales at 10 tonnes per year for the life of mine. The potential exists to revolutionize the scandium market with a massive, low-cost source of supply in a stable Australian jurisdiction. Clean TeQ has existing agreements with companies including Airbus Group and Chinalco, to develop new light-weight aluminum scandium alloys for the aerospace and automotive sectors**
- **Pre-production capital cost estimate of US$1.33 billion (A$1.77 billion) (excluding US$165m estimated contingency) reflects a significant increase in refining capacity, relative to the 2016 Pre-Feasibility Study (PFS), to provide the opportunity to increase production volumes. The estimate also includes conservative assessment of indirect costs through construction**
- **Clean TeQ Sunrise is set to deliver significant economic and social benefits over many decades…including safe and well-paid employment, infrastructure upgrades, royalties, taxes and local community contributions**
- **Steady-state operations workforce of approximately 300 people to generate strong employment opportunities in the state of New South Wales, Australia**
- **The Project delivery model is to be determined during Q3 2018 with a final investment decision targeted for early 2019 and construction expected to commence shortly thereafter**
- **Completion of Definitive Feasibility Study provides the platform to enable the acceleration of product offtake agreements and project financing**
- **Value optimization work continues to assess significant opportunities to reduce capex in areas of pre-assembly, modularisation, procurement and value-added engineering**
- **Market demand for battery minerals remains extremely strong. YTD2018 global passenger plug-in EV sales were 418k units (up 66% year on year). Electric vehicle lithium ion battery sales in January – April 2018 were 12.3GWh (up 60% year on year)[6]**

Completion of the Definitive Feasibility Study allows the Company to progress the next phase of development milestones including finalisation of offtake

[4] C1 Cash Cost includes mining, processing, site overheads (including administration), haulage and port charges
[5] Credits from cobalt sulphate, scandium oxide and ammonium sulphate
[6] Source: Bernstein Research

agreements, completion of project financing and commencement of construction subject to the final investment decision, targeted for early 2019.

The Project is forecast to deliver over US$14 billion in revenue and average annual EBITDA[7] of US$344 million over the first 25 years of operations. Average C1 cash costs of negative US$1.46/lb of nickel (net of by-product credits[8]) positions the Project to generate high margins and powerful cash flows over many decades.

Compared to the Pre-Feasibility Study completed and announced for the Project in 2016 and the subsequent NI 43-101 Technical Report completed in October 2017, the total capital cost estimate for the Project has increased due to a number of improvements and enlargement of the Project's scope, designed to deliver substantially increased revenue, EBITDA and return on capital. These improvements to the Project, as outlined below, have been developed to allow the Company to respond to strong demand from major automobile producers and battery manufacturers looking for stable and secure sources of high purity battery raw materials.

Figure 1: Members of Clean TeQ's technical team on site at the Sunrise Project

Improvements since the 2016 Pre-Feasibility Study include upsizing the refinery capacity, increasing surge capacities and revising the mine plan to significantly bring forward future cobalt metal production. Importantly, while the capital cost estimate is higher than previous studies, the DFS demonstrates the Project's outstanding economics based on an improved revenue profile from increased metal production combined with current long-term commodity price forecasts.

The Definitive Feasibility Study capital cost estimate assumes the Project is delivered by Clean TeQ in conjunction with SNC-Lavalin and McDermott

[7] EBITDA is a non-IFRS measure but is commonly used in evaluating financial performance. While the common definition of EBITDA is "Earnings Before Interest Expense, Taxes, Depreciation and Amortization", as used in the DFS, EBITDA means revenue less mining and processing costs, haulage & port charges, marketing & selling expenses and royalty payments. EBITDA, as used in this news release, may not be comparable to EBITDA presented by other companies.
[8] By products include cobalt, scandium oxide and ammonium sulphate

International[9] (collectively the Alliance), whereby the three parties will jointly manage the execution of the Project, including engineering, procurement and construction. As previously announced, the Company is also evaluating a competing Engineering-Procurement-Construction (EPC) proposal to deliver the project under a fixed-price contract. The competing proposal is highly credible, having been received from one of China's largest engineering and construction groups.

Clean TeQ remains in ongoing discussions with both the potential Chinese EPC contractor and the Alliance partners and expects to decide on the final delivery model for the Project during the third quarter of 2018. The decision on the delivery model is not expected to affect the timing of a final investment decision expected in early 2019, nor the commencement of construction.

Commenting on the outcomes of the Definitive Feasibility Study, Clean TeQ's Co-Chairman, Robert Friedland, said: "Completion of this seminal study is one of the most significant milestones in Clean TeQ's history. Our entire team are delighted that the results confirm Clean TeQ Sunrise's position as a globally important source of high purity raw materials to the lithium ion battery market, which are primarily composed of nickel and cobalt sulphate on the critical cathode side of the battery.

"Technological disruption in electrically driven transportation and energy storage is accelerating. Nickel and cobalt sulphate and scandium are expected to be in massive demand as the world rapidly transitions towards a future dependent on renewable energy and the electrification of global transportation systems.

"The prospects of creating extremely substantial value for all of our global stakeholders is apparent from the results of the Definitive Feasibility Study announced today. Our management is truly excited to see the Sunrise Project move into the next stage of development."

Clean TeQ's CEO, Sam Riggall, also commented: "Since acquiring the Clean TeQ Sunrise Project our management team has had a singular vision for how we combine world-leading technology and hydrometallurgical processing capability to develop this Tier-1 Australian mineral resource. The result is a business which is uniquely positioned as a permitted, shovel ready, long-life, low-cost producer of high purity battery materials located in the most stable and favourable of international mining jurisdictions.

"Our first priority is to progress and finalise current offtake discussions for the production which remains uncontracted, and secure advantageous funding for the Project. In our engagement with the market we are seeing no shortage of demand for high quality, battery grade nickel and cobalt sulphates and we are confident that binding long-term sales contracts will be secured in the coming months. Our banking syndicate, which includes International Commercial Bank of China (ICBC), National Australia Bank, Natixis and Societe Generale, is standing by to commence work in earnest on a debt finance facility. We have a clear strategy in place to complete the financing before making a final decision to proceed with development of the Project in early 2019.

[9] McDermott International merged with CB&I in May 2018

"I would like to thank the entire Clean TeQ team, supported by our various project consultants, who have worked extremely hard to deliver this study. We are now focused on timely delivery and execution."

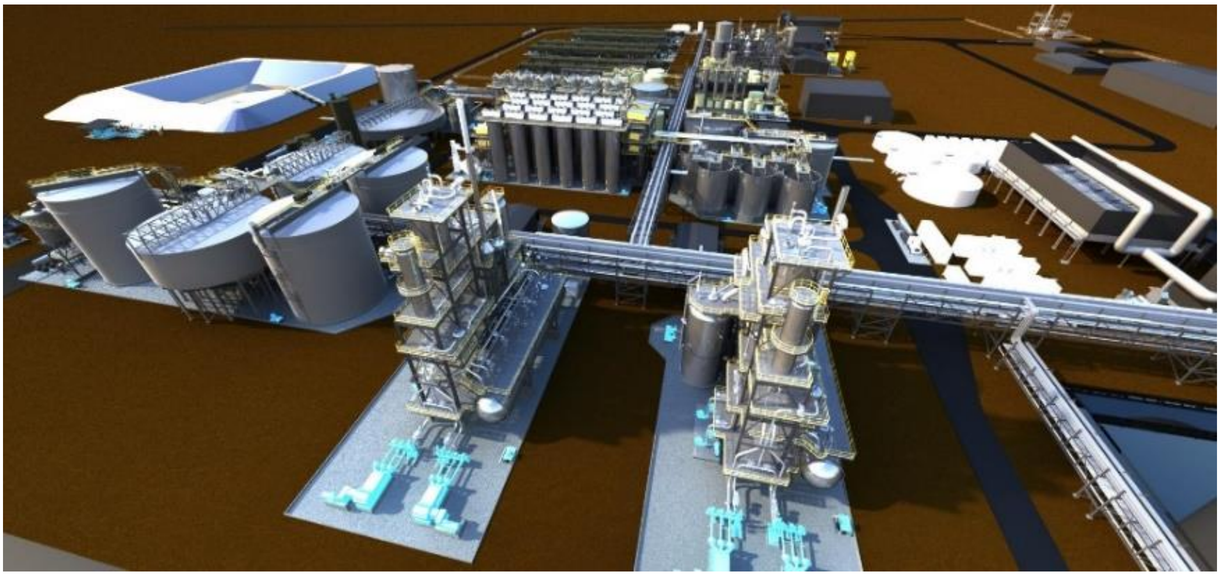


Figure 2: 3D image of Clean TeQ Sunrise Processing Plant

A detailed overview of the DFS outcomes commences on the following page.

A conference call to discuss the DFS will be held for analysts, investors and media at 10.30am AEST today, 25 June 2018. Dial in details are below.
All callers to use universal access code: **2179249**

Australian participants:	1800 123 296 (toll free) or +61 2 8038 5221
Canadian participants:	1 855 561 6766 (toll free)
USA participants:	1 855 293 1544
United Kingdom participants:	0808 234 0757
Hong Kong participants:	800 908 865
All other countries:	+61 2 8038 5221

For more information, please contact:

Richard Glass, Investor Relations (Australia)	+61 3 9797 6781
Evan Young, Investor Relations (North America)	+1 647 808 2141

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.

CLEAN TEQ SUNRISE DEFINITIVE FEASIBILITY STUDY

SECTION 1 – SUMMARY OF OUTCOMES

The DFS financial model is based on a 2.5 Mtpa ore throughput rate and initial mine life of 25 years. On this basis, Clean TeQ Sunrise will deliver in excess of US$14 billion in life of mine (LOM) revenue and approximately US$8.6 billion in LOM EBITDA. Average C1 cash costs after cobalt and other by-product credits are negative US$1.46/lb Ni, positioning the Project in the lowest quartile on the nickel cost curve.

An operational overview of the Project can be found in Appendix 1.

Dollar amounts are US$ unless otherwise indicated.

Table 1: Summary of Outcomes

Parameter	Assumption/Outcome
Autoclave Throughput*	**2.5 Mtpa**
Initial Life of Mine**	**25 years**
Initial Life of Mine Revenue	**$14.07 billion**
Initial Life of Mine EBITDA	**$8.60 billion**
Average Annual EBITDA	**$344 million**
Pre-production Capital Estimate***	**$1.49 billion**
Net Present Value (NPV)****	**$1.39 billion**
Internal Rate of Return (IRR) (post tax)	**19.1%**
Average C1 operating cash costs (Year 2-25) – inclusive of by-product credits	**($1.46/lb) Nickel**
Average C1 operating cash costs (Year 2-25) – exclusive of by-product credits	**$4.68/lb Nickel**
Project payback (simple)	**4.3 years**

*Permitted autoclave throughput rate following 24-month commissioning and ramp up period
** 25 years is the initial Life of Mine that has been modelled for the DFS. Sufficient reserves exist to support a 40+ year life of mine
***Includes $165 million contingency on capital costs
****Post tax, 8% discount, 100% equity, real terms

Table 2: Key Assumptions

Key Assumptions	
Nickel price*	**US$7/lb LME + US$1/lb sulphate premium**
Cobalt price*	**US$30/lb LME/LMB + nil sulphate premium**
Scandium oxide price	**US$1,500/kg**
Exchange Rate (USD:AUD)	**US$0.75 : A$1.00**

*Prices based on bank/broker commodity price forecasts for metal content. Premium based on industry research.

Summary of commodity price assumptions

The commodity price assumptions used in the DFS are based broadly on long-term analyst consensus price forecasts plus a sulphate premium for nickel. Consensus forecasts have been based on data from a range of global banks who have active research into these commodities.

For nickel sulphate, the DFS has assumed a long-term, flat US$7.00/lb LME (London Metal Exchange) nickel price plus a US$1.00/lb sulphate premium. The quoted premium for nickel sulphate has averaged US$1.62/lb Ni over the past 12 months.

For cobalt sulphate, the DFS has assumed a long-term, flat US$30.00/lb LME/LMB (London Metal Bulletin) cobalt price with nil premium.

The Company believes that the scandium market has considerable latent demand potential however has historically suffered from significant supply constraints. While scandium oxide prices have historically ranged from US$2,000-4,000/kg (see US Geological Survey Commodity Reports), the DFS has assumed a forward price of US$1,500/kg, which is the price at which the Company expects significant additional demand growth to be stimulated.

SECTION 2 – PRODUCTION PROFILE

The Project will become a globally significant producer of nickel sulphate and cobalt sulphate for the lithium-ion battery market. The DFS assumes a two-year commissioning and ramp up to nameplate capacity. Average production rates for the first 10 years of full production (Year 2 – 11) are shown in Table 3 below.

Table 3: Production Summary (Year 2 – 11)

Average Production (Year 2 – 11)	Outcome
Nickel sulphate	89,270 tpa
Cobalt sulphate	21,260 tpa
Scandium hydroxide intermediate*	131.8 tpa
Ammonium sulphate	82,000 tpa
Contained nickel metal	19,620 tpa
Contained cobalt metal	4,420 tpa

*Scandium hydroxide will be batch refined into scandium oxide on site. Financial model assumes scandium oxide sales of only 10 tonnes per annum with surplus to be stockpiled on site for later processing as the market develops.

Table 4: Initial Life of Mine Production

Initial Life of Mine Production (Year 1 – 25)		
Nickel Production		450,871 tonnes
Cobalt Production		84,007 tonnes
Scandium Oxide Production*		250 tonnes
Scandium Hydroxide Production (excess stockpiled)		2,337 tonnes
Average Strip Ratio		1.2:1
Average Recoveries**	*Nickel*	92.6%
	Cobalt	91.2%

*Financial model assumes scandium oxide sales of only 10 tonnes per annum with surplus to be stockpiled on site for later processing as the market develops. Scandium hydroxide will be refined into scandium oxide on site.
**High Pressure Acid Leach (HPAL) to final product.

Table 5: Life of Mine Revenue Breakdown* (Years 1 - 26)

Life of Mine Revenue	Revenue ($US billion)	Proportion of Revenue
Nickel Sulphate	$7.8	56.5%
Cobalt Sulphate	$5.6	39.5%
Scandium Oxide**	$0.4	2.7%
Ammonium Sulphate	$0.2	1.3%
TOTAL	**$14.1**	**100.0%**

*Assumed commodity prices - nickel sulphate - US$8/lb; cobalt sulphate - US$30/lb; scandium oxide - US$1,500/kg; ammonium sulphate - US$90/tonne
**Assumes sales of 10tpa
Note: Figures may not sum due to rounding

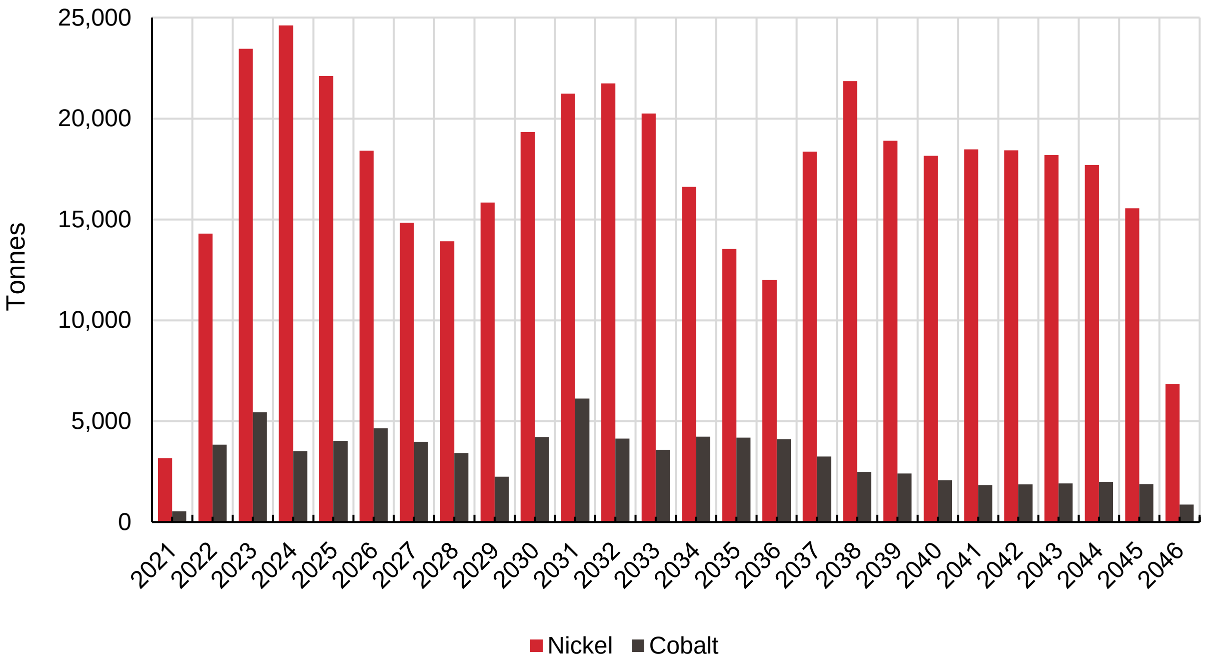
Cobalt and Nickel Production

The Project will produce nickel and cobalt in sulphate form, namely nickel sulphate hexahydrate ($NiSO_4 \cdot 6H_2O$) and cobalt sulphate heptahydrate ($CoSO_4 \cdot 7H_2O$) – the form in which the lithium ion battery industry requires these metal units to produce battery cathode precursor (Figure 3).

Figure 3: Samples of cobalt sulphate (left) and nickel sulphate (right) produced from Clean TeQ Sunrise

For the 10 years following the first year of ramp-up, the Project will produce an average of 19,620 tpa of nickel in sulphate form, and 4,420 tpa of cobalt in sulphate form. In years when higher grade material is being mined and processed, production can be flexed to almost 25,000 tpa nickel and almost 7,000 tpa cobalt (but not simultaneously).

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



Scandium Production

The Project will also have the capacity to produce an average of up to approximately 93.5 tpa of scandium oxide (stockpiled as scandium hydroxide intermediate product) over the first 25 years, with the financial model assuming only 10 tpa to be refined to high purity scandium oxide form and sold to end users. This conservative estimate of sales volumes reflects the relative immaturity of the scandium market and the need for end users 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 order as the market grows.

A scandium upside case is outlined in Section 4 to demonstrate the impact to NPV in the event scandium oxide sales develop beyond the DFS forecast.

A dedicated scandium refinery with 80 tpa high purity scandium oxide refining capacity is included in the DFS capital cost estimate.

Ammonium Sulphate Production

Clean TeQ Sunrise will also produce approximately 80,000 tpa 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 DFS is US$90/tonne (FOB).

SECTION 3 – FINANCIAL EVALUATION

The valuation of the Project was conducted using a discounted cash flow (DCF) methodology over an initial 25-year mine life. The model assumed a real 8% discount rate, 100% equity financed and a 30% corporate tax rate reducing to 25% over the duration of the Project, in line with proposed Enterprise Tax Plan No. 2 2017[10]. Commodity prices were assumed to be a flat

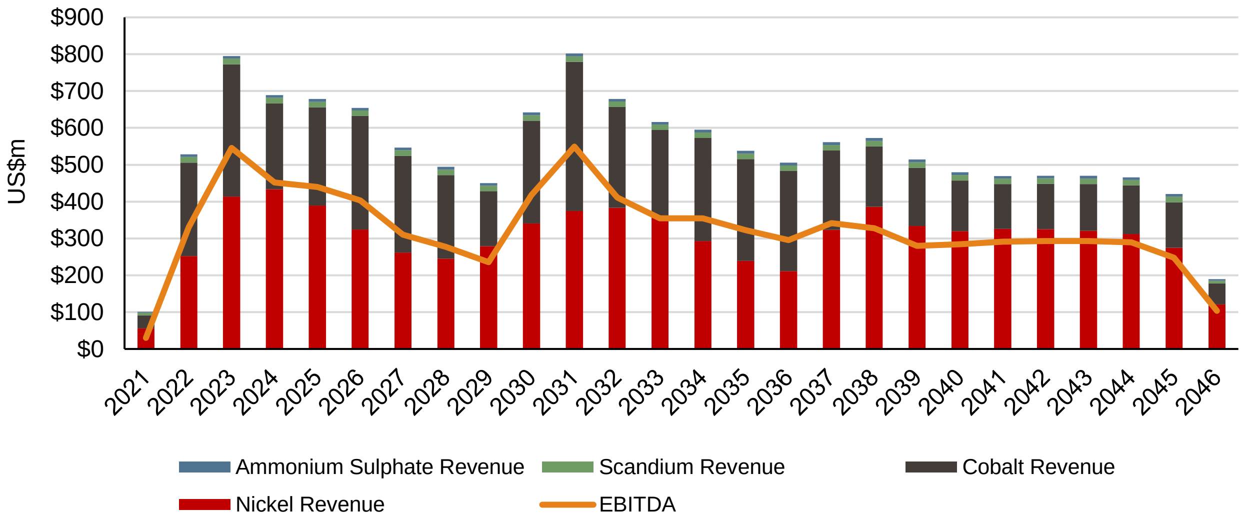
[10] Treasury Laws Amendment (Enterprise Tax Plan No. 2) Bill 2017 was introduced to the Australian House of Representatives on 11 May 2017. If passed, it will progressively reduce the lower corporate tax rate to 25% for all corporate entities by 2026-27.

US$8/lb for nickel (inclusive of a US$1.00/lb sulphate premium) and US$30/lb for cobalt for the life of mine.

Based on this analysis, the Project returns a NPV_8 (post-tax) of US$1.392 billion and a post-tax Internal Rate of Return (IRR) of 19.1%.

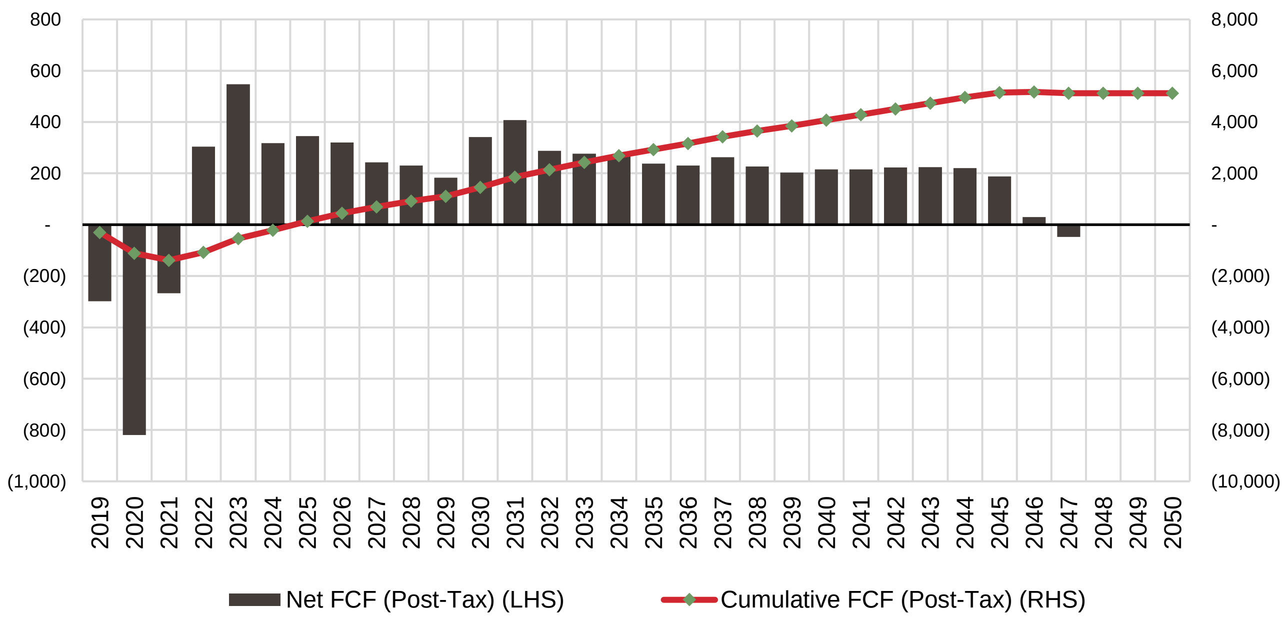
Average annual EBITDA over the life of mine is estimated to be US$344 million, peaking at ~US$550 million in years when the operation is running at maximum production rates. Figure 5 below shows the revenue and EBITDA profile over the 25-year modeled life of mine.

Figure 5: Total Projected Revenue and EBITDA ($USm)



With an estimated construction duration of 24 months and a 24 month ramp up, the Project is expected to become cash flow positive in 2022 and generate cumulative free cash flows of circa US$5 billion over the 25-year modelled initial life of mine. Figure 6 displays the cumulative and net free cash flow generation for the Project.

Figure 6: Cumulative and Net Free Cash Flow Projection ($USm)



Capital Cost Estimate

The DFS pre-production capital cost estimate for the Project is US$1.33 billion (A$1.77 billion) (exclusive of US$165m of contingency) and has been estimated at a P50 (+/- 15%) level of accuracy. The formal construction period is expected to be 24 months, assuming that early works to establish site power, water and the accommodation camp have been completed by the commencement of construction. The capital estimate includes all mine and process plant utilities and infrastructure, power tie-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.

Table 6: Capital Cost Breakdown (rounded to nearest US$m)

Project Area	US$m
Mining	17
Site Development	12
Process Plant	397
Reagents	138
Services & Infrastructure	227
Total Directs	**791**
Indirects, including EPCM	295
Owners Costs including Spares & First Fills	121
Contractor overhead & profit	119
Capital Cost, excluding Contingency	**1,326**
Contingency	165
Total Capital Cost Estimate	**1,491**

Compared to the Pre-feasibility Study (**PFS**) completed for the Project in 2016 and the subsequent NI 43-101 Technical Report completed in October 2017, the total capital cost estimate for the Project has increased due to a number of changes of scope designed to deliver substantially increased revenue, EBITDA and return on capital as well as including a range of measures to de-risk the development and operation of the Project. These scope changes include an increase to the size of the refinery to enable increased metal production, increasing surge capacities and revising the mine plan to bring forward cobalt metal production.

Operating Costs

Clean TeQ Sunrise is unique among laterite projects due to its high cobalt content relative to nickel and its low acid-consuming elements such as calcium, magnesium and aluminium." The result is a Project that is expected to deliver lowest quartile C1 cash costs averaging negative US$1.46/lb Ni once by-product credits from cobalt, scandium and ammonium sulphate are factored in (see Figure 7).

Figure 7 demonstrates the significant effect cobalt credits have on C1 operating costs. The cobalt credits payable at the assumed cobalt price of US$30/lb result in an average US$5.60 credit for every pound of nickel produced.

Figure 7: Clean TeQ Sunrise C1 Cash Costs

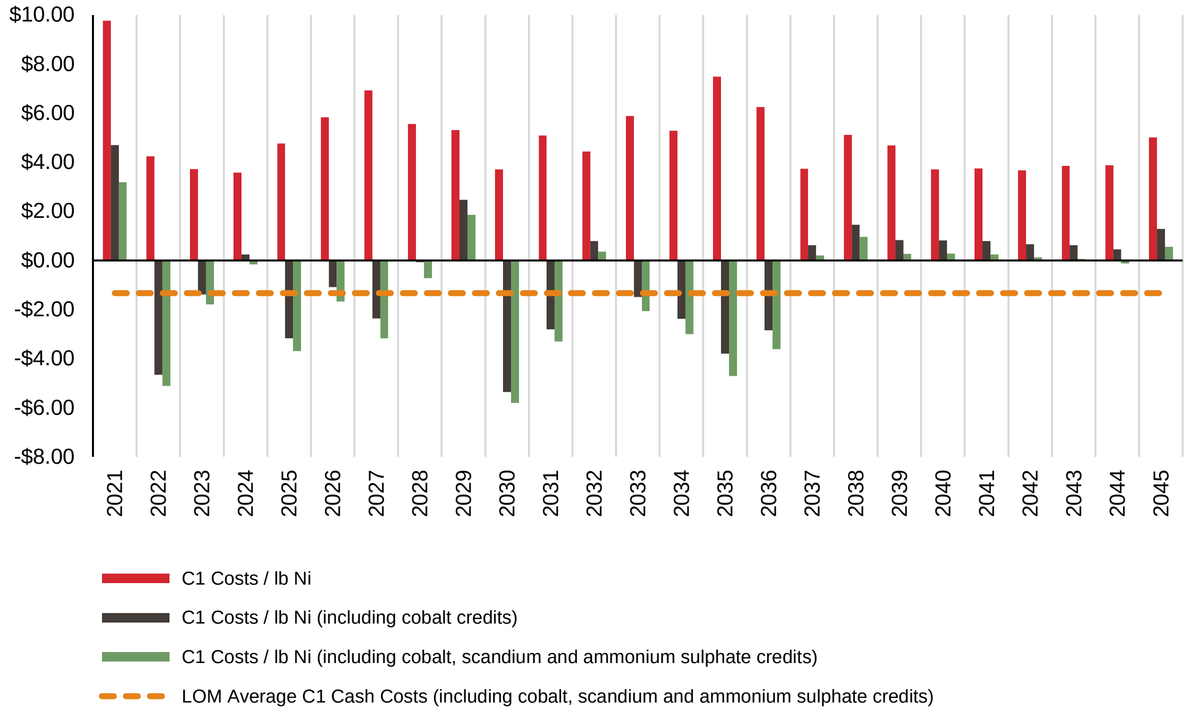
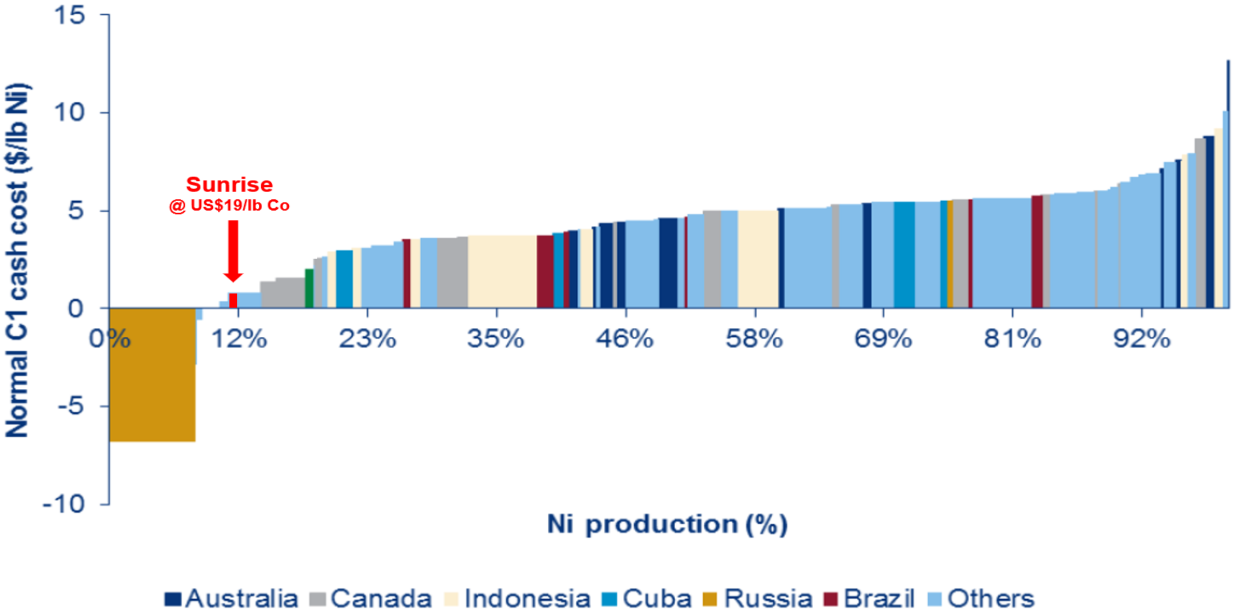


Table 7 summarises the estimated average C1 operating costs following the initial commissioning and ramp up period.

Table 7: Average C1 operating costs (Years 2 – 25)

Cost Centre	US$/lb Ni before credits	US$/lb Ni after credits
Mining	$1.14	$1.14
Processing	$3.33	$3.33
Haulage & Port	$0.07	$0.07
General & Administration	$0.14	$0.14
Cobalt Credits		($5.60)
Scandium Credits (assumes sales capped at 10tpa)		($0.36)
Ammonium Sulphate Credits		($0.18)
Total C1 Operating Cost	**$4.68**	**($1.46)**

Figure 8: Clean TeQ Sunrise Normal C1 Cash Cost Position (Operations Plus Projects), 2025 (incl. by-product credits)[11]



The DFS has assumed an operating work force of approximately 300 full-time equivalent staff and contractors (excluding mining contractor personnel), with a construction workforce peaking at approximately 1,300. Mining costs were estimated assuming contractor mining rates.

Processing inputs, primarily reagents such as sulfur and limestone, as well as other consumables were based on supplier quotes.

Sulphur is assumed to be sourced from Canada which will be shipped from Vancouver to Newcastle where it will be railed to the rail siding before trucking to site.

High quality limestone supply will be sourced from a local supplier and trucked to site.

Australian Commonwealth, state and local government charges and levies are included in the cost estimate, including the 4% NSW state revenue royalty (less allowable deductions) and a 2.5% gross revenue royalty payable to Ivanhoe Mines.

SECTION 4 – SENSITIVITY ANALYSIS

Base Case Sensitivity Analysis

As part of the DFS, sensitivity analysis was conducted to determine the effect of key variables on the base case post-tax NPV_8 of US$1.39 billion. The results of this analysis are shown in Table 8 and Table 9, below.

Table 8: NPV Sensitivity Analysis (US$m)

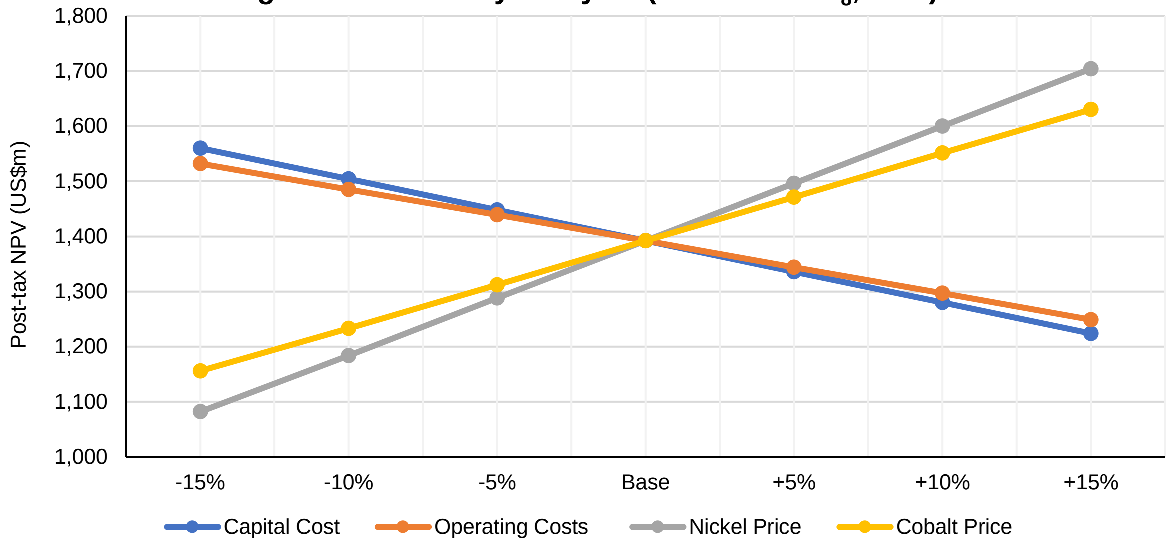
	-15%	-10%	-5%	Base	+5%	+10%	+15%
Capital Cost	1,560	1,504	1,448	**1,392**	1,336	1,280	1,224
Operating Costs	1,532	1,485	1,439	**1,392**	1,344	1,297	1,249
Nickel Price	1,082	1,184	1,288	**1,392**	1,496	1,600	1,704
Cobalt Price	1,156	1,233	1,312	**1,392**	1,471	1,551	1,630

[11] Source: Wood Mackenzie. The assumed cobalt price for 2025 for the purposes of this chart is US$19/lb in real 2017 US$

Table 9: NPV Sensitivity Analysis (US$m)

	-4%	-2%	-1%	Base	+1%	+2%
Nickel Recovery	1,302	1,347	1,369	**1,392**	1,414	1,437
Cobalt Recovery	1,321	1,357	1,374	**1,392**	1,409	1,427

Figure 9: Sensitivity Analysis (Post-tax NPV_8, real)



Spot Price Sensitivity Analysis

The Company has used commodity prices in line with consensus forecasts for the base case evaluation. Table 10 demonstrates the Project's economics at spot nickel and cobalt prices as at 12 June 2018.

Table 10: Spot Commodity Price Scenario

Nickel Sulphate Price	**US$7.73/lb (US$6.73/lb[12] + US$1/lb premium)**
Cobalt Sulphate Price	**US$36.63[12]/lb**
LOM Revenue	**US$15.02 billion**
Project EBITDA	**US$9.49 billion**
C1 Cash costs (before cobalt credits)	**US$4.75/lb**
C1 Cash costs (after cobalt credits)	**(US$2.63/lb)**
NPV_8 (real, post-tax)	**US$1.67 billion**
IRR (real, post-tax)	**21.06%**

Scandium Upside Sensitivity Analysis

In recognition of the potential for scandium demand to accelerate once a reliable supply has been established, the DFS also modelled the impact of scandium sales increasing to a steady run rate of 80 tpa by Year 7. This compares to LOM annual sales of 10 tpa assumed in the base

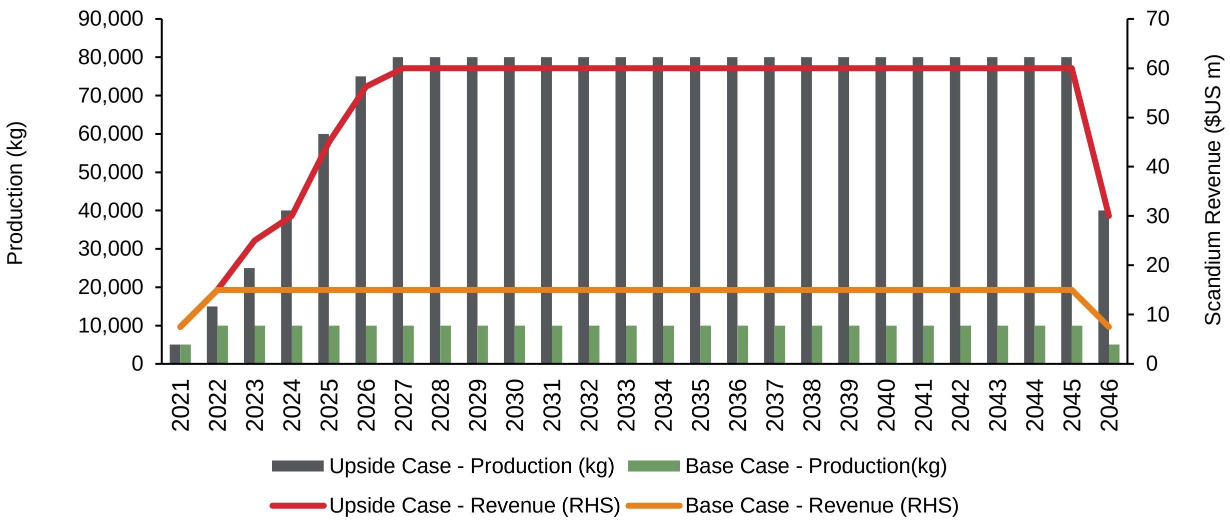
[12] London Metal Exchange price at 20 June 2018

case. The assumed long-term price in this scenario is US$750/kg to reflect the expected change to supply/demand dynamics from incentive pricing used to motivate faster adoption of scandium-containing alloys by customers.

As displayed in Figure 10, the impact the increase in sales has on scandium revenue is substantial.

In the scandium upside case, Project NPV rises by approximately US$220 million to US$1.61 billion.

Figure 10: Scandium Revenue - Base vs Upside Case



Work continues with many of our partners – Universal Alloy Corporation, Chinalco, and Airbus Group – to develop new aluminium scandium alloys for the aerospace and automotive sectors. Development work to date has been promising with a number of newly developed products now undergoing production testing.

SECTION 5 – RESOURCE & RESERVES

The DFS for Clean TeQ's Sunrise Nickel-Cobalt-Scandium Project is based on the Mineral Resource Estimate as released to the ASX on 9 October 2017 and the 2018 Ore Reserve Estimate detailed below in this release. Both estimates have been prepared in accordance with the guidelines of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ('the JORC Code'), 2012 Edition.

Clean TeQ published a 2017 Mineral Resource Estimate (effective 9 October 2017) of 39.9 Mt Measured at 0.75% nickel and 0.15% cobalt, 47.0 Mt Indicated at 0.55% nickel and 0.12% cobalt and 14.2 Mt Inferred at 0.24% nickel and 0.11% cobalt using a 0.06% cobalt cut-off applied as well as a Mineral Resource Estimate using a 0% cobalt cut-off.

The 2017 Mineral Resource Estimate is tabulated below at 0% and 0.06% cobalt grade cut-offs.

Table 11: Clean TeQ Sunrise Nickel and Cobalt and Scandium 2017 Resource Estimate (at 0% and 0.06%Cobalt cut-offs)

	Category	Tonnage (Mt)	Grade Ni (%)	Grade Co (%)	Grade Sc (ppm)	Ni Metal Tonnes	Co Metal Tonnes	Scandium Metal (t)	Scandium Oxide (t)
0% Co cut off	Measured	68.8	0.63	0.10	62	436,000	69,000	4,238	6,500
0% Co cut off	Indicated	93.9	0.47	0.08	86	437,000	75,000	8,096	12,417
0% Co cut off	Inferred	20.6	0.23	0.09	283	48,000	18,000	5,829	8,940
0.06% Co cut off	Measured	39.9	0.75	0.15	61	299,000	59,000	2,439	3,732
0.06% Co cut off	Indicated	47.0	0.55	0.12	96	259,000	58,000	4,518	6,913
0.06% Co cut off	Inferred	14.2	0.24	0.11	315	35,000	16,000	4,472	6,843

The Mineral Resource and Ore Reserve for this DFS has increased significantly from the 2016 PFS, which is primarily the result of the following key factors:

- An overall geological review of the Sunrise Deposit Project Area by Clean TeQ resulted in the decision to model the cobalt, nickel, scandium (and platinum) mineralisation together as a single polymetallic deposit;
- The polymetallic nature of the deposit allowed for the appropriate removal of individual cut-off grades and allowed for inclusion of blocks that had previously been excluded from the Resource. Additionally, this approach provides the ability to apply 'block support' (i.e. the blending of higher and lower-value blocks) to blocks that may otherwise be classified as waste during Ore Reserve estimation;
- Refinements to the geological interpretation, including the use, in closely-spaced areas of drilling, of smaller blocks, which has allowed for more selective rejection of low grade and waste material;
- The application of refinements to the geological and resource modelling, including the use of techniques such as 'unfolding', 'indicator kriging' and 'sub-domaining' of high-grade cobalt and scandium zones within the Deposit;
- Improved control of deleterious elements (such as aluminium, silicon, manganese and magnesium) within the main lateritic mineralisation zones (i.e. the Goethite and Silicified Goethite Zones);
- Mining and processing of higher-grades and higher-revenue ore blocks during the initial years of operations, with processing of lower-grade ore beyond the DFS financial modelling of 25 years, providing a mine life in excess of 40 years;

- Comprehensive suite of metallurgical testwork and pilot plant operation, supporting processing and metallurgy recoveries used in the DFS.

An Ore Reserve Estimate (effective 22 June 2018) has also now been completed for the Sunrise Deposit based on the Measured and Indicated Mineral Resources (at a 0% Co cut-off) tabled above. The Mineral Resources reported are inclusive of the Ore Reserves for the Project

As shown in Table 12 below, total current Ore Reserves for the Sunrise Deposit are 147.4 Mt at 0.56% nickel, 0.09% cobalt and 53 ppm scandium.

Table 12: Clean TeQ Sunrise Ore Reserve Estimate (2018)

Category	Tonnage (Mt)	Grade Ni (%)	Grade Co (%)	Grade Sc (ppm)
Proven	65.5	0.65	0.10	48
Probable	81.9	0.49	0.08	57
TOTAL	**147.4**	**0.56**	**0.09**	**53**

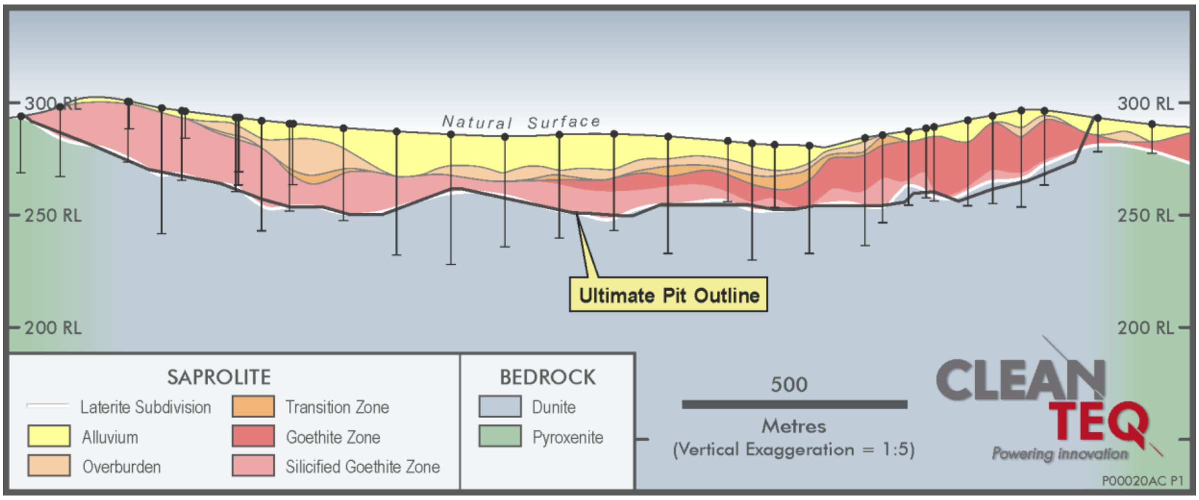


Figure 11: Clean TeQ Sunrise Typical Section with Ultimate Pit boundary

Importantly, grade variability across the resource allows significant optimization of the mine plan, especially for cobalt. 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 Clean TeQ with the opportunity to significantly increase cobalt production above the rates detailed herein if optimal pricing parameters prevail in the early years of the mine life. This is the reason why certain parts of the process plant have been increased in size since the PFS, to provide the Company with the opportunity to flex production rates in response to prevailing commodity prices in the early years of the mine.

SECTION 6 – COMMUNITY AND SOCIAL BENEFITS

Over the estimated mine life of more than 40 years, Clean TeQ Sunrise is expected to deliver substantial social and financial benefits to local, regional and national stakeholders. These include employment opportunities, taxes, royalties, council rates, upgrades to local infrastructure, community enhancement contributions and other local community initiatives.

Figure 12: Clean TeQ local community consultation

Clean TeQ Sunrise is expected to create hundreds of direct and indirect jobs in regional NSW through the construction and operations phase. The peak construction workforce is expected to be 1,000 people with a steady-state operations workforce of 300 people (plus mining and logistics contractors and ancillary services). During steady-state operations the majority of these workers are expected to reside in local communities. Employee salaries and wages are estimated at approximately A$1.9 billion over the life of mine, including mining contractor wages but excluding logistics contractors and ancillary services.

Other benefits to local communities includes contributions to compensate communities for local project impacts (principally road upgrades and maintenance), community enhancement contributions, council rates and additional ongoing local community development initiatives. Telecommunications will also be greatly enhanced around the Project area, to the benefit of local residents. Additional benefits are also expected for local businesses as suppliers of goods and services to Clean TeQ Sunrise.

The New South Wales and Federal Governments are also forecast to benefit significantly from the Project in the form of state royalties and payroll tax, expected to be ~A$630 million, and corporate tax of ~A$2.2 billion over the initial 25-year mine life modelled by the DFS.

SECTION 7 – NEXT STEPS & SCHEDULE

The outstanding outcomes generated by the DFS confirm the strong technical and economic viability of the Project. Next steps are to progress the Project towards FID by the Board in early 2019 with the commencement of construction expected shortly thereafter.

To achieve FID within the above timeframe, there are several key workstreams which need to be completed.

Selection of Project Delivery Model

Clean TeQ has two proposed delivery models for Project execution; the Integrated Alliance model with SNC-Lavalin and McDermott and an EPC (Engineer-Procure-Construct) model using a Chinese contractor. Discussions are ongoing with the parties to ensure both proposals are thoroughly assessed with respect to delivered cost, risk and capability. The preferred model will be selected during Q3 2018 and any material impacts to the outcomes of the DFS will be reported.

Product Offtake

Clean TeQ has been actively marketing to end users and intermediaries in the battery supply chain over the past 18 months. These discussions have progressed well and, with the DFS now complete, the Company expects to sign further binding offtake agreements in coming months.

Project Financing

The Company appointed four leading banks as Mandated Lead Arrangers (MLAs) in late 2017, who have made indicative best efforts undertaking to support the Project with a total of US$500 million of project debt finance. It is anticipated that the Project's cash flow will support additional gearing, with additional debt funding to be sought as part of a syndication process to be led by the MLA banks. The MLA group, which includes National Australia Bank, Natixis, Societe Generale and ICBC, is engaging an independent technical expert to review the outcomes of the DFS with a view to progressing the indicative offer of support to a binding term sheet prior to FID. Having completed the DFS, this work can now commence.

In addition, the Company is assessing other opportunities to raise the remaining equity required to build the Project, including involving a potential offtake counterparty, streaming/royalty transactions or other strategic investor at Project level.

Early Works

As previously disclosed, Clean TeQ has commenced some of the early works activities to prepare the Project for formal construction post-FID. These works include connecting the site to power and water, installation of the construction accommodation facility and early site works. Planning and works are well underway, with activity set to increase during the second half of 2018.

Detailed Front-End-Engineering & Design

While a substantial volume of work has been completed as part of the DFS, there is a substantial body of work required to produce the final designs and detailed engineering to enable construction to commence as early as possible post FID. This work is underway and will continue through to the end of 2018.

The current indicative Project schedule is as follows:

Final Investment Decision (FID)	Q1 2019
Formal construction (24 months)	Q1 2019 – Q1 2021
First ore into process plant	Q1 2021
First production & Ramp Up	Q1 2021 – Q1 2023

– ENDS –

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, the Clean TeQ Sunrise Project, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as "may", "would", "could", "will", "intend", "expect", "believe", "plan", "anticipate", "estimate", "scheduled", "forecast", "predict" and other similar terminology, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. These statements reflect the Company's current expectations regarding future events, performance and results, and speak only as of the date of this new release.

Statements in this news release that constitute forward-looking statements or information include, but are not limited to: statements regarding the selection of a project delivery model during Q3 2018; the negotiation and conclusion of further binding offtake agreements; the settlement of completion of a binding term sheet from the MLA group prior to the FID; the potential investment by a strategic investor and/or additional equity finance; completing of final design and detailed engineering work through the end of 2018; the making of a Final Investment Decision in Q1 2019; commencement and completion of construction between Q1 2019 and Q1 2021; commissioning in Q1 2021; first production and ramp up between Q1 2021 and Q1 2023; and the potential for a scandium market to develop and increase.

In addition, all of the results of the Sunrise Project DFS constitute forward-looking statements and forward-looking information. The forward-looking statements includes metal price assumptions, cash flow forecasts, projected capital and operating costs, metal recoveries, mine life and production rates, and the financial results of the Sunrise Project DFS. These include statements regarding the Sunrise Project IRR; the Project's NPV (as well as all other before and after taxation NPV calculations); life of mine revenue; average annual EBITDA; capital cost; average C1 operating cash costs before and after by-product credits; proposed mining plans and methods, a mine life estimate; project payback period; the expected number of people to be employed at the Project during both construction and operations and the availability and development of water, electricity and other infrastructure for the Sunrise Project.

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

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

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

This news release also contains references to estimates of Mineral Resources and Mineral Reserves. The estimation of Mineral Resources and Mineral Reserves is inherently uncertain and involves subjective judgments about many relevant factors. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The accuracy of any such estimates is a function of the quantity and quality of available data, and of the assumptions made and judgments used in engineering and geological interpretation, which may prove to be unreliable and depend, to a certain extent, upon the analysis of drilling results and statistical inferences that may ultimately prove to be inaccurate. Mineral Resource or Mineral Reserve estimates may have to be re-estimated based on, among other things: (i) fluctuations in nickel, cobalt or other mineral prices; (ii) results of drilling; (iii) results of metallurgical testing and other studies; (iv) changes to proposed mining operations, including dilution; (v) the evaluation of mine plans subsequent to the date of any estimates; and (vi) the possible failure to receive required permits, approvals and licences.

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.

COMPETENT & QUALIFIED PERSONS STATEMENTS

The information in this report that relates to Mineral Resources is based on information compiled by Mr Lynn Widenbar, a member of the Australasian Institute of Mining and Metallurgy. Mr Widenbar is a full-time employee of Widenbar and Associates. Mr Widenbar is a consultant to Clean TeQ and has sufficient experience which is relevant to the style of mineralisation and type of deposit and to the activity which he has undertaken 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". Mr Widenbar consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

The sections in this report that relate to the Clean TeQ Sunrise Ore Reserves are based on information compiled by; Mr Luke Cox, Mr Tim Harrison and Mr Lee White. Mr Cox is a full-time employee of Clean TeQ. Mr Harrison is a full-time employee of Clean TeQ and holds shares and options in the company. Mr White is employed by Kalem Group Pty Ltd and is engaged as an internal consultant to Clean TeQ.

Mr Cox, Mr Harrison and Mr White are all Members of the Australasian Institute of Mining and Metallurgy and each 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 qualified persons who are responsible for the disclosures regarding the DFS in this news release are Mr Lynn Widenbar, a member of the Australasian Institute of Mining and a member of the Australian Institute of Geoscientists (AIG) (for the Mineral Resource) and Mr Tim Harrison MAusIMM (CP Met) for the disclosures other than the Mineral Resource. Mr Harrison and Mr Widenbar are both Qualified Persons under the terms of NI 43-101. Mr Widenbar is a full-time employee of Widenbar and Associates and is independent of Clean TeQ. Mr Harrison is Clean TeQ's Principal Metallurgist and is not independent of Clean TeQ. Mr Harrison and Mr Widenbar (for the Mineral Resource only) supervised the preparation of the DFS and have reviewed and approved the scientific and technical information in this news release, including information relating to the DFS. Mr Harrison has also verified the technical data disclosed in this news release.

An updated NI 43-101 technical report with respect to the Clean TeQ Sunrise project will be filed on SEDAR and with other applicable authorities within 45 days of this news release.

APPENDIX 1

OVERVIEW OF OPERATIONS

Clean TeQ Sunrise is located near the town of Fifield in central New South Wales, ~370 km west of Sydney, Australia. The project site is well serviced by existing infrastructure inclusive of sealed roads, rail, power, gas, and nearby regional population centres.

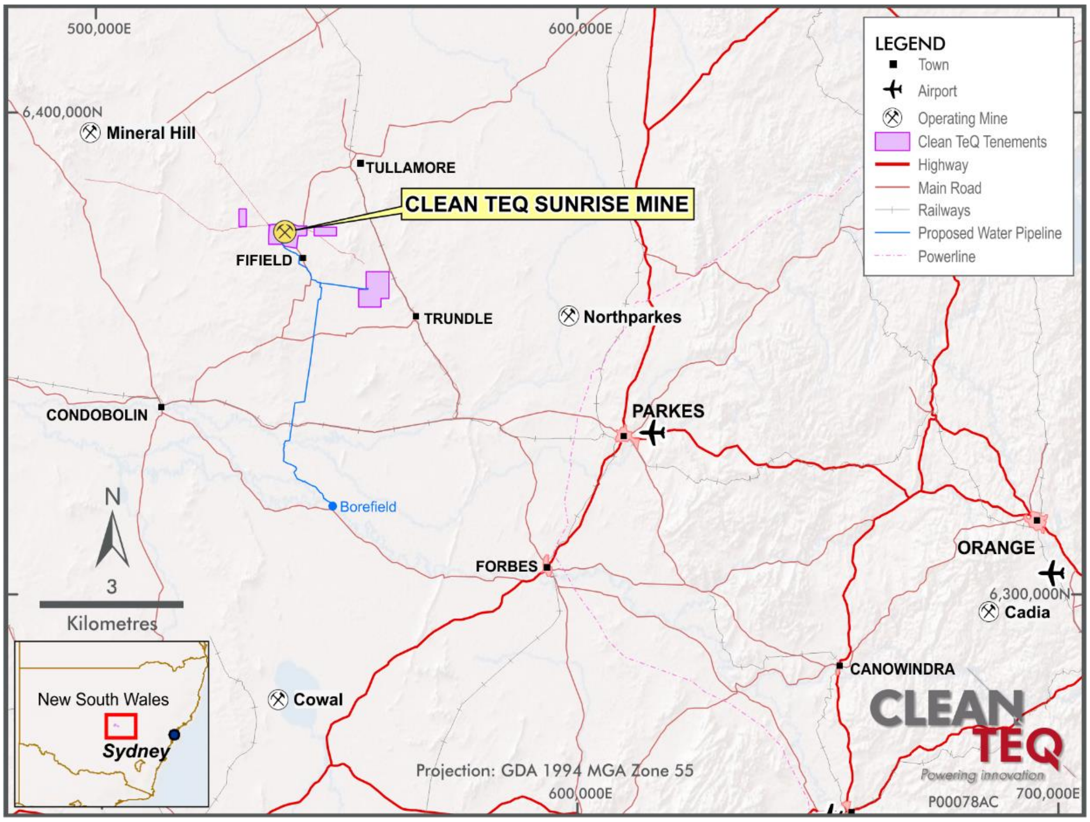


Figure 13: Clean TeQ Sunrise Project Location

Figure 14: Clean TeQ Sunrise Project

Development of Clean TeQ Sunrise will consist of a shallow open cut mine, hydrometallurgical processing plant and associated infrastructure. The DFS has assumed the following;

- Ore throughput rate of 2.5 Mtpa using open pit mining with excavators and trucks, mainly free dig, with average strip ratio of 1.2:1 over life-of-mine
- Ore crushing and preparation plant
- 2 x high-pressure acid leach (HPAL) trains to digest the ore and solubilise cobalt, nickel and scandium
- Sulphuric acid plant
- Partial neutralisation tanks using lime slurry
- Extraction and separation of nickel, cobalt and scandium, using Clean TeQ's proprietary ion exchange process technology, Clean-iX®
- Product refining and crystallisation
- Tailings treatment, evaporation, and storage facility
- Steam and power generation
- Site buildings and accommodation camp with capacity for approximately 1,300 people during the construction phase and 300 during operations
- New rail siding
- 40 kms roads upgrade, a 90km 66kV power tie-line and 70 km water supply pipelines

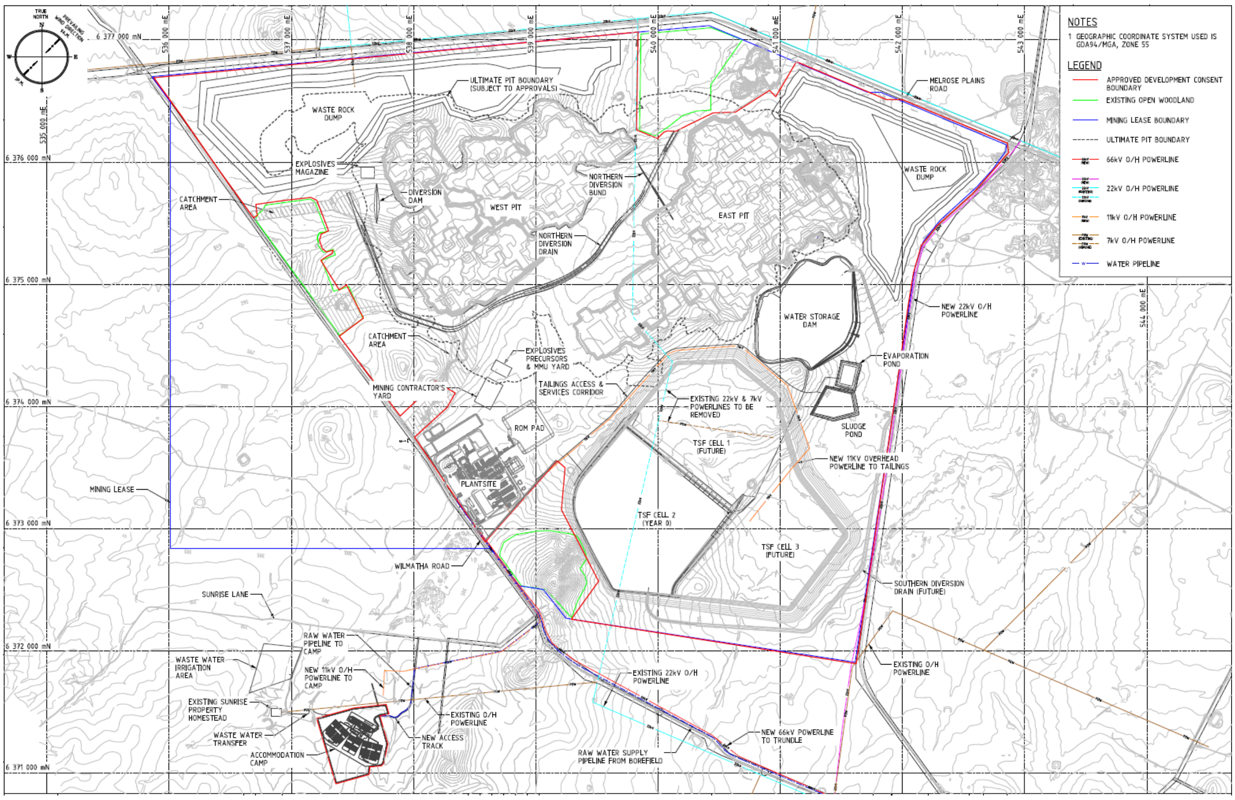


Figure 15: Clean TeQ Sunrise Proposed Layout

Clean TeQ Sunrise will use the Company's proprietary Clean-iX® ion exchange technology in the process flowsheet to produce battery grade nickel sulphate, cobalt sulphate and scandium oxide at the mine site. The process flow sheet has been extensively tested at the Company's pilot plant in Perth, Western Australia, and has demonstrated excellent operability, reliability and cost efficiency, as well as achieving excellent metal recoveries.

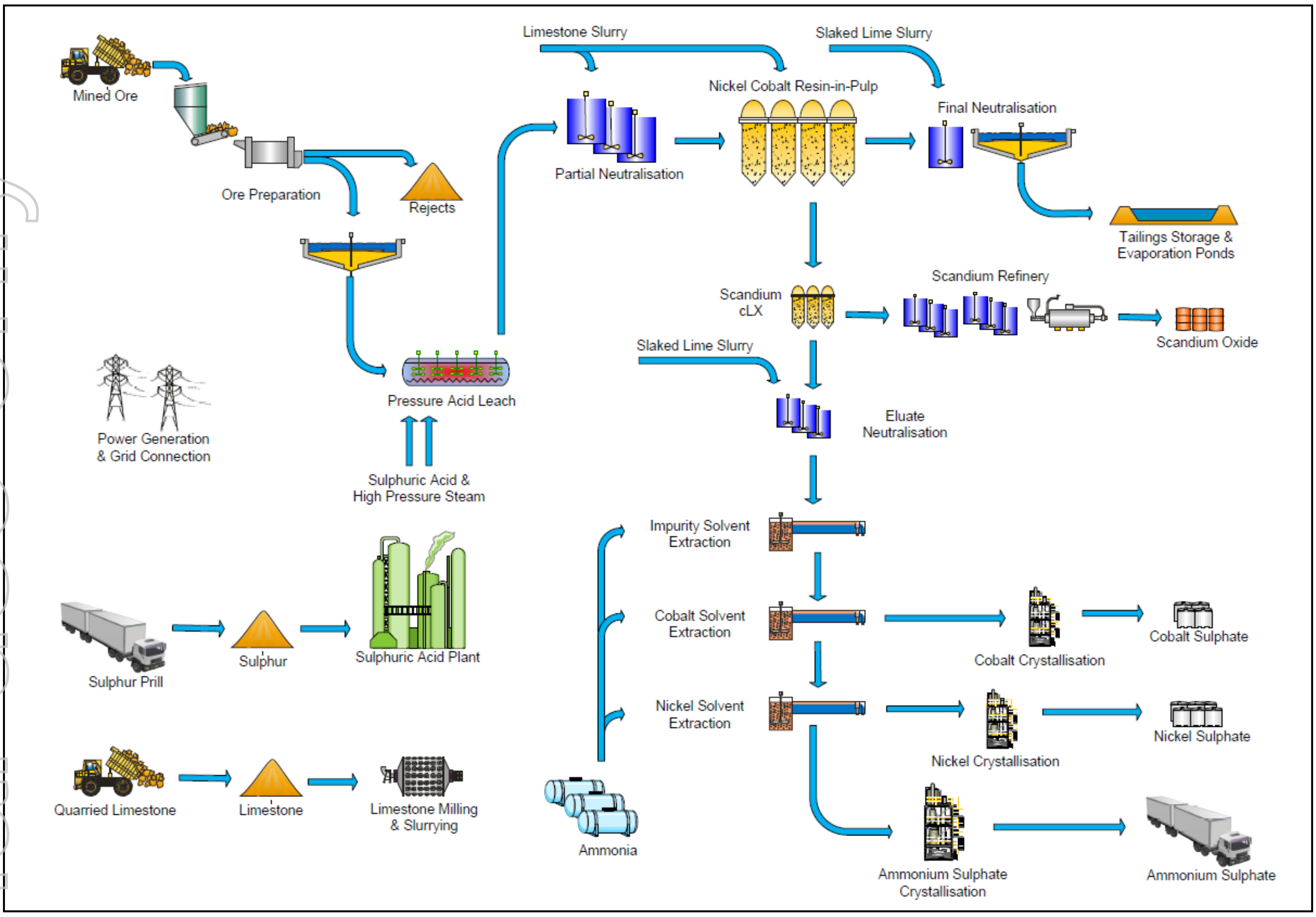


Figure 16: Clean TeQ Sunrise Process Flow Sheet Design (inclusive of scandium recovery circuit)

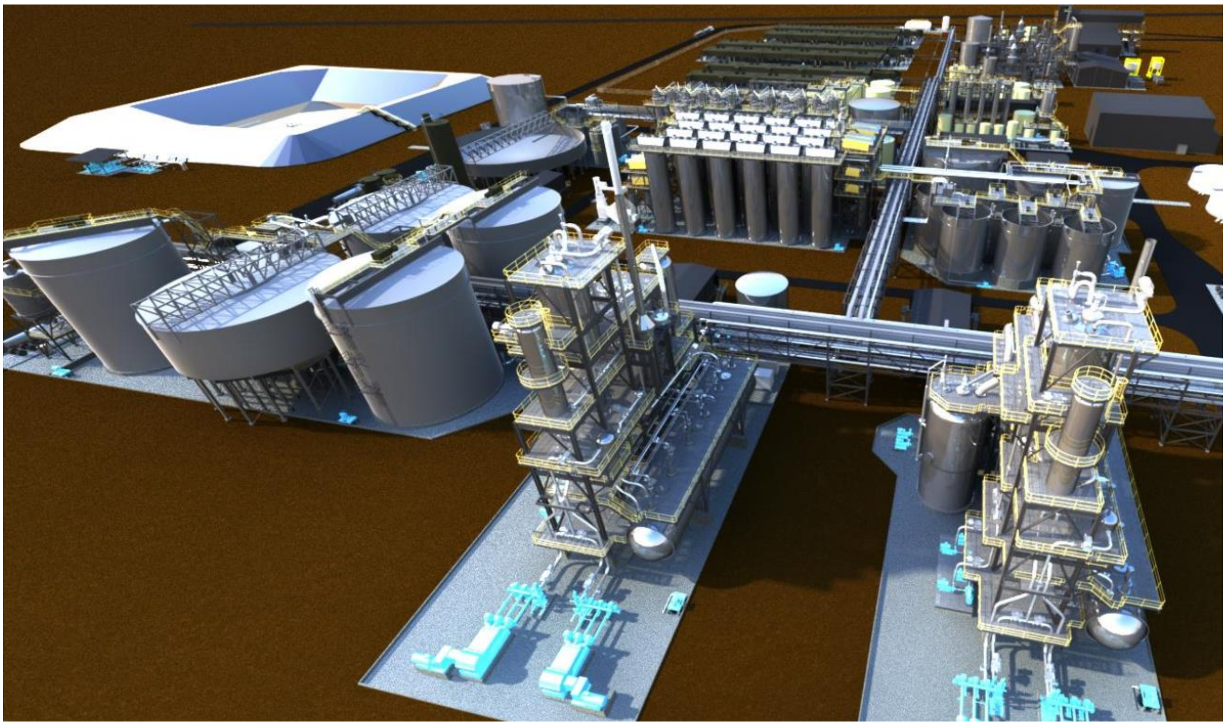


Figure 17: 3D Model of Clean TeQ Sunrise processing plant

Figure 18: 3D Model of Clean TeQ Sunrise processing plant

INFRASTRUCTURE

While supporting infrastructure at site is excellent, the Project will require an investment in several key areas including roads, rail, water, power and on-site accommodation. Specifically, the DFS has assumed the following:

- Upgrade to ~40 kms of local roads
- A new rail siding will be built near Trundle to accommodate project logistics
- Raw water will be piped from two bore-fields located 65km south of the main site, close to the Lachlan River. It is proposed that river water will be used to supplement the bore water supply when surface water is abundant
- A connection to the electrical supply grid via a 90km tie-line to Parkes will be constructed. This tie-line will comprise a 66kV overhead powerline supported by steel poles and will be routed from the Clean TeQ Sunrise site through Trundle and onto Parkes through a combination of private land and road easements
- An accommodation facility will be located 2.5km from the process plant and will be constructed in stages. After achieving the first stage installation of 300 rooms, it is planned to add 100 rooms per month up to a final camp capacity peaking at up to 1,300 persons. Clean TeQ has purchased all buildings within the first stage of the camp and will retain this facility following commissioning for use as shutdown accommodation during operation.

ENVIRONMENT & PERMITING

Clean TeQ holds relevant exploration and mining leases, a water license, and owns all the freehold land required for project development and infrastructure. Access agreements are currently being negotiated with the government to access a small amount of state/crown land which is within the Project area.

Figure 19: Survey works underway at Clean TeQ Sunrise

An Environmental Impact Statement (EIS) was prepared in 2000 by Black Range Minerals (previous owner of Sunrise/Syerston) and a Development Consent for the Project was granted in 2006. As the Project has evolved under Clean TeQ's ownership, several modifications to this Development Consent have been applied for and subsequently granted by the NSW Department of Planning and Environment (DPE). Modification 4, which relates to changes to the processing method, mine layout and water supply infrastructure is currently being assessed by the DPE.

Clean TeQ Sunrise is positioned to be a modern and sustainable mining operation, adhering to the highest level of environmental standards. During project development and steady state operations, Clean TeQ is committed to minimizing the impacts of the Project on the environment. Pursuant to our approvals, appropriate environment management procedures, including supporting monitoring programs as required, will be put in place to manage key areas including water resources, biodiversity, noise, air quality, emissions and community infrastructure.

In addition, under the Development Consent for the Project, Clean TeQ will conduct an annual review of the environmental performance and commission a full independent environmental audit of the Project within one year of commencement of the development and every three years thereafter.

Clean TeQ is actively engaged with all major stakeholders and the project is well understood and supported by local government and relevant Members of Parliament, at both a Federal and State level. No Native Title claims have been registered over the Project area.

Figure 20: Local community consultation

COMMUNITY & STAKEHOLDER ENGAGEMENT

Clean TeQ is committed to engaging with its stakeholders in the communities in which it operates. A comprehensive stakeholder engagement strategy is in place, with a detailed plan to guide and inform consultation.

This engagement includes a Community Consultative Committee which has been established, a locally-based Community Relations team which holds regular community meetings across the region, and established shop front offices in the nearby townships of Condobolin and Trundle.

Figure 21: Clean TeQ in the community

During the operations phase, the Project is expected to deliver significant economic and social benefits to the local communities in the Shires of Lachlan, Forbes, Parkes and surrounding areas. These include:

- Employment opportunities with an operational workforce of approximately 300 people (plus mining and logistics contractors and ancillary services)
- Local supply opportunities for local businesses
- Upgrades to local infrastructure (principally roads)
- Community enhancement contributions

While the construction workforce of ~1,000 people will be accommodated at site, it is expected that during steady state operations the majority of the workforce are expected to reside in local communities.

Clean TeQ is working together with the community to engage, consult and determine its needs, with a view to establishing relationships based on trust, care and respect.

APPENDIX 2

JORC 2012 – Table 1

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. • A total of 13 shallow, vertical diamond core holes were 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*	• 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

Criteria	JORC Code Explanation	Commentary
	sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	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, 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.
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.
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*	• 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. • Sample preparation at all the laboratories used

Criteria	JORC Code Explanation	Commentary
	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.*	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 were reportedly collected by spear sampling bagged reject, but details could not be verified in the time frame of this estimate. If correct this would not be a satisfactory procedure, however it relates to only a small proportion of the assay data. • 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. • 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 2014-2015 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).

Criteria	JORC Code Explanation	Commentary
		• 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, 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

Criteria	JORC Code Explanation	Commentary
		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.
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 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, 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.
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

Criteria	JORC Code Explanation	Commentary
		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 Lidar Survey. This also provided an independent check against former licensed surveyor (Geolyse Pty Ltd) survey control points.
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*	• Technical reviews by independent consultants

Criteria	JORC Code Explanation	Commentary
	sampling techniques and data.	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.

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 (2,195.0 ha). This Mining Lease is held 100% by Scandium21 Pty Ltd, a wholly owned subsidiary of Clean TeQ Holdings Limited. It was granted on 16 February 2018, has an initial validity period of 21 years and may be extended by future applications for renewal. • A smaller Mining Lease application MLA 113 was lodged by Scandium21 Pty Ltd on 10 August 1998 over areas adjoining ML 1770. MLA 113 covers an area of 735.6 ha over 2 areas on the eastern and western boundaries of ML 1770 and covers areas currently held by Scandium21 Pty Ltd as EL 4573. • A second Mining Lease, ML 1769 (389.7 ha) is also held 100% by Scandium21 Pty Ltd and covers a limestone resource at 'Westella' approximately 20km southeast of the Sunrise Ni-Co Deposit. ML 1769 was awarded 15 February 2018 for an initial period of 21 years. • Conditions that apply to the licences appear to be normal conditions that would apply to any similar tenements in New South Wales. • The Sunrise Project was granted Development Consent under the NSW Environmental Protection and Assessment Act in May 2001. A notice of modification to include scandium oxide as a product, in addition to nickel and cobalt sulphates, was approved on 12 May 2017. • Scandium21 also holds title to 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 local elevated Pt and Sc values. It has developed over an ultramafic intrusive

Criteria	JORC Code Explanation	Commentary
		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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception*
		• Exploration results are not being reported.

Criteria	JORC Code Explanation	Commentary
	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 results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Exploration results are not being reported.
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 DFS

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 (Lynn Widenbar) on 21st September 2017; 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.* • *The factors affecting continuity both of grade and geology.*	• 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. • 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*	• 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

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

Criteria	JORC Code Explanation	Commentary
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Global Mineral Resource Estimates have been reported with no cut-off for the nickel, cobalt and scandium Resource • The 2017 October Mineral Resource Estimate, published to the ASX on 9 October 2017, included Mineral Resource Estimates of nickel, cobalt, scandium and platinum at various cut-offs as described below: o The 2017 October Nickel and Cobalt Mineral Resource Estimates were reported using a cut-off of 0%, 0.06% and 0.08% cobalt; o The 2017 October Scandium Mineral Resource Estimates were reported using a cut-off of 0 ppm scandium and 300 ppm scandium; o The 2017 October Platinum Mineral Resource Estimates were reported using a cut-off of 0.15 g/t platinum, 0.5 g/t platinum and a 1.0 g/t platinum; • The 2018 Ore Reserve Estimate is based on the Measured and Indicated Mineral Resources of the Global Mineral Resource Estimate using a 0% cobalt cut-off and scandium only reporting from within the transition, goethite and silicified goethite zones. 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, 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 through 2018 for mineral recovery determination. • A comprehensive suite of metallurgical test work, including further Pilot Scale test work and specific equipment vendor test work is presently in process and due for completion in Q3 2018 further supporting results used in the Definitive Feasibility Study (DFS), currently being undertaken

Criteria	JORC Code Explanation	Commentary
		by Clean TeQ. The ongoing metallurgical test work shall include metallurgical samples and composites collected from bulk test pits and geographically dispersed drill holes. • Average overall HPAL feed metallurgical recoveries to final product were estimated to be 92% for nickel and 91% for cobalt and 31% 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. Recent metallurgical test work undertaken by Clean TeQ confirm these recoveries. • 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 and purification steps of the scandium eluate to produce high purity scandium oxide product.
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 in parallel with the 2000 Feasibility Study and in May 2001 the proposed nickel-cobalt project received Development Consent under the NSW Environmental Planning and Assessment Act. • The previous granting of a 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 the DFS, additional baseline studies 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.
Bulk density	• *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*	• Dry bulk density factors used for previous Mineral Resource estimates have been used for this update. • 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

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td></td><td>the deposit.
• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</td><td>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>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>1.20</td></tr><tr><td>Silicifed 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 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.</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, 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.</td></tr>
<tr><td>Audits or reviews</td><td>• The results of any audits or reviews of Mineral Resource estimates.</td><td>• The currently reported Mineral Resource estimates have not been subject to third party review, but have been internally peer-reviewed.</td></tr>
</table>

Criteria	JORC Code Explanation	Commentary
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 production data, where available.*	• 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.

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 compiled by Mr Lynn Widenbar of Widenbar and Associates who is a consultant to Clean TeQ and a member of the Australasian Institute of Mining and Metallurgy (AusIMM) with sufficient relevant experience to qualify as a Competent Person • The Mineral Resource for the Clean TeQ Sunrise Project was completed in October 2017. • 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 0.06% cobalt cut-off and 0% cobalt cut-off but only the 0% cobalt cut-off was used to generate the 2018 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 Mr Tim Harrison (Principal Metallurgist), Mr Luke Cox (Manager Geology and Mining) and Mr Lee White (Lead Mining Engineer), and all are members of the AusIMM. Mr Cox and Mr Harrison are full time employees of Clean TeQ. Mr White is an employee of Kalem Group Pty Ltd and is engaged as an internal consultant to Clean TeQ • Mr Harrison has made numerous extended visits

Criteria	JORC Code Explanation	Commentary
		to site between 2015 and 2018. Mr Cox and Mr White will visit site during July 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. • 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 high-pressure acid leach (HPAL) circuits ○ 2 x HPAL trains and associated sulphuric acid plant to leach the target minerals ○ Partial neutralisation tanks using limestone slurry ○ Extraction and separation of nickel, cobalt and scandium, using continuous ion exchange process technology ○ Product refining and crystallisation ○ Tailings storage, evaporation and water storage facilities ○ Back-up steam and power generation ○ 40km of road upgrades, 91km 66kV power tie-line, borefields and 70km water supply pipeline ○ New rail siding ○ Construction camp to accommodate 1,300 people • A detailed and practical mine plan was developed following Multimine optimisation using CAE NPVS 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 June 2018 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: ○ <15% silicon, mass rejection of 0%, Ni and cobalt metal loss of 0%; ○ ≥15% silicon and <23% Silicon, mass rejection of 18%, Ni and Co metal loss of 6%; ○ ≥23% silicon, mass rejection of 27%, Ni and Co metal loss of 7%; • 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*	• 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

Criteria	JORC Code Explanation	Commentary
	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 infrastructure requirements of the selected mining methods.*	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 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.
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, HPAL, continuous resin in pulp, continuous liquid exchange, solvent extraction and crystallisation to produce high purity nickel and cobalt sulfate products. High purity scandium oxide will also be produced. Waste streams are neutralised prior to disposal in a Tailings Storage Facility. • 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 High Pressure Acid Leach (HPAL) for laterite mineralisation is widely used within industry, as is solvent extraction and crystallisation. The use of continuous resin in pulp 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

Criteria	JORC Code Explanation	Commentary
		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 HPAL feed metallurgical recoveries to final product were estimated to be 92% for nickel and 91% for cobalt and 31% for scandium. • 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 was 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 HPAL 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 that are managed though the current process design. The use of the continuous RIP process represents demonstrates upgrading of nickel and cobalt metal relative to impurities through rejection of impurities elements from the leached slurry through operating continuous and selectivity of the ion exchange resin for Ni, Co and Sc over impurity elements.
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 Study (EIS) in 2000 and was granted Development Consent by the NSW Government in 2001. • Waste will be used in the walls 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 Development Consent conditions in place. • Erosion control measures will be provided along with the relocation and spreading of stockpiled topsoil material. Flora and fauna will be established in line with the development consent and EIS requirements.
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*	• Mining of the Sunrise Deposit is dependent on new development of the following infrastructure: ○ haul roads, process plant, acid plant and accommodation at mine sites; ○ power reticulation to the minesite from

Criteria	JORC Code Explanation	Commentary
	be provided, or accessed.	the NSW grid; o Capital costs for this infrastructure were estimated within the DFS. • The main project area is covered by two adjoining tenements, Mining Lease (ML) 1770 and a portion of Mining Lease Application (MLA) 113. These two tenements are underlain by Exploration Licence (EL) 4573. ML 1769 covers the Westella Limestone deposit which is underlain by Exploration Licence EL 8561. All of the MLs, MLAs and ELs covering the main project area are 100% controlled by Clean TeQ via the 100% owned subsidiary, Scandium21 Pty Ltd, as well as freehold ownership of the majority of the project area and water rights for the Project. • Land currently not owned by the company which is required for the project is under negotiation for purchase or an access agreement • The company has a water licence for 3.2GLp.a. from a bore field 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 Development Consent in place on the Project, upgrades to certain sections of roads have been agreed. The costs for these upgrades have been accounted for in the DFS 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 DFS. • The DFS capital costs were estimated by SNC-Lavalin and Clean TeQ with expected accuracy of -10% to +15%. • The capital costs were derived from the engineering deliverables of the DFS, including equipment lists, material take-offs, electrical single line diagrams, process & Instrument diagrams, process flowsheets, specifications and reviewed 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 DFS 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 DFS and include port costs and charges, rail line haul and road transportation.

Criteria	JORC Code Explanation	Commentary
		• The DFS assumes that nickel and cobalt sulphate will be produced on site together with scandium oxide. No allowances were made for penalties for failure to meet specification. • 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: ○ Long term product pricing was assumed for the life of project based on market consensus forecasts of: • US$7.00/lb nickel plus a nickel sulphate premium of US$1.00/lb nickel • US$30.00/lb cobalt • US$1,500/kg for scandium oxide ○ Nickel, cobalt and scandium oxide production and product quality are derived from the Life of Mine (LOM) schedule and metallurgy recoveries ○ 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 DFS, 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: ○ A Development Consent has been granted by the New South Wales government for the project based on an EIS submitted in 2000 and subsequent modifications in 2004 and 2006. Approvals for a modification to this consent to allow scandium oxide production was approved in May 2017. Additional approvals for modifications to this consent was undertaken in May 2017, September 2017 and December 2017 for additional project efficiencies and updates as part of the DFS and are awaiting final approval or further

Criteria	JORC Code Explanation	Commentary
		assessment. ○ 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 under the EP&A Act. Any future modification applications of the Project will comply with relevant State significant development legislative requirements. ○ Mining Leases under NSW Mining Act 1992 for the main project area and the limestone quarry have been granted. ○ Water Access Licences and associated works approvals under NSW Water Management Act 2000 have been issued. ○ Voluntary planning agreements with local councils have been agreed in principle and subject to approval of the Development Consent Modification by the NSW Department of Planning. ○ 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 of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	• 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
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 147.4 million tonnes of Ore Reserves, grading 0.56 Ni%, 0.09% Co and 53 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 162.7 million tonnes of Mineral Resources grading 0.54% Ni, 0.09% Co and 76 ppm Sc. • Mr Tim Harrison, 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*	• 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 ±

Criteria	JORC Code Explanation	Commentary
	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.*	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.