ASX Announcement
23 January 2023

MT LYELL COPPER MINE PREFEASIBILITY STUDY DEMONSTRATES STRONG ECONOMICS OVER MULTI-DECADE LIFE

- **Mt Lyell Copper Mine Prefeasibility Study (PFS) demonstrates highly attractive economics for the restart of underground mining operations over an initial 25-year mine life**
- **Low-cost, long-life copper and gold operation with a pre-tax NPV_7 of A$560 million, IRR of 22% and Life of Mine net cash flow of A$1,081 million**
- **Estimated pre-production capital cost of A$279 million with average C1 costs for the first 10 years of steady-state operations of US$1.73/lb Cu (including by-product credits)**
- **Total estimated production of 555kt of copper and 320koz of gold in concentrate**
- **PFS Board-approved with immediate progression to Feasibility Study, targeted to be finalised in Q3CY2023**

New Century Resources Limited (**ASX: NCZ**) (**New Century** or the **Company**) is pleased to announce the release of the Mt Lyell Copper Mine PFS results, which demonstrate highly attractive economics through the potential development of a low-cost, long-life copper and gold operation in a Tier-1 jurisdiction, supplied by 100% renewable power.

The robust economic profile demonstrated by the PFS includes a pre-tax NPV_7 of A$560 million, IRR of 22% and Life of Mine net cash flow of A$1,081 million. The estimated pre-production capital investment requirement is A$279 million, leveraging existing infrastructure, with a maximum cash draw of A$360 million. Average C1 costs of US$1.73/lb Cu (including by-product credits) are projected over the first 10 years of steady-state operations, and average life of mine C1 costs of US$1.89/lb Cu with the inclusion of the production ramp-up period.

The PFS supports an initial 25-year mine life, producing 555kt of copper and 320koz of gold in concentrate over this period. The average annual production over the first 10 years post-ramp up is approximately 27kt of copper and 16koz of gold, underpinned by an Ore Reserve containing 246kt of copper and 198koz of gold. The first 10 years of mine life comprises 82% of production from Indicated Mineral Resource, with an additional ~8% Inferred Mineral Resource drilled and pending conversion to Indicated Mineral Resource.

New Century Managing Director & CEO, Robert Cooper, said:

"We are pleased to release this PFS for the Mt Lyell Copper Mine restart project, which provides a strong validation for adding this key growth opportunity to our portfolio. The study clearly demonstrates that Mt Lyell is one of the largest and most attractive near-term copper projects in Australia, with projected operational metrics that compare favourably to many current operations and a resource size that allows significant scale and mine life. Leveraging the extensive existing infrastructure both on and off site, Mt Lyell has an attractive capital efficiency and a low-risk development profile.

With an initial 25-year Life of Mine and an overall resource base greater than 1 million tonnes of copper and almost 1 million ounces of gold, this project is transformational for our Company and represents a material long-term source of low-carbon copper to support the global transition to renewable energy and contribute to the decarbonisation of the economy.

The robust economics demonstrated in this PFS show that Mt Lyell can again be an integral part of the Tasmanian economy and boost employment in the West Coast region. Leveraging off the Tasmanian Government's foresight to increase renewable energy generation in the State, Mt Lyell's infrastructure and fixed assets are able to be 100% operated on zero carbon power.

In a world where the embedded carbon within supply chains is becoming increasingly important, this represents a significant competitive advantage. Reducing the carbon intensity of our production is a key target for New Century and Mt Lyell will help to deliver this outcome.

Building from our globally significant zinc production at the Century asset and the associated near-term Silver King development project, Mt Lyell represents a further opportunity for New Century to expand as a substantial Australian producer of base metals.

Our project team is now progressing the Mt Lyell Feasibility Study, which will inform our decision on exercising the option to take ownership of the asset later in 2023. We look forward to updating the market on the recent drilling at Mt Lyell, which we anticipate will upgrade more material within the Mineral Resource and further build on what are already very substantial copper Ore Reserves."

Cautionary and Competent Persons Statements

As the PFS utilises a portion of Inferred Mineral Resource, the ASX Listing Rules require a cautionary statement is included in this announcement.

Approximately 36% of the 25-year Life of Mine (**LoM**) production target in the PFS is from Inferred Mineral Resource. There is a lower level of geological confidence associated with Inferred Mineral Resource and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resource or that the production target itself will be realised. The Company has concluded however, that it has reasonable grounds for disclosing a production target which includes 36% of Inferred Mineral Resource on the basis that: recent infill drilling is expected to convert a portion (~4%) of Inferred Mineral Resource to Indicated Mineral Resource, there is a proven history of the operating mine converting Inferred to Indicated Mineral Resource in the past and there is allowance for significant resource conversion drilling in the financial model. Further, the first 10 years of the LoM includes 82% Indicated Mineral Resource with an additional ~8% Inferred Mineral Resource that has been drilled and is pending conversion to Indicated Mineral Resource. The Company confirms the use of Inferred Mineral Resource is not the determining factor for the Mt Lyell project's viability.

The information in this announcement relating to the Mineral Resource estimate for the Mt Lyell Project was first released by the Company to the ASX on 27 October 2021. The information in this announcement relating to the Ore Reserve estimate for the Mt Lyell Project was first released by the Company to the ASX on 2 June 2022. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the Mineral Resource and Ore Reserve estimates continue to apply and have not materially changed. The Mineral Resource and Ore Reserve estimates underpinning the production targets disclosed in this announcement have been prepared by a Competent Person in accordance with the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Accuracy

The PFS has been prepared to an overall level of accuracy of approximately ±20%.

Forward-Looking Statements

This announcement contains “forward-looking information” that is based on the Company’s expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the PFS, the Company’s business strategy, plan, development, objectives, performance, outlook, growth, cashflow, projections, targets and expectations, Mineral Resources, Ore Reserves, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as, 'anticipate', 'project’, 'target', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will’, 'plan', 'forecast’, 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company’s actual future results or performance may be materially different.

The Company believes the forward-looking information in this announcement is based on reasonable grounds. However, neither the Company nor any other person makes or gives any representation, assurance or guarantee that the production targets or expected outcomes in this announcement will ultimately be achieved. The forward-looking information in this announcement is subject to known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information. Such risks include but are not limited to future prices and demand of copper, gold and silver and other metals; foreign exchange rates; availability of funding; results of further optimisation activities; changes in project parameters as plans continue to be refined; failure of plant; equipment or processes to operate as anticipated; possible variations of ore grade or recovery rates; accident, labour disputes and other risks of the mining industry; delays in obtaining governmental approvals or financing or in the completion of development or construction activities and general business, economic, competitive, political and social uncertainties.

A number of key steps need to be completed in order to achieve production at the project. Many of these steps are referred to in this announcement. Investors should note if there are delays associated with completing those steps, or completion of the steps does not yield the anticipated results, the actual estimated production and forecast financial information may differ materially from the PFS results presented in this announcement.

These risks are not exhaustive of the factors that may affect or impact forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information. The Company disclaims any intent or obligations to revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

This announcement is approved for release by the New Century Board of Directors.

About New Century Resources Limited

Established in 2017, New Century is an Australian base metal producer with significant zinc assets and a brownfield copper development project. New Century is a top-15 global and top-five domestic zinc producer, operating Australia's largest hydraulic mine at the Century Mine in Queensland; extracting, processing, and marketing zinc recovered from historical tailings. New Century is actively progressing life extension opportunities at Century and studying the potential to restart copper production at the historically significant Mt Lyell Copper Mine in Tasmania.

New Century is also pursuing opportunities with industry peers to reprocess and rehabilitate contemporary and historical mineralised waste assets at operational and legacy mine sites. Under this model, New Century may employ its expertise in economic rehabilitation with partners to the benefit of shareholders and the environment.

For further information about New Century visit **www.newcenturyresources.com** or contact:

Robert Cooper
Managing Director & CEO
P: + 61 (0)3 9070 3300
E: **info@newcenturyresources.com**

James McNamara
Head of Investor Relations
P: + 61 (0)416 734 080
E: **jmcnamara@newcenturyresources.com**

New Century Resources Limited
Level 4, 360 Collins Street
Melbourne, Victoria, Australia 3000
E: **info@newcenturyresources.com**
www.newcenturyresources.com

Follow us on:

Background

New Century Resources Limited (**ASX: NCZ**) (**New Century** or the **Company**) is pleased to announce the outcomes of the Prefeasibility Study (**PFS** or **Study**) for the Mt Lyell Copper Project, located near the town of Queenstown on the West Coast of Tasmania, Australia.

Mt Lyell Copper Project (option to acquire 100% under attractive terms)

- **Status**: Prefeasibility Study
- **Mineral Resource**
  - **Underground:** 71.3Mt @ 1.14% CuEq for 734,000t Cu and 588,000oz Au
  - **Open pit:** 69.1Mt @ 0.71% CuEq for 442,000t Cu and 367,000oz Au
- **Proposed annual production**
  - 27ktpa Cu
  - 16koz Au

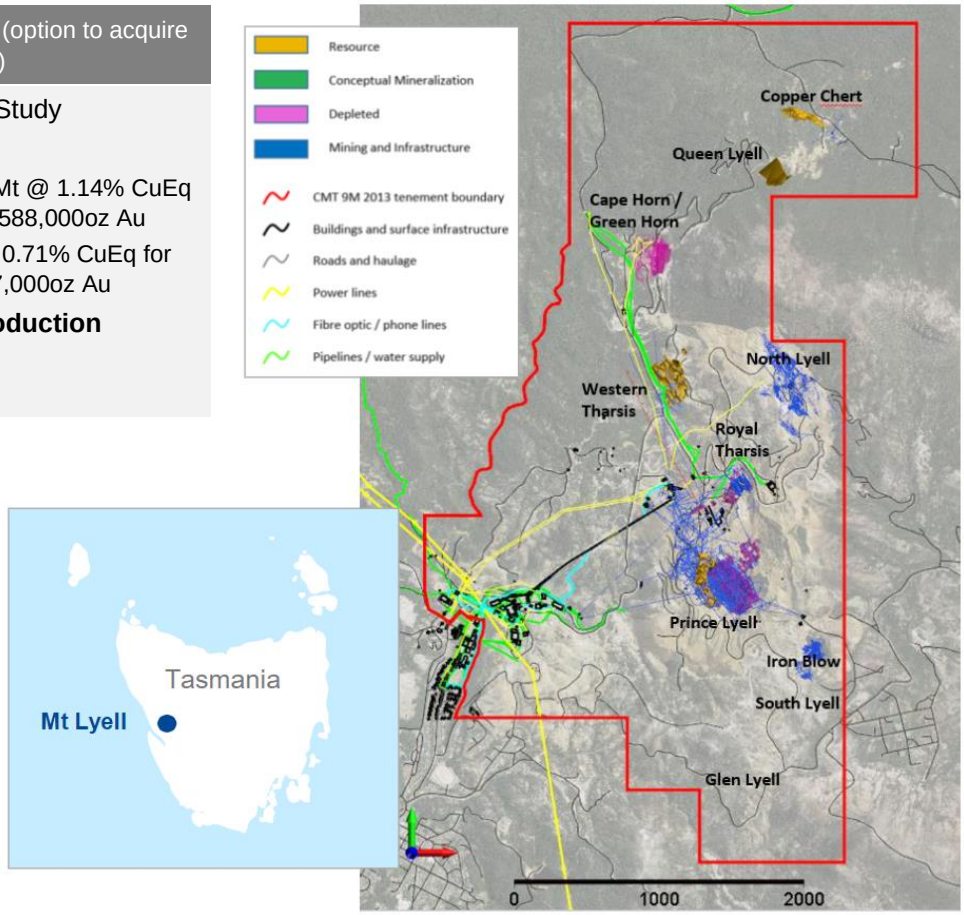

Figure 1 – Mt Lyell project overview

The PFS has demonstrated the potential for the recommencement of the Mt Lyell Copper Mine as a long-life, low-cost copper producer. This extensive study work has been undertaken by the Company in conjunction with numerous highly credentialled independent, reputable engineering companies and technical partners. The Study demonstrates a robust and executable project, offering strong economic benefits and the potential to significantly contribute to the regional economy through employment and regional investment.

The restart is considered to have a low technical risk given more than a century of historical site operations. Drawing from a portion of the currently defined resource base, significant upside potential exists via life extensions from identified and defined Mineral Resources as well as strong exploration potential.

Summary Physicals

The current Mineral Resource Estimate of 71.3Mt @ 1.14% CuEq is the basis for an initial underground mine life of 25 years with clear potential for extension beyond this. The PFS is based on approximately 65Mt of ore being extracted (including dilution) with most of this material sourced from underground mining of the Prince Lyell and Western Tharsis ore bodies (Figure 2).

The Mt Lyell deposits were mined almost continuously since the 1890s until entering care and maintenance in July 2014. This extensive operating history provides a strong design basis for recommencement of underground operations and the construction of a new processing plant. Replicating the historical process flowsheet with modern equipment provides a low-risk development pathway with upside for efficiency gains in processing consumables and reagents, labour requirements, and metallurgical performance. This is seen as the preferred option over refurbishment of the historic processing plant, to provide higher confidence operations and also due to the long-life nature of the proposed operation.

Full access to past operating data, including semi-quantitative monthly mineragraphy from 1999 to 2013 from Copper Mines of Tasmania (**CMT**) and third parties, has allowed the Study to be progressed with high confidence. The data shows consistency in mineralogy, mineral associations and mineral liberation for plant feed, concentrates and tailings. Ore types within the Study production profile are mainly comprised of similar and same characteristics as past operations, delivering a true brownfield study basis and associated benefits in relation to both risk and confidence levels.

Table 1 – Mt Lyell estimated LoM physicals

Item	Unit	Value
Mine life	Years	25
Underground Mining		
Mining Method	-	Sub-level caving (SLC) / open stope
Mined ore tonnes (incl. dilution)	Mt	65.0
Mined copper grade	%	0.92
Mine gold grade	g/t	0.23
Mined waste tonnes	Mt	7.8
Processing		
Processing method	-	Flotation
Copper recovery (steady-state)	%	92.7
Gold recovery (steady-state)	%	66.3
Copper recovered (in concentrate)	kt	555
Gold recovered (in concentrate)	koz	320
Concentrate produced	kdmt	2,056
Copper concentrate grade	%	27

Extensive infrastructure and services are in place, providing for a rapid restart of operations. Key infrastructure proposed to be utilised in the restart includes:

- Significant underground infrastructure and development, actively maintained since 2014
- Mains power supply and substation
- Water supply and storage
- Tailings storage facility (**TSF**) permitted for 100Mt, with 58Mt[1] capacity remaining
- Administration/office buildings and workshops
- 7.8m concrete-lined shaft installed to 650m (material handling system requires refurbishment)
- Ore haulage to the surface will be via the shaft from year 5 of production, significantly reducing diesel truck haulage from that point
- Prince Lyell is a fully permitted mine currently on care and maintenance; restart of operations will require engagement with statutory authorities to demonstrate the operating philosophy presents a safe workplace and safe work systems and customary statutory approvals in relation to construction activities
- Western Tharsis and Copper Chert are on the Mining Lease and will require customary statutory approval processes to commence operations
- Power supply will be sourced from the 100% renewable capacity Tasmanian grid

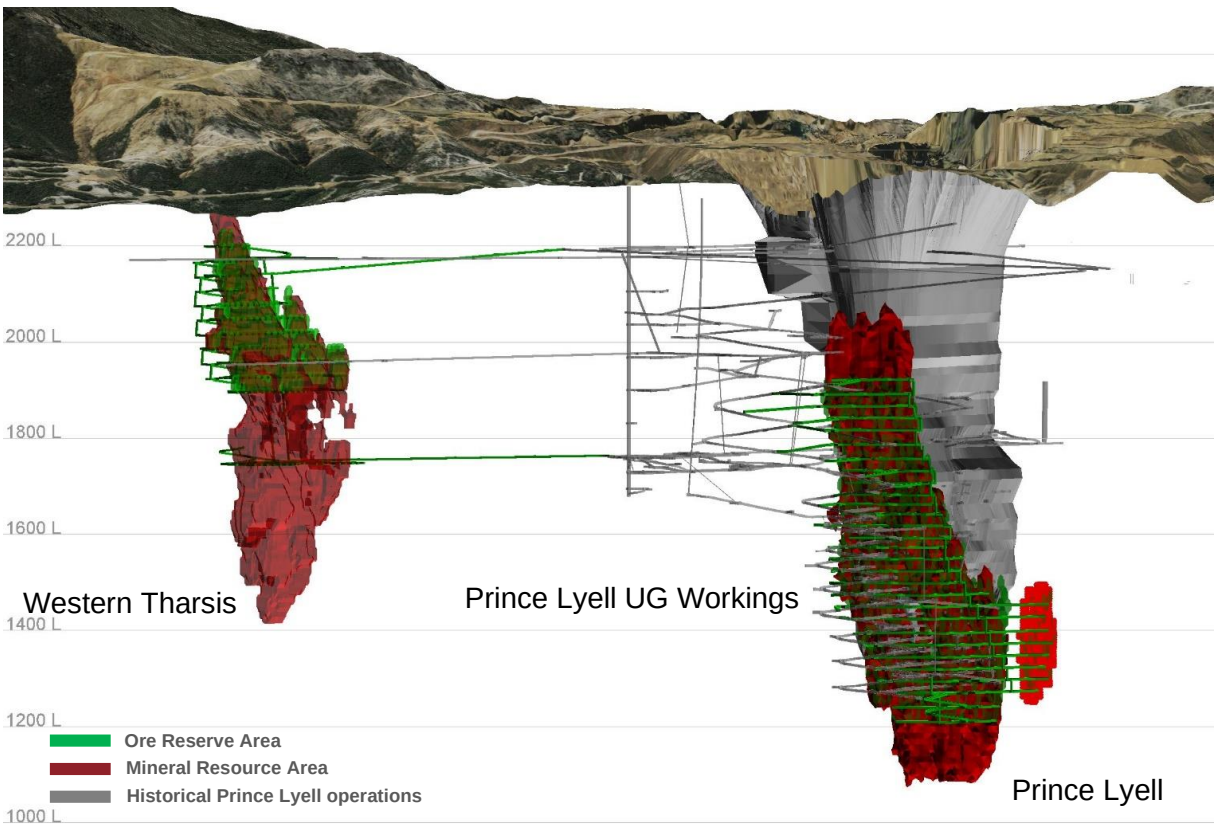

Figure 2 – Prince Lyell and Western Tharsis deposits, which form the majority of initial mine plan

[1] Further tailings dam expansion will need to be permitted by 2045.

The processing flowsheet (Figure 3) adopted for the PFS is:

- Single-stage crushing circuit into a conventional SAB (SAG Mill and Ball Mill) grinding circuit
- Flotation and regrind, via rougher flotation tanks, regrind mill and cleaner circuit
- Thickening and filtration of concentrate, via standard thickeners and plate and frame filters
- Thickening of tailings via a standard thickener and pumping to existing TSF
- Concentrate handling via established road, rail, port, shipping routes and associated infrastructure

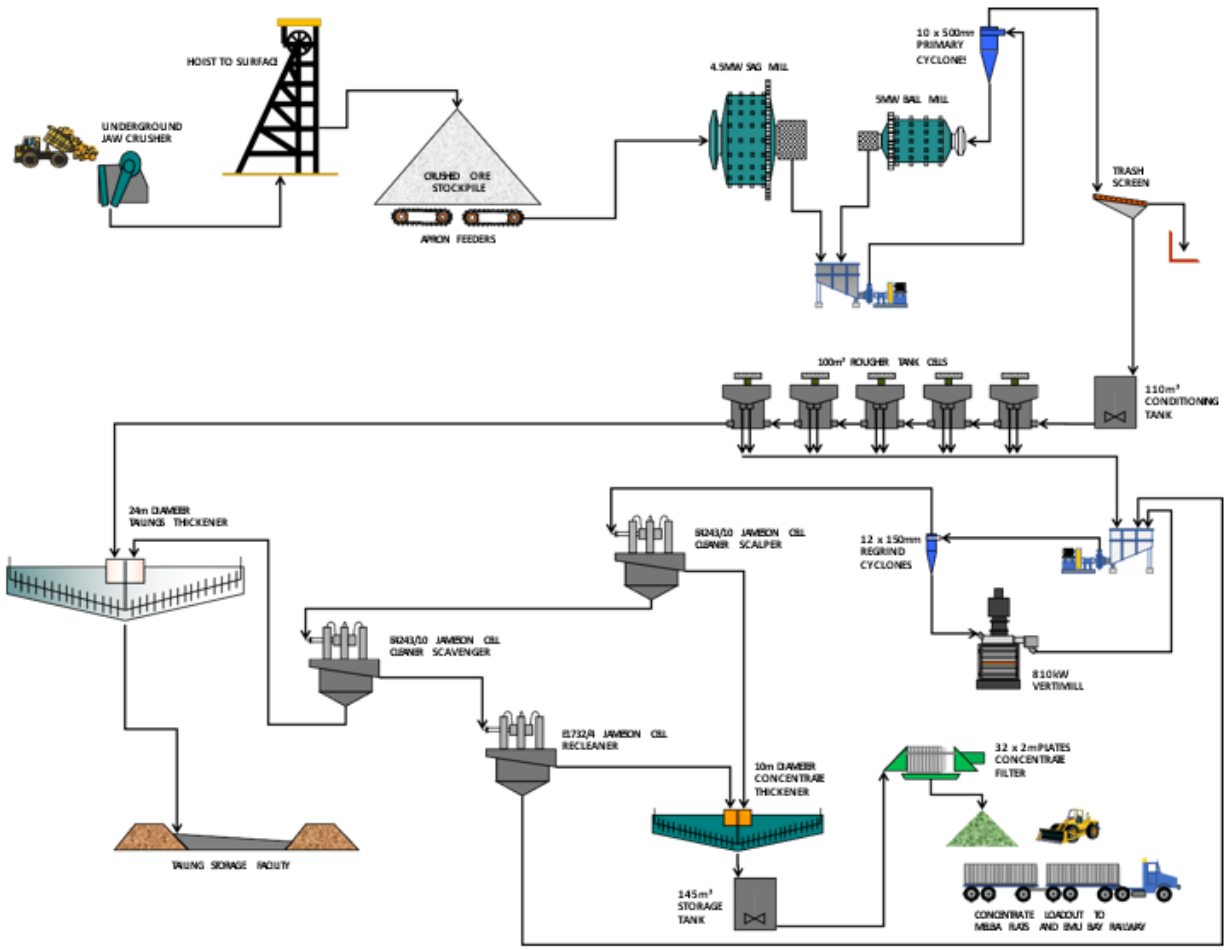

Figure 3 – Mt Lyell process plant overview

Summary Financials

The project has a pre-tax NPV_7 of A$560 million and a pre-tax IRR of 22%. These returns are generated against November 2022 long-term consensus pricing, with further leverage remaining to any upside macroeconomic scenario driven by general economic growth or the widely anticipated commodity bull market resulting from the electrification megatrend.

Operating costs place Mt Lyell favourably among peers, with average C1 costs of US$1.73/lb during the first 10 years of steady-state operations,[2] following ramp up to full production.

[2] Years 4-13, at nameplate throughput.

The project's leverage to upside pricing to consensus is demonstrated by a spot price case using 17 January 2023 closing prices[3]. This yields a pre-tax NPV_7 of A$793 million and a pre-tax IRR of 27%.

Table 2 – Summary of estimated key financial parameters

Item	Unit	Value	
Economic Assumptions		**Base[4]**	**Spot**
Copper price	US$/t	8,430	9,282
Gold price	US$/oz	1,701	1,913
Exchange rate (flat)	US$:A$	0.68	0.70
Operating Costs			
Mining cost (total)	A$/t ore mined	45.83[5]	45.83
Processing cost (total)	A$/t ore processed	16.04[6]	16.04
Concentrate transport	A$/wmt con	40	40
Freight	US$/wmt con	60	60
Copper Treatment	US$/dmt con	70	70
Copper Refining	US$/payable lb	0.07	0.07
Gold Refining	US$/payable oz	5	5
C1 cash cost	US$/lb Cu	1.89	1.88
All-in Sustaining cost (AISC)	US$/lb Cu	2.91	2.96
Capital Costs			
Pre-production capital	A$m	279	279
Maximum cash draw	A$m	360	355
Sustaining capital (incl shaft refurb in year 7)	A$m	738	738
Cashflow			
Project cashflow (pre-tax)	A$m	1,081	1,450
Financial Metrics			
NPV_7 (pre-tax)	A$m	560	793
IRR (pre-tax)	%	22	27
Capital payback period (from FID)	years	8.0	6.1

[3] 17 January 2023 pricing, A$/US$ WM/Reuters Australian Dollar Fix at 4.00 pm (Sydney), sourced from page AUDFIX on Thomson Reuters, gold price quote from PM Fix on the London Bullion Markets Association and copper Cash Closing Price quoted on Bloomberg – LMCADY.
[4] LoM average.
[5] Includes all capital for LoM including sustaining capital.
[6] Includes all capital for LoM including sustaining capital.

Ore Reserve

The Company has declared an initial Ore Reserve for Mt Lyell, as announced to the ASX on 2 June 2022. Ore Reserves of 246kt Cu and 198koz Au contained in the Probable category demonstrate the robust nature of the production profile, with high confidence levels aided through the utilisation of Sub-Level Caving (SLC) mining methods employed at the operation since 1995.

Table 3 – Mt Lyell Ore Reserve

Resource	Mineable Ore Tonnes (Mt)	CuEq[7] Grade (%)	Cu Grade (%)	Au Grade (g/t)	Cu Metal (kt)	Gold Ounces (koz)
Probable						
Prince Lyell	21.0	1.14	1.03	0.26	216	174
Western Tharsis	2.9	1.14	1.03	0.26	30	24
Total	**23.9**	**1.14**	**1.03**	**0.26**	**246**	**198**

[7] CuEq (%) = Cu (%) + Au (ppm) * 0.43, CuEq calc. uses a copper recovery of 92%, gold recovery of 60%, copper price of US$8,780/t and a gold price of US$1,653/oz.

MT LYELL COPPER MINE PREFEASIBILITY STUDY

JANUARY 2023

CORPORATE DIRECTORY

DIRECTORS AND COMPANY SECRETARY

Kerry Gleeson Non-executive Chairman
Robert Cooper Managing Director & CEO
Peter Watson Non-executive Director
Thomas Wilcox General Counsel & Company Secretary

REGISTERED OFFICE

Level 4, 360 Collins Street
Melbourne, Victoria 3000
Australia
Office Phone +61 (03) 9797 6700
Website newcenturyresources.com

NEW CENTURY PROJECT TEAM

Aaron Spong Study Manager
Brad Evans Head of Technical Services
Barry Harris Chief Operating Officer
Michael Pitt Head of Business Development
Shane Goodwin Head of Corporate Affairs & Social Responsibility
Michael Worcester Group Financial Controller
Nick Spanswick Geology Superintendent
Hamish Anderson Group HR Manager
Nigel Corben Manager Marketing & Sales
Ben Sender Engineering & Infrastructure Lead
Clint Mayes CMT General Manager
Geoff Cordery CMT Exploration Manager

TECHNICAL ADVISORS

SRK Resource Geology
AMC Mine Planning
Sedgman Mineral Processing
Ashurst Approvals and Permitting
Ranbury Underground Mining Cost Estimation
Maxwell Energy & Resources Engineering and Infrastructure
Eureka Metallurgy Metallurgy Advisor
Mineralis Metallurgy Advisor
Aurelia Metallurgy Metallurgical Testwork
Tundra Analytics Financial Modelling
Freeman Financial Financial Modelling
Delta Pearl Partners Social Impact Assessment
The Cravern Group Information Management

Contents

STUDY HIGHLIGHTS

27 ktpa
Copper in concentrate
Years 1-10

25 years
Initial mine life
underground resources only

A$**560**m
pre-tax NPV
7% discount rate

$**1.89**/lb
C1 cash cost (US$)
LoM, after by-product credits

27%
Copper in concentrate
with low deleterious elements

100%
Renewable grid power
via hydroelectric supply

2025
Target production year
Rapid restart of brownfield site

22%
IRR pre-tax
on A$279m initial capital investment

1.18 Mt
Contained copper
Based on 140Mt & 0.93% CuEq

0.96 Moz
Contained gold
Based on 140Mt & 0.93% CuEq

EXECUTIVE SUMMARY

The Mt Lyell Prefeasibility Study (**PFS**) has identified a compelling investment opportunity for New Century, defining a long-life project producing over 27ktpa of copper with a low carbon footprint in the tier-1 mining jurisdiction of Tasmania. The PFS scope was designed to be an investigation of development options, leading to a recommendation of the preferred option to progress to a Feasibility Study (**FS**). With over a century of operating history at Mt Lyell, there is a substantial body of operational data and previous study work underpinning the restart strategy, further complementing the infrastructure advantages of this brownfield project.

The value optimisation phase of the PFS presented various options for Mt Lyell. Table 4 shows the scenarios that were chosen to take through the Study. The scenario description was broken into various categories:

- Production rate – the Hill of Value (HoV^{TM}) study showed a ridge of value between 2.4Mtpa and 3.0Mtpa and cut-off grade between 0.6% copper and 0.8% copper.
- Mine Life – Robust mine life was generated for each option, demonstrating optionality for cut-off adjustments.
- Mining Method – All options assumed SLC for Prince Lyell and Western Tharsis and open stoping for Copper Chert.
- Crusher location – Options with the shaft reintroduced require underground crushing.
- Process plant location – Along with two design throughput rates, two process locations were considered: at the present lower location and at the upper location near the shaft headframe.
- Materials handling – Both truck and shaft were considered viable options. A conveyor option had previously been evaluated but is not considered viable.

The purpose of the PFS is to determine the scenario to be taken into the FS and ultimately the scenario put forward as the defined financial investment decision. Table 4 outlines the scenarios tested during the mining study. Each scenario is a variation of capital and operating costs, production rates, and infrastructure, the combinations of which have been evaluated to determine the optimal scenario to take forward into the FS.

Table 4 – Study scenarios

	Scenario 1 Trucking Case	Scenario 2 Staged Case	Scenario 3 Max Value
Scenario Inputs	Truck Only	**Delayed Shaft**	Shaft Early
Production Rate (Mtpa)	2.4	3	3
Min Mine Life	15	25	25
Mining Method	SLC/Open Stope	SLC/Open Stope	SLC/Open Stope
Crushing	Modular crushing	Modular crushing then UG	UG
Process Location	Upper	Upper	Upper
Materials Handling	Diesel truck haulage to surface	Diesel truck to surface transitioning to shaft haulage	Shaft haulage

A processing study investigated four processing scenarios: two locations and two production rates. After initial investigations on site, 2.4Mtpa at the lower location (where the historical plant is located) and 3.0Mtpa at the upper location were deemed to be the optimal scenarios to investigate further as they aligned with the mining scenarios. Figure 4 shows the location of the upper and lower locations relative to the mine office and shaft.

Figure 4 – Process plant location options

The first option is a 2.4Mtpa throughput processing plant fed by ore trucked to the surface, located in the lower area of the mine site where the existing crushing circuit and ore storage are situated. The second option is a 3.0Mtpa (or greater) plant that incorporates the underground crusher and mine shaft for ore delivery and is in the upper area of the mine site adjacent to the mine shaft. Both options have a Coarse Ore Stockpile (**COS**) that feeds a SAG and Ball Mill (**SAB**) grinding circuit and flotation circuit, with concentrate and tailings piped to the existing thickener area.

Analysis identified several downsides to the lower location, including heavy vehicle interaction around the office leading to traffic management issues, limited space to incorporate a COS and SAB circuit, demolition costs and timing requirements and other minor issues. As such, the PFS has selected the processing plant site in the upper location, adjacent to the shaft.

The Study outcomes are summarised in Table 5 and Table 6.

Table 5 – Mt Lyell estimated LoM physicals

Item	Unit	Value
Mine life	Years	25
Underground Mining		
Mining Method	-	SLC / Open Stope
Mined ore tonnes	Mt	65.0
Mined copper grade	%	0.92
Mine gold grade	g/t	0.23
Mined waste tonnes	Mt	7.8
Processing		
Processing method	-	Flotation
Copper recovery (steady-state)	%	92.7
Gold recovery (steady-state)	%	66.3
Copper recovered	kt	555
Gold recovered	koz	320
Concentrate produced	kt	2,056
Copper concentrate grade	%	27

Table 6 – Summary of estimated key financial parameters

Item	Unit	Value
Economic Assumptions		
Copper price (LoM average[8])	US$/t	8,430
Gold price (LoM average[8])	US$/oz	1,701
Exchange rate (flat)	US$:A$	0.68
Operating Costs		
Mining cost (total)	A$/t ore mined	45.83[9]
Processing cost (total)	A$/t ore processed	16.04[10]
Concentrate transport	A$/wmt con	40
Freight	US$/wmt con	60
Copper treatment	US$/dmt con	70
Copper refining	US$/payable lb	0.07
Gold refining	US$/payable oz	5
C1 cash cost	US$/lb Cu	1.89
All-in sustaining cost (AISC)	US$/lb Cu	2.91
Capital Costs		
Pre-production capital	A$m	279
Maximum cash draw	A$m	360
Sustaining capital[11]	A$m	738
Cash flow		
Project cashflow (pre-tax)	A$m	1,081
Financial Metrics		
NPV_7 (pre-tax)	A$m	560
IRR (pre-tax)	%	22
Capital payback period[12]	years	8.0

[8] November 2022 consensus pricing.
[9] Includes all capital LoM, including sustaining capital.
[10] Includes all capital LoM, including sustaining capital.
[11] Including shaft refurbishment in year 7.
[12] From Final Investment Decision (**FID**).

THE PROJECT

Mt Lyell is one of the most significant copper mines in Australian history, having first started operations in the 1890s and was one of the most prolific producing mines within the British Empire. The Mt Lyell project is located on the West Coast of Tasmania, near the town of Queenstown.

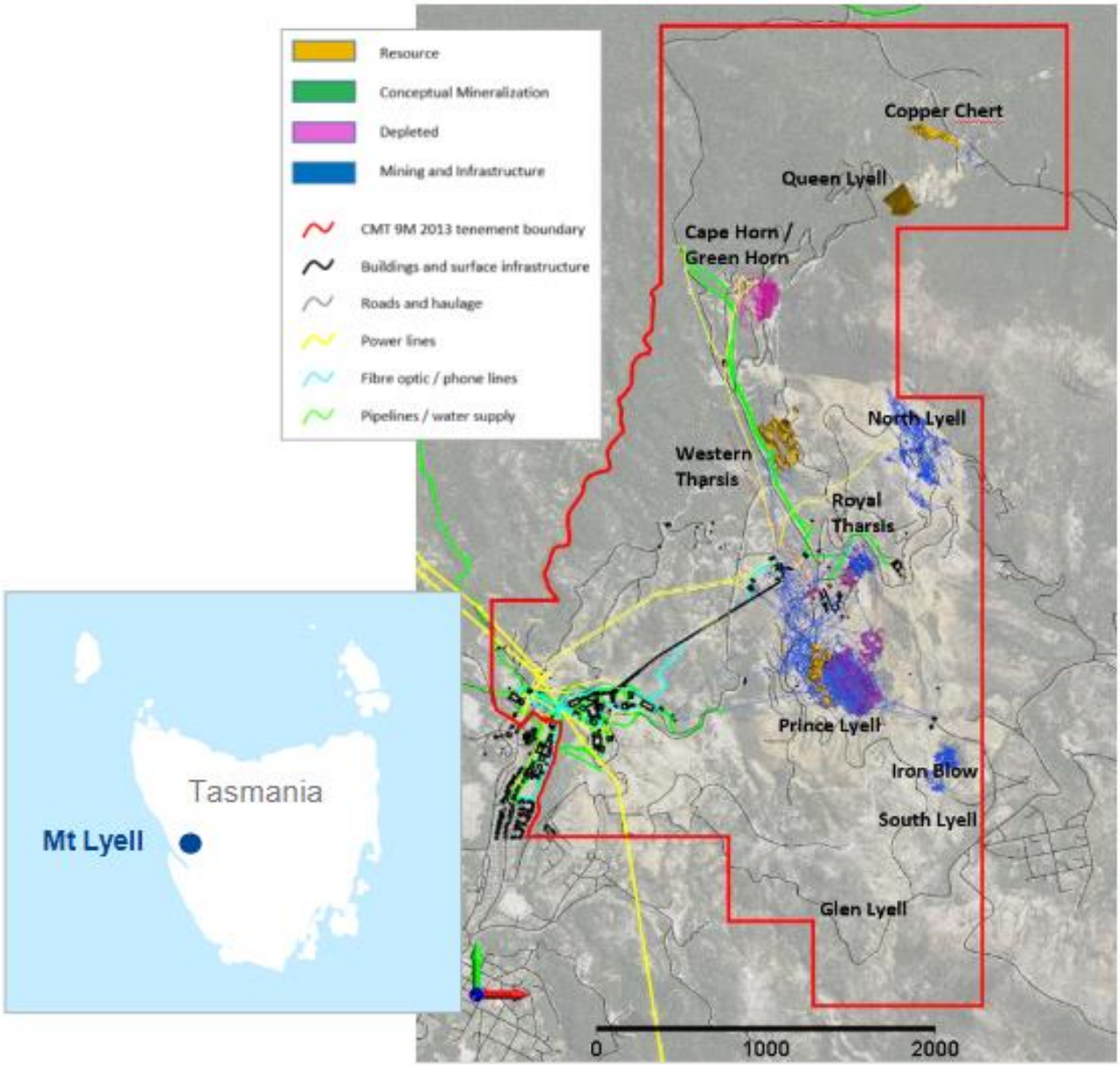

Figure 5 – Mt Lyell location, Tasmania, Australia

Mt Lyell was acquired by Vedanta in 1999, who thereafter profitably produced almost 400kt of copper, 220koz of gold and 1.8moz of silver until 2014. The mine was placed on care and maintenance in 2014, following a series of safety incidents, with the subsequent depressed commodity market resulting in operations remaining suspended for an extended period.

Figure 6 – Existing site infrastructure, clockwise from top left: underground workings, surface infrastructure, 100Mt capacity tailings dam, hydroelectric power station

Option Agreement

On 27 October 2021, New Century **announced** it had executed an Option Agreement with Monte Cello B.V. (**MCBV**), a subsidiary of Vedanta Limited (**Vedanta**) for the acquisition of Copper Mines of Tasmania Pty Ltd (**CMT**), the owner of the Mt Lyell Copper Mine. The two-year option agreement, which commenced on 5 November 2021, allows New Century to evaluate the potential for restart of operations at Mt Lyell.

The Option Agreement includes a minimum expenditure of US$10 million during the option period towards development and exploration, in addition to the reimbursement of care and maintenance costs.

If the option is exercised (at New Century's sole election), the following key acquisition key terms apply:

- US$10m payable upon option exercise
- At risk / deferred payments:
  - US$10m payable at declaration of commercial production (i.e. post-production restart)
  - Net smelter royalty (cash settled), capped at US$250m, payable as follows:
    - Years 1-4: 2.0% NSR, where copper price is >US$4,000/t.
    - Years 4+: 4.0% NSR where copper price is >US$4,000/t, with 1.0% pro-rata increase for every US$1,000/t in the copper price increase to a maximum 10% NSR.
  - Post US$250m, a capped 'windfall' royalty of a further US$50m payable for production in months where copper price >US$7,500/t (same structure as above starting at 7.5%, up to 10% NSR).
- Upon exercise of the option, New Century must replace the existing environmental bond (A$6.1m) covering post-1999 liabilities (all pre-1999 liabilities are retained by the Tasmanian Government).

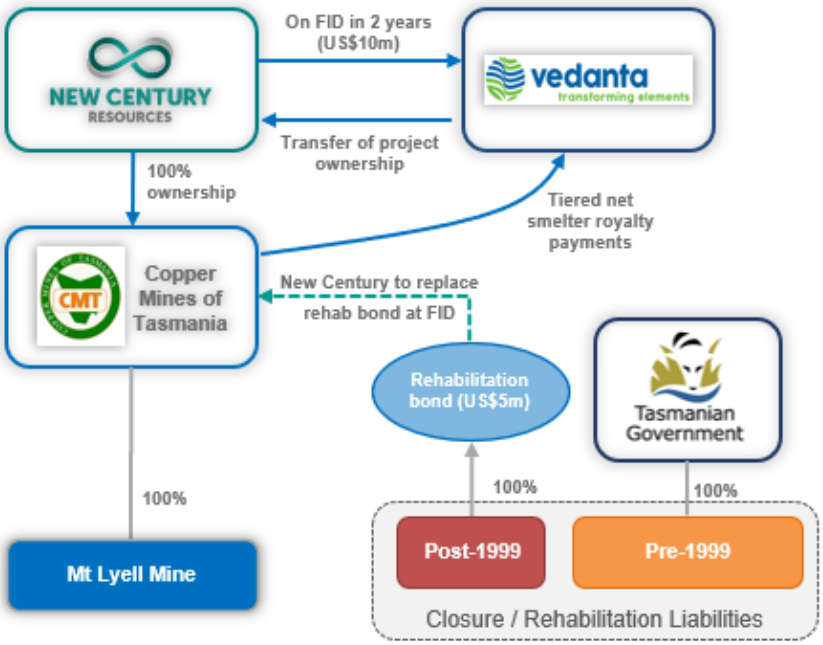

Figure 7 – Option agreement acquisition structure

COPPER MARKET & CONCENTRATE

Demand and Supply

The global copper market is deep, liquid and widely forecast to experience significant supply deficits later this decade due to strongly rising demand and ever-increasing challenges for discovery, permitting and development weighing on greenfield projects. The annual traded volume is currently approximately 25 million tonnes per year, having risen strongly over the past decades in line with rising electrification in developed countries.

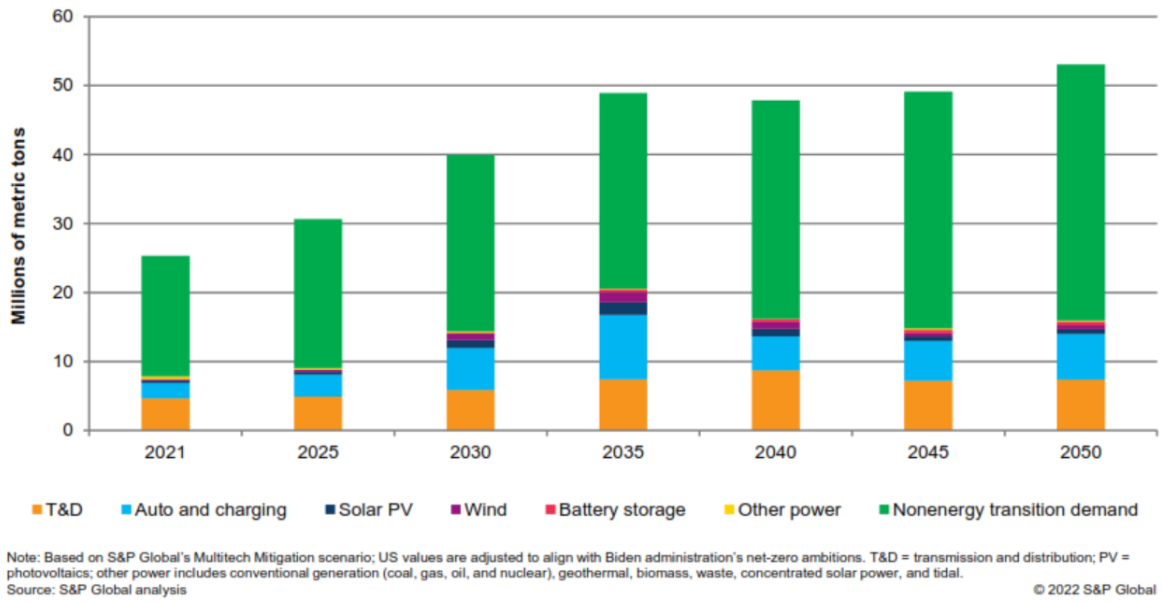

Figure 8 – Copper global demand breakdown (source: S&P Global, ICSG)

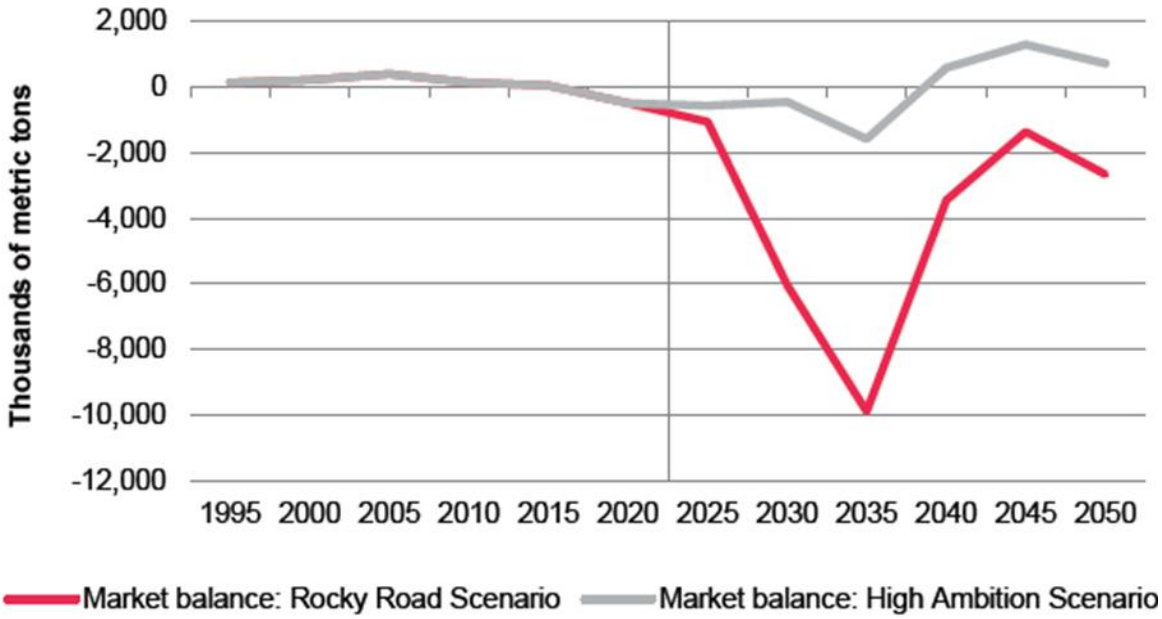

Figure 9 – Copper market balance (source: S&P Global, ICSG)

With the accelerating transition to electrification to aid efforts to decarbonise the world economy, in conjunction with developing nations experiencing their own increase in standards of living and the associated rise in power consumption, copper is a critical metal to provide the wires to enable this modernisation and decarbonisation.

Copper's demand is projected to grow from 25Mt today to about 50Mt by 2035. To satisfy this demand, supply is forecast to hit a shortfall as high as 9.9Mt in 2035 based on typical mine development and copper recycling trends continuing.[13]

Copper Price Outlook

Copper price forecasts are widely positive across various commercial and investment banks, with the generally predicted potential headwinds across 2023/24 to be short-lived and the price strengthening from 2025 onwards as a potential supply shortfall materialises. By way of example, Jefferies Metals and Mining Research[14] has recently predicted copper prices to reach US$5.50/lb by 2026, before a long-term average of US$4.00/lb beyond 2030. Recent upwards momentum in copper pricing to beyond US$4.00/lb in line with China's relaxation of COVID-19 restrictions, and a significant period trading around US$4.50/lb in early 2022, is supportive evidence of the underlying demand for copper within the current electrification efforts of most economies around the globe.

[13] S&P Global, "The Future of Copper: Will the looing supply gap short-circuit the energy transition?"
[14] Jefferies, Equity Research (28 September 2022) "Updating commodities on a stronger US dollar".

Mt Lyell Copper Concentrate

The concentrate produced from the project has not been available to the global market since pre-1999, due to Vedanta having internal smelters as customers for the product.

As a highly clean copper concentrate of good grade, it represents a very attractive “new” product to market. It presents as an ideal blending concentrate for smelters that are experiencing growing restrictions on import qualities, smelter emissions and waste product specifications. Notably, the typical arsenic content of Mt Lyell copper concentrate is <0.01%. By-product credits will be a material source of revenue and assist with lowering the project cost base.

The forecast copper market for Mt Lyell production is one of solid liquidity as both grade and strong demand fundamentals will be intersecting. It is predicted that a wide range of smelters will allow competitive price tension to secure standard payables for copper, gold and potentially silver. There is anticipated to be minimal penalties for impurities (e.g., arsenic, alumina, bismuth, fluorine, chlorine, etc) given the relatively low levels of these elements. Based on the forecast specification, the cost of smelter treatment charges (TC) and smelter refining charges (RCs), should be at market levels.

Element Assay	Units	Value
Copper (Cu)	%	25-28
Silver (Ag)	g/t	35
Arsenic (As)	ppm	90
Gold (Au)	g/t	5
Bismuth (Bi)	ppm	10
Cadmium (Cd)	ppm	30
Chlorine (Cl)	ppm	200
Fluorine (F)	ppm	400
Iron (Fe)	%	30
Mercury (Hg)	ppm	1
Lead (Pb)	%	0.2
Sulphur (S)	%	33-40
Antimony (Sb)	ppm	4
Selenium (Se)	ppm	60
Zinc (Zn)	%	1

Table 7 – Copper concentrate typical grade

GEOLOGY AND EXPLORATION

The regional geology consists of Cambrian volcano sedimentary rocks of the Mount Read Volcanics which are locally intensely hydrothermally altered and mineralised. Known mineralisation is dominantly synergised to epigenetic disseminated chalcopyrite and bornite with varying amounts of pyrite and localised high-grade vein mineralisation.

Copper grades typically average 1.0 to 1.5% copper, with significant gold and silver credits. High-grade zinc, lead and silver and surficial secondary copper mineralisation is also present on the lease. Five significant and many smaller orebodies have been exploited during more than a century of mining on the Mt Lyell field, producing more than 1.7 million tonnes of copper metal, 1,000 tonnes of silver and 60 tonnes of gold. There remains good exploration potential for base metals and gold mineralisation. The mineralised mine sequence is overlain by Palaeozoic sedimentary sequences and locally cut by Tertiary intrusives. Cenozoic glaciation has modified the topography and resulted in local glacial sediment cover.

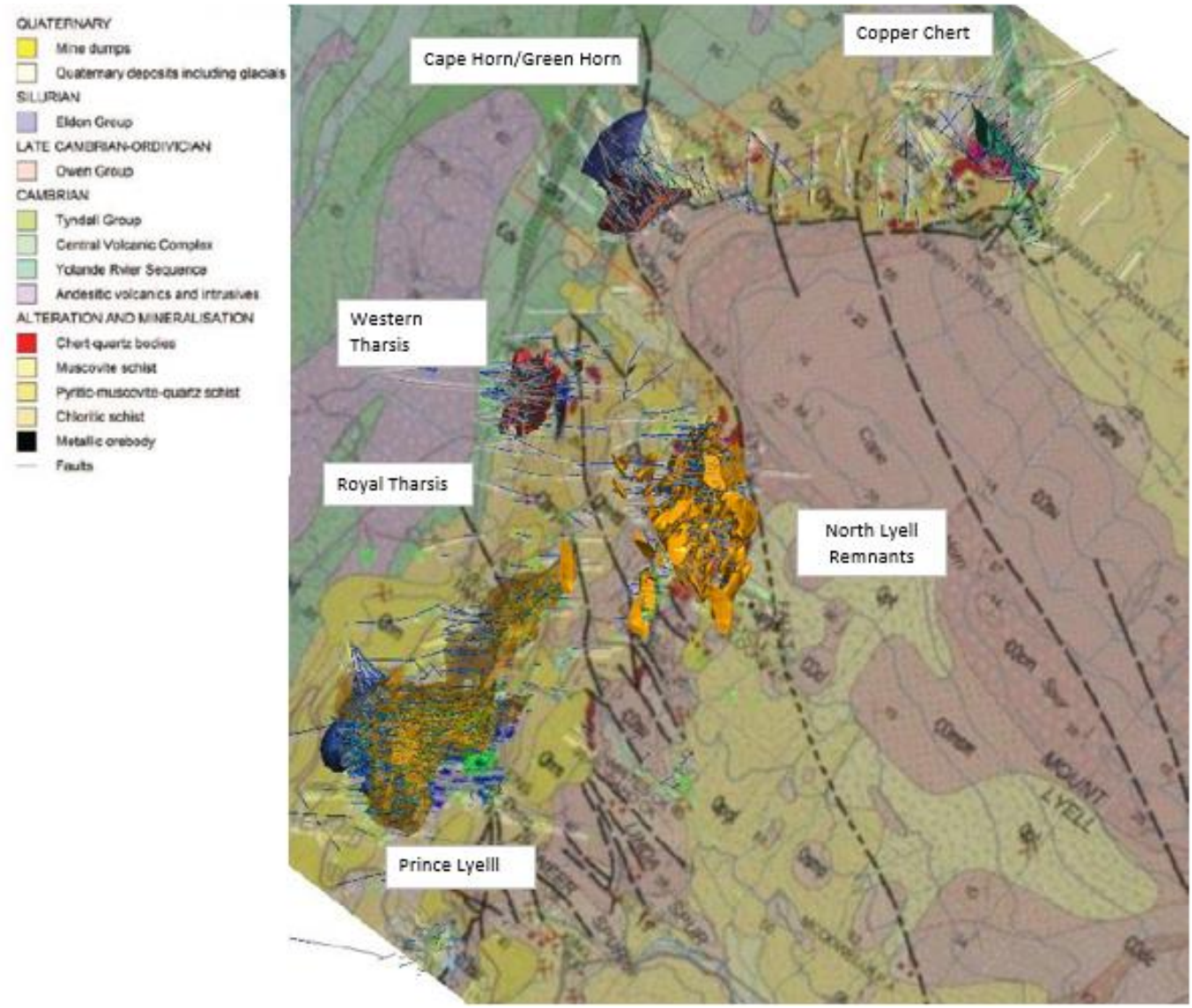

Figure 10 – Mt Lyell regional geology, source: SRK Consulting, 2020

The deposits are hosted by schistose felsic to intermediate volcanics of the Central Volcanic Complex (**CVC**) of the 250 km long, middle to late Cambrian Mt Read Volcanic Arc. To the south-east of the Henty Fault this complex is composed of rhyolitic to dacitic acid lavas and pyroclastics with some andesites and minor shale. The CVC rocks consist of metamorphic assemblages of quartz, sericite, chlorites and sulphides (lower greenschist facies).

A resource definition infill drilling program was completed in the second half of 2022. The program focussed on the upper Prince Lyell Inferred Mineral Resource, with the aim of converting this material to Indicated Mineral Resource. The drilling program is completed, with final assay results pending. Mineral resource estimation has commenced and is planned to be completed in Q1CY23. Figure 11 shows a core photo of a representative sample from the drill program.

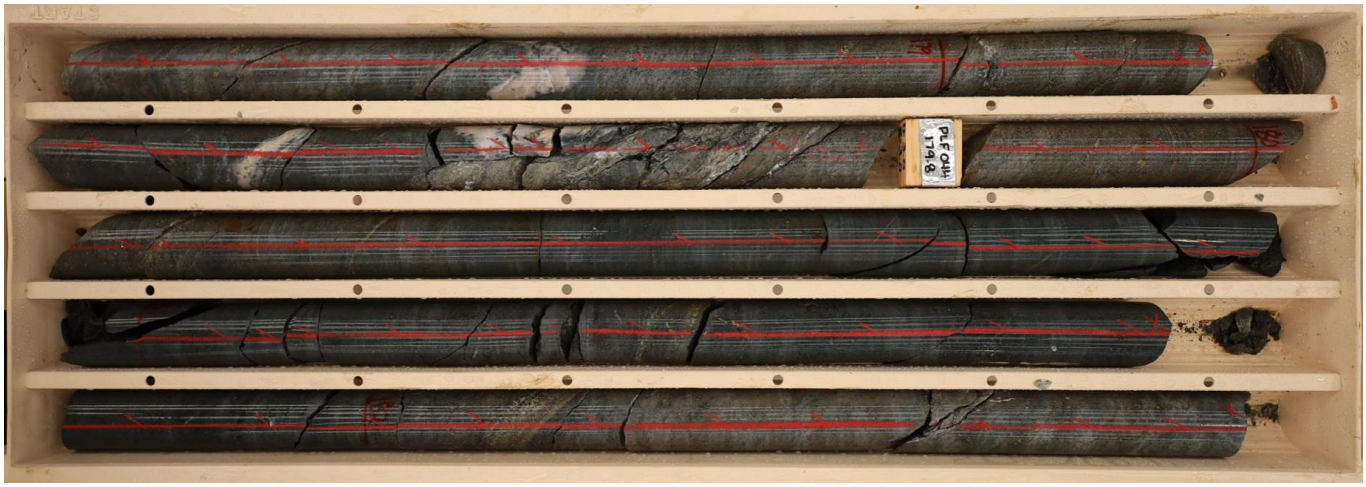

Figure 11 – Core from recent resource definition infill drilling

The CVC is unconformably overlain by the keratophyric tuffs, massive agglomerates, conglomerates, sandstones, shales and limestones of the Tyndall Group. The predominantly volcanic sequence is unconformably overlain by a thick Ordovician succession progressing from red conglomerate to red sandstone and finally to a widespread limestone. The volcanic sequence is unconformably overlain by a thick Ordovician succession progressing from red conglomerate to red sandstone and finally to a widespread limestone.

The focus of the PFS was primarily on the existing Prince Lyell, Western Tharsis and Copper Chert ore bodies. Further investigations on the surrounding ore bodies (shown in Figure 13) will form part of future studies.

Exploration History

The Mt Lyell region had been actively explored and mined since the 1890s, initially as an open cut mine and then transitioning to underground mining. As mining progressed into the 20th century, mining grades were becoming lower and geological stress was becoming an issue for the miners. By the middle of the century, field investigations including the use of electromagnetic and magnetic surveys to identify geological anomalies were conducted. The Prince Lyell deposit has been actively drilled since the 1920s.

Figure 12 shows a section created by SRK showing periods of exploration drilling from the 1920s through to 2010.

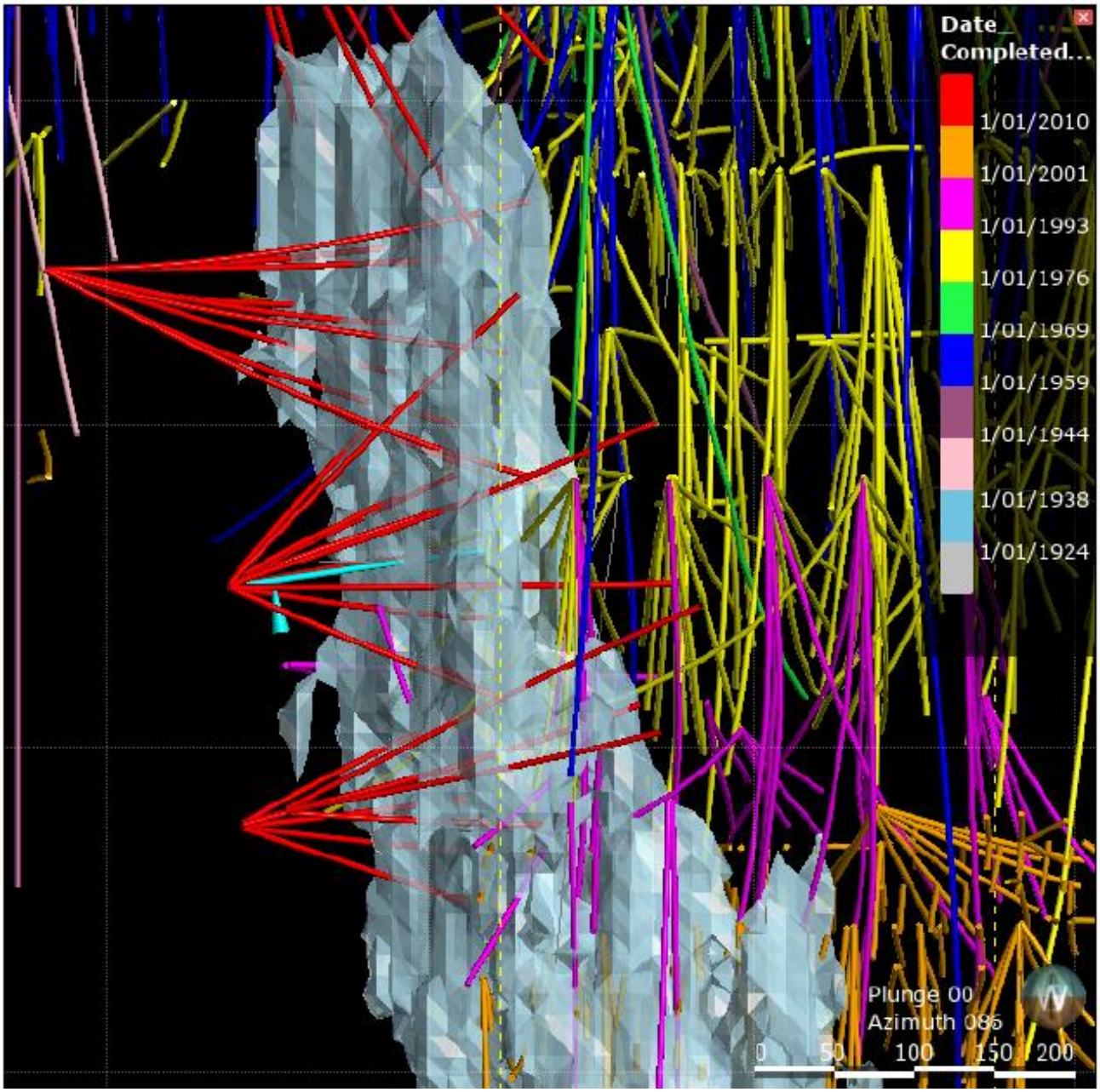

Figure 12 – Section view looking northeast – Prince Lyell North Flank drilling by year

MINERAL RESOURCE

The PFS is based on an underground Mineral Resource of 71.3Mt at 1.14% CuEq for 734kt Cu and 588koz Au, which is a subset of the global Mt Lyell Mineral Resource (including open pit) of 140.3Mt at 0.93% CuEq for 1,176kt Cu and 955koz Au.

The current model is constructed using diamond drilling data only. As previously highlighted, drilling covers a wide time span with core from the early 20th century to recent times. No QAQC or similar documentation is available pre-1994 and a rigorous QAQC programme was not implemented until 2012. Despite this, the data has been handled well over time with pre-digital data still available as level plans, cross sections, and reports. Data reviews by external consultants SRK Consulting in 2022, and resampling programmes conducted by CMT historically, have not highlighted any material issues with data integrity.

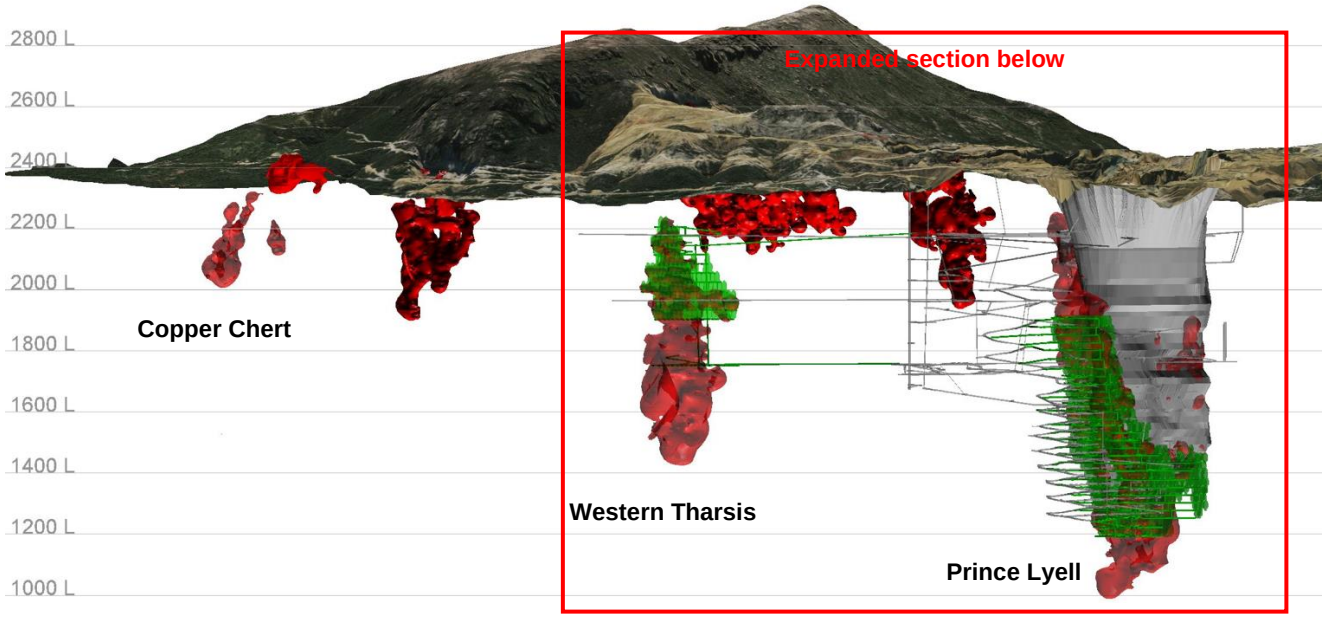

Figure 13 – Mt Lyell current Mineral Resource long section

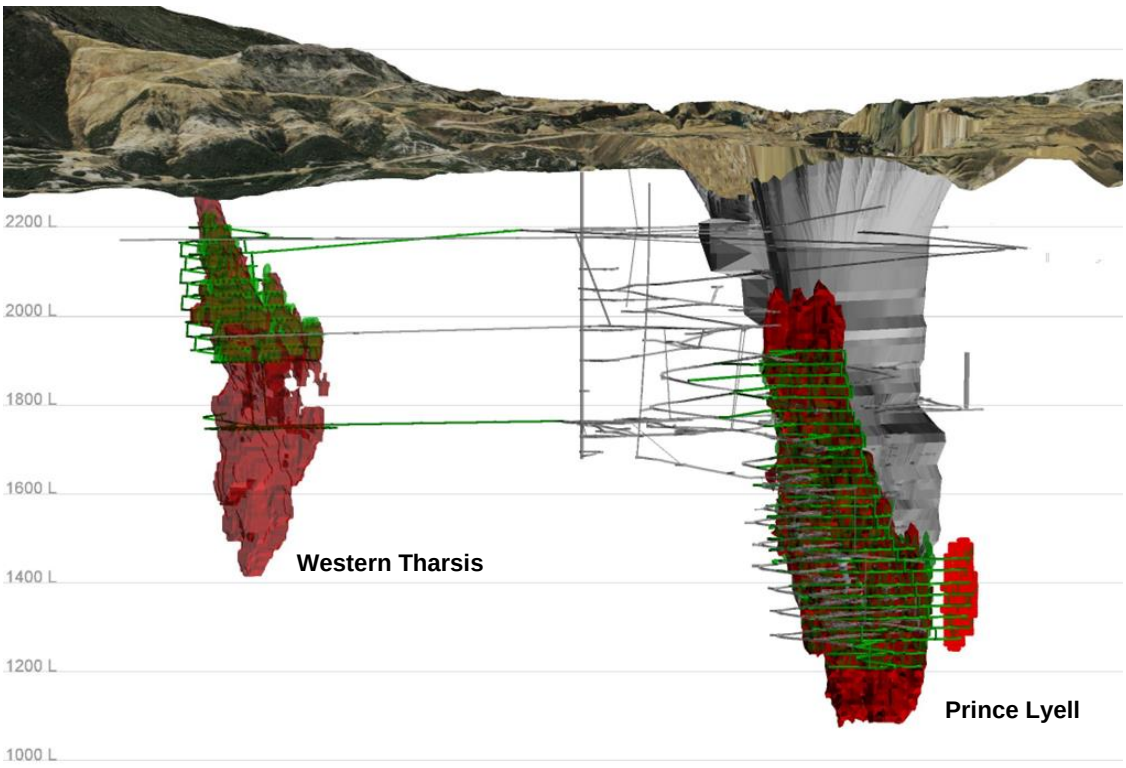

Figure 14 – Prince Lyell and Western Tharsis deposits, which are the major focus of restart activities at Mt Lyell, including initial Ore Reserve mine plan

Table 8 and Table 9 show the total Mineral Resource for underground and surface as set out in the previous ASX releases by New Century on 27 October 2021 and 2 June 2022.

Table 8 – Mt Lyell underground Mineral Resource for PFS

	Ore Tonnes (Mt)	Cu Grade (%)	Au Grade (g/t)	CuEq[15] Grade (%)	Copper Metal (kt)	Gold Ounces (koz)
Prince Lyell North Flank (as of 2 June 2022) 0.6% Cu cut-off						
Measured	-	-	-	-	-	-
Indicated	22.6	0.90	0.23	0.99	203	167
Inferred	2.9	0.94	0.24	1.04	27	22
Total	**25.5**	**0.90**	**0.23**	**1.00**	**230**	**189**
Western Tharsis (as of 1 October 2021) 0.6% Cu cut-off						
Measured	-	-	-	-	-	-
Indicated	6.4	1.07	0.26	1.18	68	53
Inferred	12.6	1.11	0.30	1.23	139	122
Total	**19.0**	**1.10**	**0.29**	**1.21**	**207**	**175**
Prince Lyell Deeps: In situ (1365-1000 RL) (as of 1 October 2021) 0.8% Cu cut-off						
Measured	3.5	1.22	0.30	1.35	43	34
Indicated	1.7	1.26	0.31	1.39	21	17
Inferred	2.1	1.17	0.29	1.29	25	20
Total	**7.3**	**1.21**	**0.30**	**1.34**	**89**	**70**
Prince Lyell Deeps: Ex situ (1365-1465 RL) (as of 1 October 2021) 0.8% Cu cut-off						
Measured	-	-	-	-	-	-
Indicated	-	-	-	-	-	-
Inferred	7.2	0.81	0.21	0.90	58	49
Total	**7.2**	**0.81**	**0.21**	**0.90**	**58**	**49**
Copper Chert (as of 1 October 2021) 0.6% Cu cut-off						
Measured	-	-	-	-	-	-
Indicated	3.2	1.70	0.76	2.02	54	78
Inferred	0.9	1.31	0.91	1.70	12	26
Total	**4.1**	**1.61**	**0.79**	**1.95**	**66**	**105**
Green / Cape Horn (as of 1 October 2021) 0.6% Cu cut-off						
Measured	-	-	-	-	-	-
Indicated	-	-	-	-	-	-
Inferred	8.2	1.02	n/a	1.02	84	-
Total	**8.2**	**1.02**	**0.00**	**1.02**	**84**	**0**
Total Underground	**71.3**	**1.03**	**0.26**	**1.14**	**734**	**588**

Table 9 – Mt Lyell project open pit Mineral Resource

	Ore Tonnes (Mt)	Cu Grade (%)	Au Grade (g/t)	CuEq Grade (%)	Copper Metal Tonnes (kt)	Gold Ounces (koz)
Royal Tharsis / Prince Lyell Upper Remnants (as of 1 October 2021) 0.2% Cu cut-off						
Measured	-	-	-	-	-	-
Indicated	-	-	-	-	-	-
Inferred	35.5	0.64	0.18	0.72	227	205
Total	**35.5**	**0.64**	**0.18**	**0.72**	**227**	**205**
North Lyell Remnants (as of 1 October 2021) 0.2% Cu cut-off						
Measured	-	-	-	-	-	-
Indicated	-	-	-	-	-	-
Inferred	33.6	0.64	0.15	0.70	215	162
Total	**33.6**	**0.64**	**0.15**	**0.70**	**215**	**162**
Total Open Pit	**69.0**	**0.64**	**0.17**	**0.71**	**442**	**367**

[15] CuEq (%) = Cu (%) + Au (ppm) * 0.43, CuEq calc. uses a copper recovery of 92%, gold recovery of 60%, copper price of US$8,780/t and a gold price of US$1,653/oz.

ORE RESERVE

The initial Ore Reserve has been estimated after consideration of the level of confidence in the Mineral Resource and material and relevant Modifying Factors. Details of the material assumptions underpinning the Ore Reserve and the outcomes of the Ore Reserve PFS are set out in the market release 2 June 2022.

Table 10 – Mt Lyell initial Ore Reserve

Resource	Mineable Ore Tonnes (Mt)	CuEq[16] Grade (%)	Cu Grade (%)	Au Grade (g/t)	Cu Metal Tonnes (kt)	Gold Ounces (koz)
Probable						
Prince Lyell	21.0	1.14	1.03	0.26	216	174
Western Tharsis	2.9	1.14	1.03	0.26	30	24
Total	**23.9**	**1.14**	**1.03**	**0.26**	**246**	**198**

GROWTH POTENTIAL

To date, only Prince Lyell, Western Tharsis and Copper Chert have been considered within the Study mine plan. Both Western Tharsis and Copper Chert remain open and untested at depth. Although more mineralisation is not necessarily required, with a long mine life already extending 25 years, replacement by higher grade or lower cost material has the potential to deliver improvements in the project economics. A systematic resource extension and exploration review will be conducted in 2023 to prioritise future drilling.

As shown in Figure 13, there remains significant Mineral Resource outside the material included in this Study. The Green Horn/Cape Horn deposit was historically mined but is not closed at depth. The Comstock and Tasman Crown areas also offer excellent targets for exploration, with significant high-grade, low tonnage historic production.

The open pit potential at the project has not been considered for this Study. Of note, the North Lyell open pit Mineral Resource offers potential support to a throughput growth case that would take pressure off underground ore sources. A scoping study, assessing the open pit potential will be completed once the FS is underway.

During the FS, a detailed review of the regional exploration will be conducted to inform future exploration efforts. Figure 15 shows the major mineral deposits of the West Coast of Tasmania.

[16] CuEq (%) = Cu (%) + Au (ppm) * 0.43, CuEq calc. uses a copper recovery of 92%, gold recovery of 60%, copper price of US$8,780/t and a gold price of US$1,653/oz.

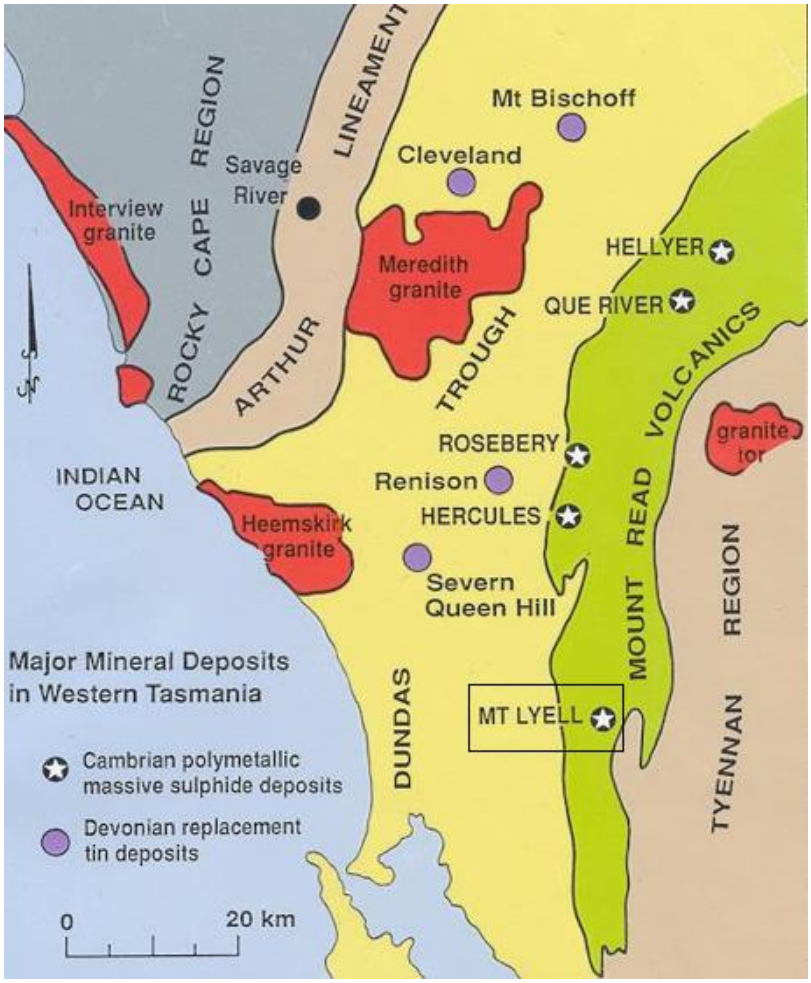

Figure 15 – Major mineral deposits of Western Tasmania

MINING OPERATIONS

The initial mine development is proposed to access the upper levels of the Prince Lyell D Panel and will provide for access drives across to the Western Tharsis deposit from the existing Prince Lyell decline. Production is planned to commence within the first year of mining recommencing. The total ore production for Mt Lyell is 65Mt at 0.92% copper and 0.23 g/t gold, yielding a contained metal content of 601kt copper and 485koz of gold.

The mine design parameters for the Mt Lyell project are generally based on the parameters previously used to mine the Prince Lyell deposit, being SLC. The Copper Chert mine design parameters have been based on industry best practice, as this is currently planned to be a Longhole Open Stoping method of mining. Equipment selection and planned operational production rates have been considered during the process. With the deposit's existing infrastructure, the aim of the design is to minimise the capital development and maximise the return on investment by bringing forward production as soon as practicable. Figure 16 shows an isometric of the final mine layout.

Historic production utilised SLC rings which were extracted initially longitudinally (along strike), and then transversely (across strike), below 1525 mRL, with level spacing increasing between 20m to 25m. The proposed mining method for Prince Lyell and the majority of Western Tharsis is SLC. The mining method for upper Western Tharsis will be reviewed in the FS to see if a form of open stoping is both more suitable and provides improved project economics.

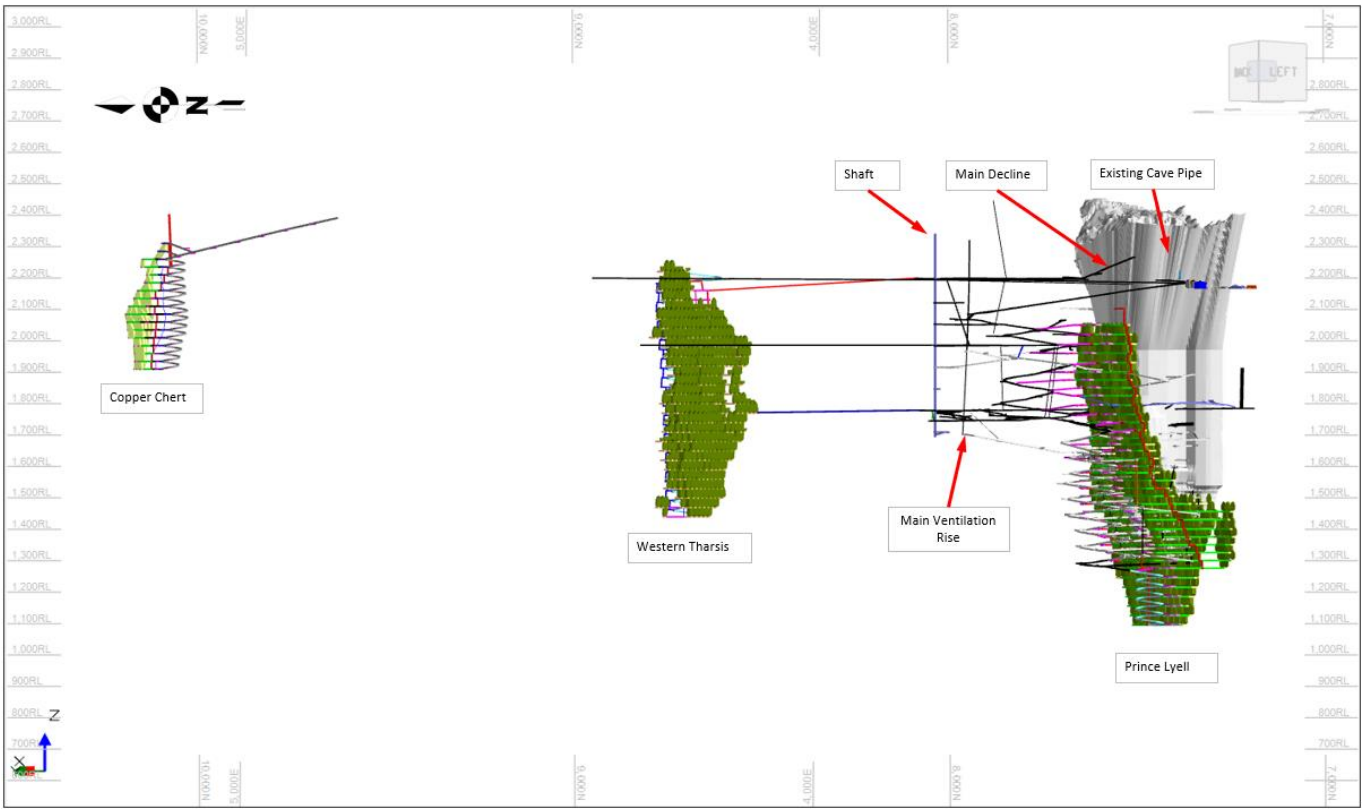

Figure 16 – Overall Mt Lyell mine plan

SLC is an underground bulk mining method commonly applied to large low-grade homogeneous deposits with large vertical extents. SLC is a mass mining method based upon the utilisation of gravity flow of blasted ore and caved waste rock. The method functions on the principle that ore is fragmented by blasting, while the overlying host rock fractures and caves under the action of mine-induced stresses and gravity. The caved waste from the overlying rock mass fills the void created by ore extraction.

Current SLC geometries consist of a series of sublevels created at intervals between 20m, 25m or 30m, beginning at the top of the orebody and working downward. A number of parallel drives are excavated on each sublevel, with drives being offset between sublevels. From each sublevel drive, vertical or near vertical blast hole fans are drilled upward to the overlying sublevel. The burden between blast fans is in the order of 2-3m. Beginning typically at the hanging wall, the burden is blasted against the front-lying material, consisting of a mixture of ore and caved waste. Extraction of the ore from the blasted burden continues until total dilution or some other measure reaches a prescribed level. The next burden is then blasted, and the process repeated.

The aim of the production schedule is to deliver a high project value by ensuring that high grades are processed as soon as practicable. This is proposed to be achieved by:

- Ramping up quickly to the production capacity of the plant (3Mt per annum).
- Where practical, delaying development until it is required for production.
- Targeting the areas that are expected to deliver higher value first.

As part of the strategy, a series of scenarios were investigated and taken into separate cost and financial models to determine the preferred go-forward option.

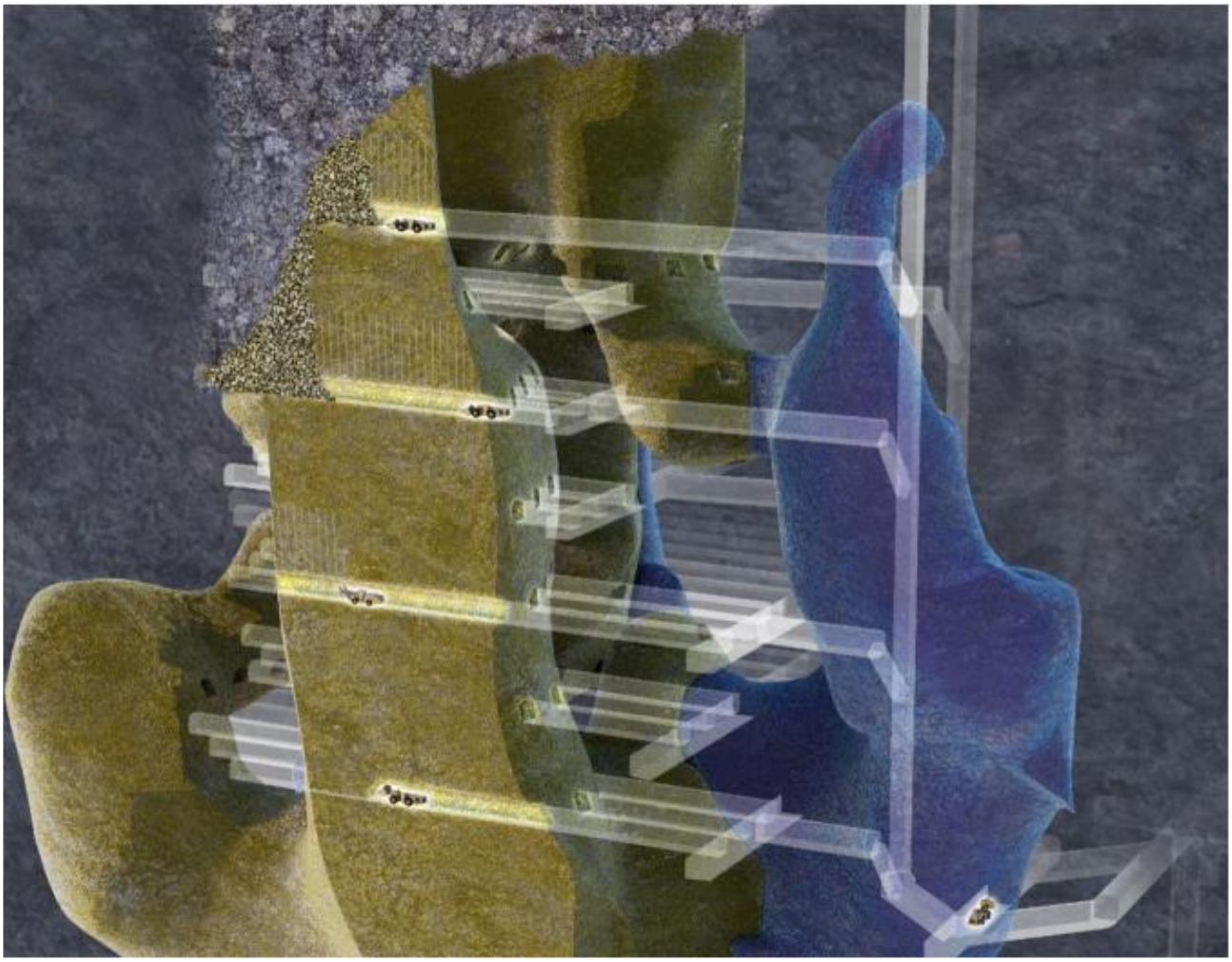

Figure 17 – Example SLC mining operation

The strategy resulted in the production profile for Scenario 2 shown in Figure 18. Production is initially focussed on the restart of North Flank/D Panel within the Prince Lyell deposit, then moving to Western Tharsis and Copper Chert deposits. The bars coloured yellow represent inferred material at the top of Prince Lyell, which has been subject to the recently completed drilling program. This material is pending a Mineral Resource update that will be incorporated into the FS and represents a potential near-term increase to the Ore Reserve.

Production proposed to initially be focussed on the restart of D Panel within the Prince Lyell deposit, then commencement of Western Tharsis and Copper Chert deposits. Commencing the Copper Chert deposit earlier in the mine plan increases the mine head grade within the first 5 years of the project.

Mining costs have been developed from first principles and have resulted in the mining cost key performance indicators (**KPI**) shown in Table 12.

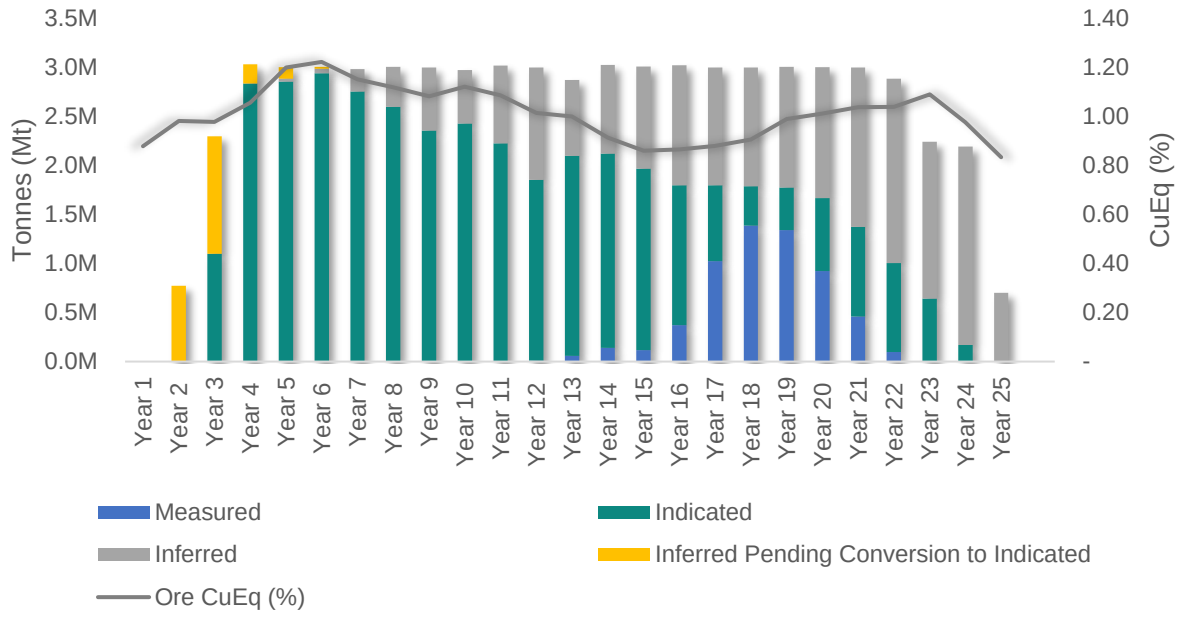

Figure 18 – Tonnes and grade by resource category per year (Scenario 2)

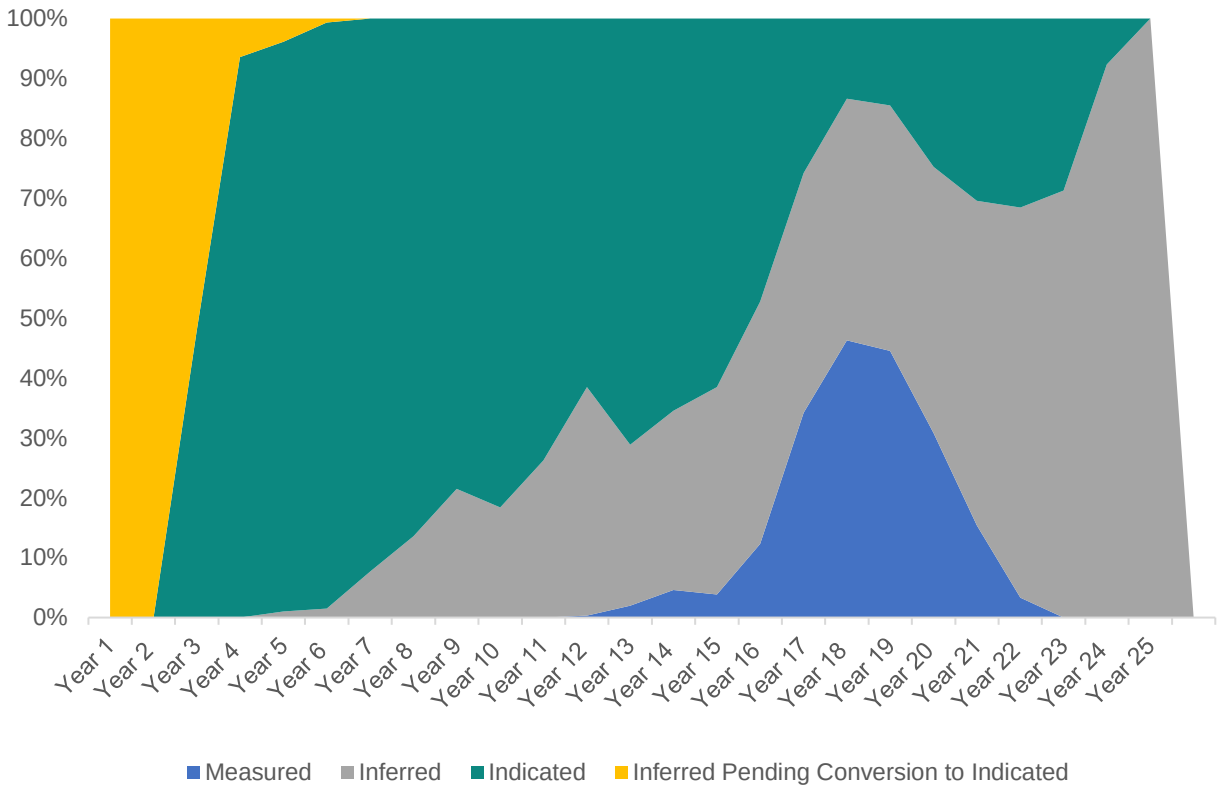

Figure 19 – Percentage of resource classification by year (Scenario 2)

Table 11 – Estimated mining physicals from Scenario 2

Item	Parameter	Unit	Value
Mining study schedule	Mine life	Years	25
Total	Mined ore tonnes	Mt	65.0
	Mined copper grade	%	0.92
	Mine gold grade	g/t	0.23
	Mined waste tonnes	Mt	7.8
Capital development	Lateral development	km	49.0
	Vertical development	km	4.7
Operating development	Lateral development	km	98.8
	Vertical development	km	2.5
SLC production	Production drilling	km	4,165
	Mined ore tonnes	Mt	61.5

Table 12 – Estimated LoM mining cost KPIs

KPI Measure	Units	Value
Mine operating cost	A$/t ore	34.99
Mine capital cost	A$/t ore	10.84
Mine total cost	A$/t ore	45.83
Development unit cost	A$/m advanced	5,600
Development unit cost	A$/t developed	73.93

Within the current Study, a contractor mining strategy has been assumed to carry out the mine development over the LoM. These works include all development drilling, charging, loading and ground support. The contractor will manage the development works and maintenance of all equipment associated with this scope of works and will be required to perform in adherence to predetermined KPI metrics. This contractor will utilise and maintain the surface and underground workshops and provide all small tooling.

Allowance has been made within the capital estimate for mine automation technologies, however at this level of study maturity no corresponding gains in efficiency have been applied to the operating parameters. The technologies proposed are intended to:

- Improve productivity generally by allowing operation of equipment remotely through shift change.
- Reduce damage through use of Lidar technology.
- Improve mine control, generally by monitoring and controlling activity remotely and in real time.
- Provide improved data acquisition and management, generally by automatically monitoring and recording activity.
- Demonstrate a commercial return on investment through reduction in project OPEX or CAPEX.

During future studies a mine automation study will be conducted to provide a business case and definition of cost savings to be captured from automation that is measured by improved safety, productivity and efficiency.

Most modern mining equipment suppliers now provide specific equipment that is already equipped with the technology to enable automation. This technology generally relates to the connectivity to the mine fibre optic/wireless network for control and data acquisition and enables the implementation of required software and systems.

The operational philosophy applied to the Study for the management of the underground mining operations is proposed through an integrated management team comprising of personnel from the New Century owner's team and an underground mining contractor.

The initial underground development is proposed to be implemented through a mining contractor. The contractor will undertake all excavation works and production activities underground to mitigate risks of delayed production. The technical management will be expedited by the Company, with technical staff responsible for mine operations in the broad areas of geology, mine planning and scheduling, surveying, and geotechnical engineering.

The majority of the owner's team will be comprised of local residential personnel, with others on a drive-in/drive-out or fly-in/fly-out roster. The underground contractor's team will be ideally sourced from Tasmania, with the remainder coming from the mainland to make up any deficient numbers or specific skill set. New Century will advocate that many of the employees be sourced locally and from Tasmania.

The operating rosters for the Mt Lyell project will be nominally 5-days on, 2-days off/4-days on, 3-days off for the management and technical staff, with the underground workforce likely to be seven-days on, seven-days off, or a derivative of this.

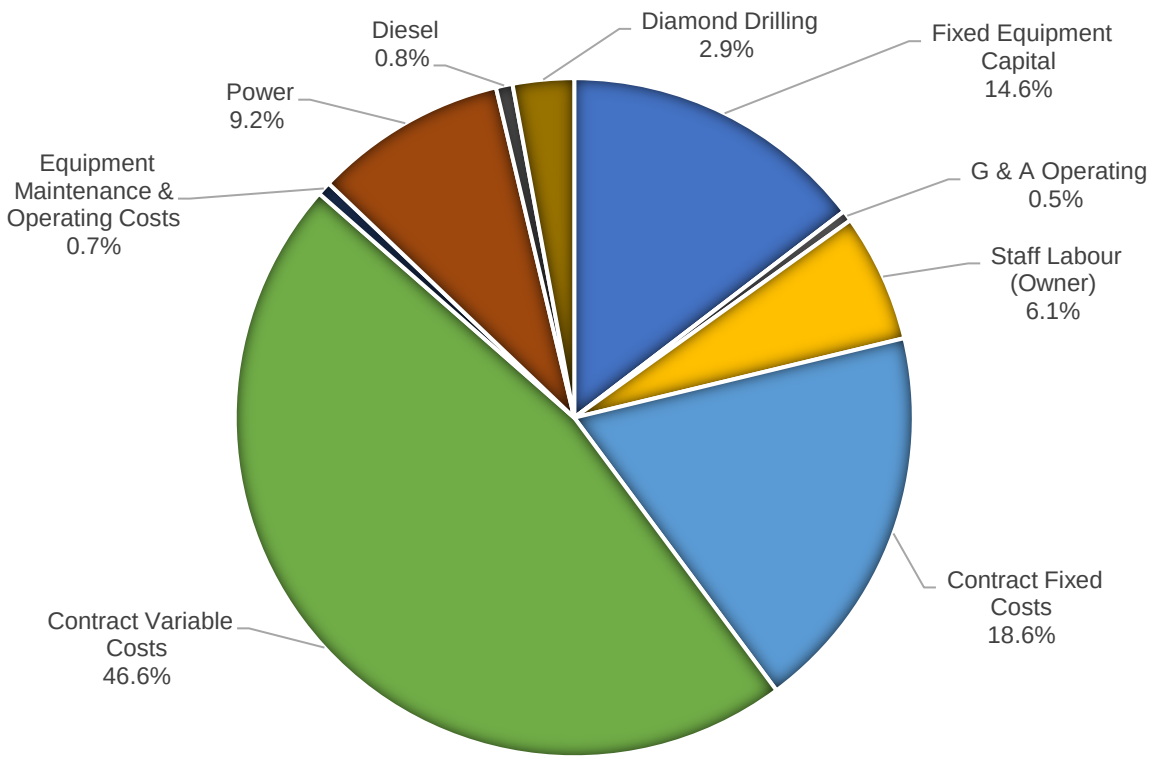

Figure 20 – Estimated total mining cost breakdown (Scenario 2)

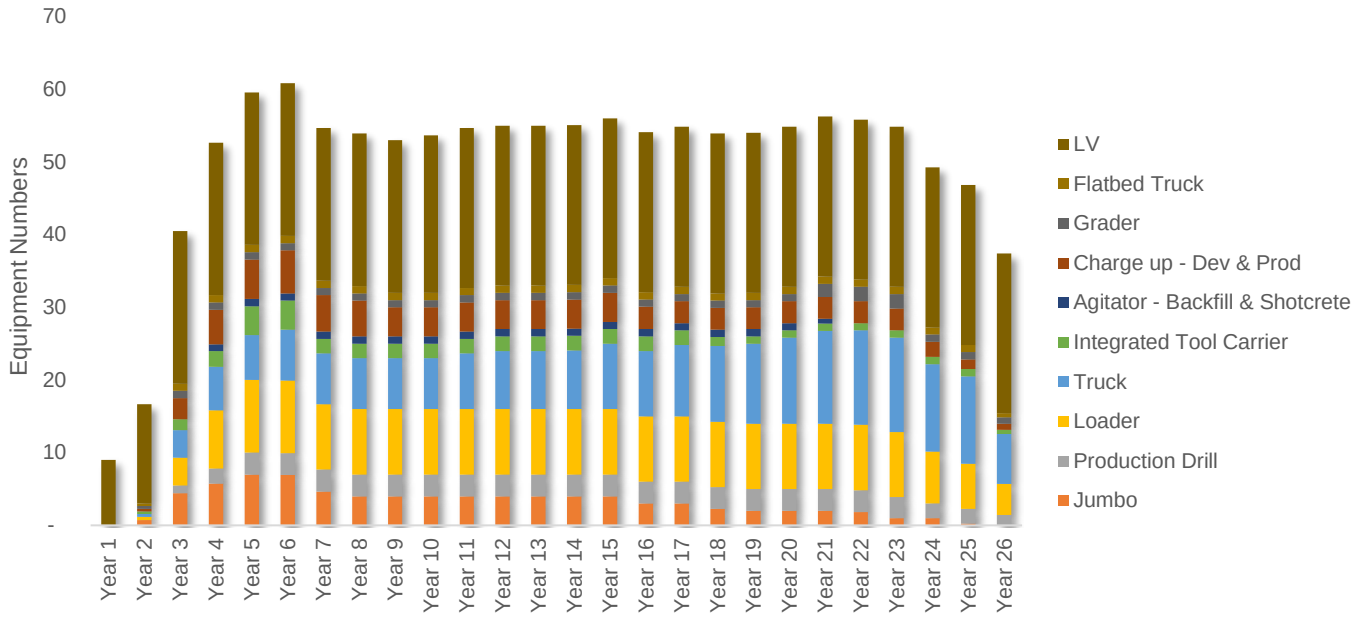

Figure 21 – Estimated underground fleet requirements (Scenario 2)

METALLURGY AND PROCESSING

With the Mt Lyell deposits were mined almost continuously since the 1890s until entering care and maintenance in July 2014. This extensive operating history provides a strong basis to design a new processing plant for the restart project. Replicating the historical process flowsheet with more modern equipment provides a low-risk development pathway with upside for efficiency gains in processing consumables and reagents, labour requirements, and metallurgical performance. This is seen as the preferred option over refurbishment of the historic processing plant.

Full access to past operating data, including semi-quantitative monthly mineragraphy from 1999 to 2013 from CMT and third parties, has allowed the Study to be progressed with high confidence. The data shows consistency in mineralogy, mineral associations and mineral liberation for plant feed, concentrates and tailings. Ore types within the Study production profile are mainly comprised of similar and same characteristics as past operations, delivering a true brownfield study basis and associated benefits in relation to both risk and confidence levels.

Metallurgical assumptions for the PFS were established from the extensive operating history of the site, through overall plant performance and semi-quantitative monthly mineragraphy over a period of 20 years. The estimated recoveries and concentrate grades are shown in the table below and are all based on historic actual results.

The Mt Lyell project is expected to produce a consistent grade copper concentrate which will be highly desirable in the market due to extremely low deleterious elements. Notably, the low arsenic content of the concentrate is expected to be a key marketing advantage.

Table 13 – Estimated metallurgical parameters for Mt Lyell PFS

Item	Unit	PFS Assumption
Recovery		
Copper	%	92.7
Gold	%	66.3
Concentrate Grade		
Copper	%	27
Gold	g/t	5

The processing study focussed on four processing scenarios: two locations and two production rates. After initial investigations on site, 2.4Mtpa at the lower location and 3.0Mtpa at the upper location were deemed to best two scenarios to investigate further as they worked best with the mining scenarios. Figure 22 shows the location of the upper and lower locations relative to the mine office and shaft.

Figure 22 – Process plant location options

The first option is a 2.4Mtpa throughput processing plant fed by ore trucked to the surface, located in the lower area of the mine site where the existing crushing circuit and ore storage are situated. The second option is a 3.0Mtpa (or greater) plant that incorporates the underground crusher and mine shaft for ore delivery and is in the upper area of the mine site adjacent to the mine shaft. Both options have a COS that feeds a SAB grinding circuit and flotation circuit, with concentrate and tailings piped back to the existing thickener area.

Several downsides were identified at the lower location including heavy vehicle interaction around the office leading to traffic management issues, lack of space to incorporate a COS and SAG Mill circuit, demolition costs, etc. For this Study, the selected processing plant site is in the upper location, adjacent to the shaft.

Mineral Processing Overview

The proposed processing plant for Mt Lyell is consistent with the historical processing flow sheet. Construction of a modern plant provides the benefits of a simplified footprint, reduction in the number of mechanical equipment items (and associated maintenance) and implementation of well-proven technologies with high utilisation.

The proposed circuit is a standard crush, grind and flotation process, producing copper concentrate, at a nameplate throughput of 3.0Mtpa. The selected option assumes the mill building (containing the SAG mill, ball mill, trash screen and the hydrocyclone pack) and the flotation building (including rougher and cleaner circuits) will be located adjacent to the shaft. During past operations, material transported to surface via the shaft was required to be conveyed overland to the processing plant, introducing single points of potential failure and maintenance requirements. Concentrate and tailings will be pumped downhill to the existing process plant area, where the dewatering circuits (thickeners and filter) will be located, along with the pumping station to send concentrate to the handling shed and tailings to the TSF.

Comminution and flotation mass balances have been developed based on the extensive historical operating dataset, combined with benchmarked parameters from other Cu-Au operations of similar size. From this data, Process Design Criteria (**PDC**) for 2.4 Mtpa and 3.0 Mtpa have been established, which includes flows and rates of production at the specified head grade and the required utilization and availability. The design of the processing flow sheet and the selection of key equipment and infrastructure items are based upon these PDC.

For the comminution and flotation circuits, the modelling software IES has been used to simulate data in the PDC. Several models have been used in parallel to size the major equipment and calibrate the model to reflect the likely ore response through processing. The simulations and design are for a SAB circuit, with design allowance for the installation of a pebble crusher in future, if ore hardness unexpectedly requires this processing addition.

The major processing units specified for Mt Lyell which represent variations from the past processing plant include SAG mills, Vertimills and Jameson Cells for flotation. All of these are seasoned technologies, used extensively worldwide and present minimal risk in operation due to being incremental upgrades on those previously utilised processing units within the operational flowsheet (i.e. a more modern flotation cell as opposed to a new base technology or processing mechanism). Whilst not identified as a material risk, future metallurgical test work programs should confirm the suitability of this equipment.

In the flotation circuit, consumption rates of major reagents and consumables have been based on the extensive historical usage rates supplied by CMT. This approach removes risks around laboratory scale up factors which are required to translate testwork outcomes to industrial scale operations.

The flow of material will follow the flowsheet shown in Figure 24. Mined ore will report to the existing underground jaw crusher. The crushed ore will then be hoisted via the existing shaft to the existing drift conveyor and on to the Coarse Ore Stockpile (**COS**) with a live capacity of 9,000t, which is equivalent to twenty-four hours of operation.

Ore from the COS will be reclaimed via two apron feeders, and a CAT D8 dozer will push the ore into the apron feeders when required. Ore from the COS will then progress to the SAG mill and ball mill, with dilution water added prior to SAG mill feed to achieve a target pulp density of 72% (w/w).

Overflow from the cyclone bank will progress to an agitated rougher circuit conditioning tank, before progressing to a circuit of five 100m^3 flotation cells. Rougher tailings will be pumped to the tailings thickener, whilst the rougher concentrate will progress to the regrind mill, being a Vertimill. Regrind mill discharge will report back to the regrind cyclone feed hopper.

Dilution water will be added to the Cleaner-Scalper Jameson Cell to reduce the pulp density to approximately 10% w/w. This circuit will generally recover the coarse, liberated, fast-floating copper minerals. Wash water will be added to the concentrate to remove entrained gangue minerals. The concentrate will then be pumped downhill to the new concentrate thickener, via a feed break sump. A portion of tailings will be recycled back to the circuit feed, whilst the rest of the tailings will report to the Cleaner-Scavenger Jameson Cell circuit. In the Re-Cleaner Jameson Cell, wash water will be added to the concentrate to remove entrained gangue minerals. The pH of all cleaner flotation circuits will be 11.

In the existing 30.5m diameter tailings thickener, flocculant will be added to assist settling of the slurry. The Thickener overflow will report to the existing process water tank, whilst the Thickener underflow will be pumped to the existing TSF.

In the new 10m diameter concentrate thickener, flocculant will be added to assist settling of the slurry. The thickener overflow will report to the existing process water tank, whilst the thickener underflow will be pumped to a new agitated concentrate storage tank. The filter feed tank will have approximately 8 hours of surge capacity.

Concentrate will be pumped from the filter feed tank to the concentrate filter, which will be a plate and frame unit, operating in batch mode. Filtrate will be pumped back to the concentrate thickener, whilst the concentrate will report to the concentrate shed to be trucked off-site.

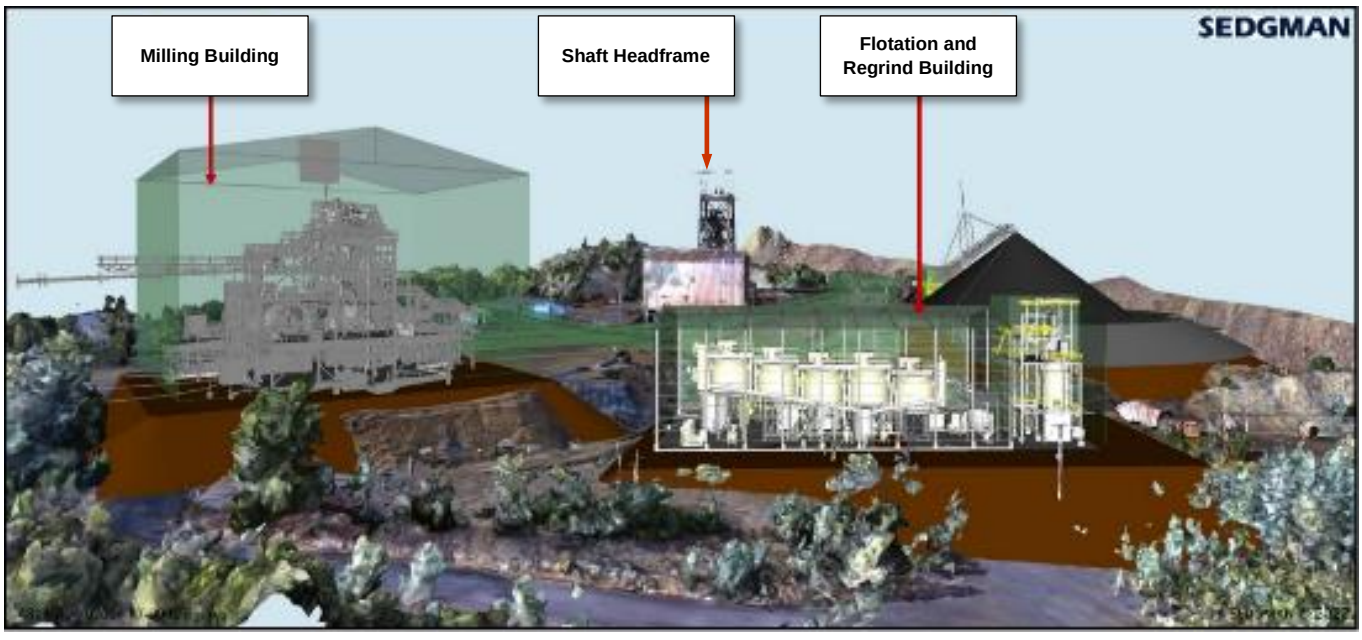

Figure 23 – Plant and infrastructure location overview

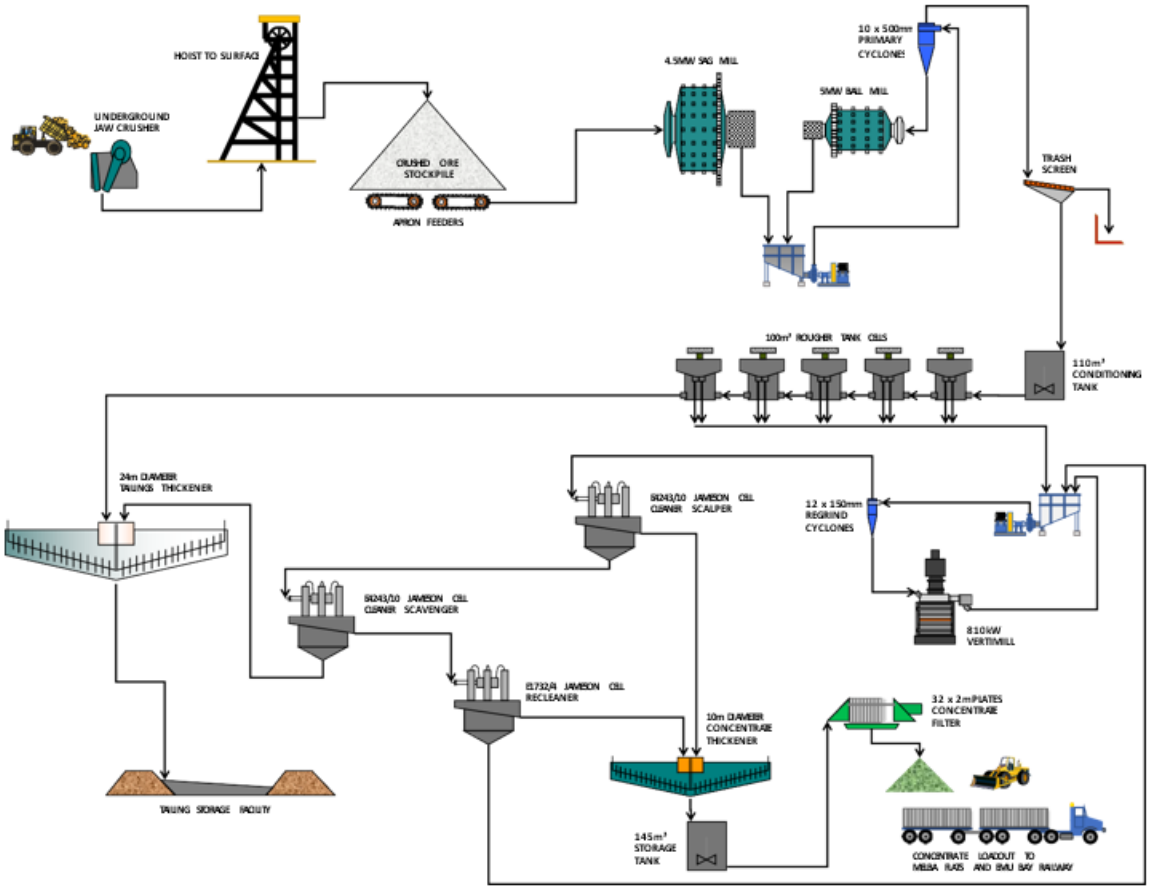

Figure 24 – Mt Lyell process plant overview

INFRASTRUCTURE AND SERVICES

The Mt Lyell Copper Mine has access to significant infrastructure both regionally and on the Mining Lease, which is a significant advantage over greenfield copper deposits of similar size and scale.

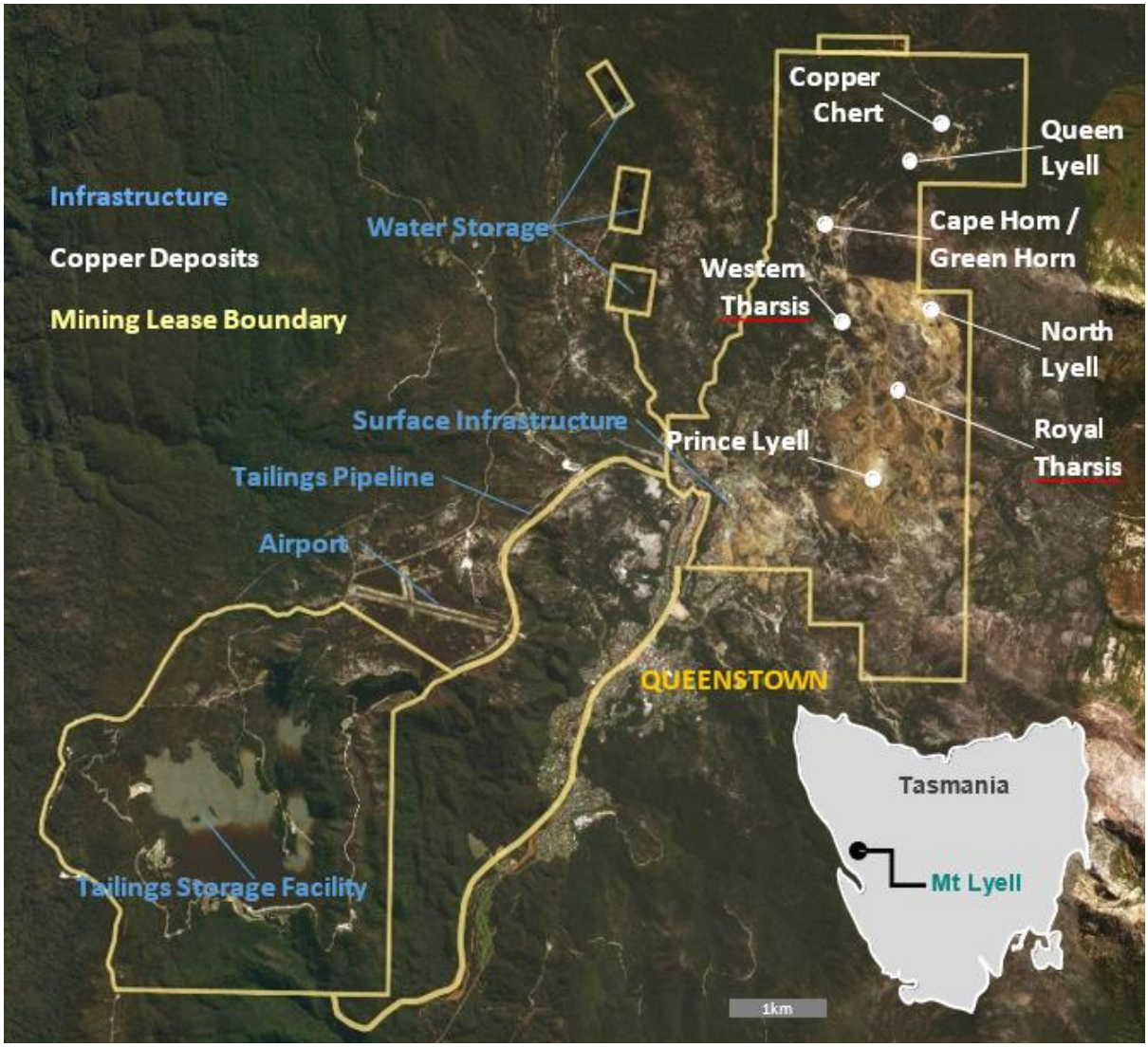

Figure 25 – Key infrastructure relative to the Mining Lease

Power

The main source of power for the Mt Lyell project will be from the Queenstown Transend Grid 11kV high voltage connection (operated by TasNetwork) as well as the connection to the Lake Margaret Hydro Power Generation facility (operated by Hydro Tasmania). Both sources of power are currently in operation and connect to the site's dedicated 11kV Substation (**CMT Main Substation**) where existing electrical installations have the capability to supply high voltage power to the new processing plant location. The substation and electrical equipment are in good working condition.

Power will be delivered to the new process plant through a new 11kV overhead power line running approximately 2km in length west of CMT Main Substation, in parallel with the existing overhead line network to power the underground substation.

The combined capacity of both power sources is approximately 24MW (Lake Margaret hydroelectric capacity of 8.4MW and further grid capacity of 16MW). This capacity rating is adequate to meet the projected maximum demand of the restart operation of 13.5MW. The restart operation comprises of a power demand build-up of approximately 1MW infrastructure, 10MW process plant and 2.5MW underground mining operations (historical data).

The Power Purchase Agreement currently in place for power supply to the Mt Lyell site was used as the basis for power cost within the operating cost estimate. Engagement with the power provider during the FS will look to further extend this agreement to cover long term operations at the site pending a positive development decision.

Shaft Refurbishment

Scenarios 2 and 3 include the full refurbishment of the materials handling system, including underground crusher and ore transfer system, hoisting system and winders, and head frame and ore handling system to the run of mine stockpile.

Under Scenario 2, the shaft project is fully complete in year 8 (year 5 of production) and in Scenario 3 it is operating in year 3 with all ore production hoisted to the surface. Scenario 1 includes the simple stripping of the shaft to enable it to be used as an intake airway only.

Two specialist shaft contractors visited site to inspect the infrastructure and scope the shaft refurbishment project for the FS, with this FS phase study component awarded to MCA. MCA possesses extensive prior knowledge of the project infrastructure and experience with the full materials handling system.

Underground Infrastructure

The PFS considers both refurbishment and continuation of underground infrastructure such as the workshop, magazine, dewatering, and ventilation infrastructure. The project also includes upgrades to historic infrastructure with the application of new technology, notably the introduction of optical fibre and Wi-Fi to all operating areas of the mine being included within the capital allowances of the PFS.

Water

Fresh water is delivered via a pipeline to the process plant from nearby fresh water sources. The current water dam has significant fresh-water storage capacity and the mine is licenced to draw from this source. The pipeline is nominally DN200 and can deliver the required rate (greater than 50LPS / 200m^3/h). Investigations are planned for the FS to look at the reuse of water that is currently leaving site via Haulage Creek.

The process plant will recycle process water with a newly built process water dam adjacent to the plant. The dam will minimise process water runoff and reduce the amount of fresh water consumed.

It is intended that the mine return water will be combined with site run off water and controlled within the existing site vee drains, which in turn gravity flow to a nearby feed point to the King River. The entry point into the King River remains the same as historical operations and is within the site operational area via Haulage Creek. The site run off water will be chemically treated to the extent required under the existing licence conditions before release.

Where feasible to do so, water will be recycled. Further work in the FS will be conducted to identify all opportunities to recycle water and minimise the project impact on the receiving environment.

Tailings Pipeline and Storage

Tailings are pumped via an 8 km long pipeline to the discharge points at the TSF. The tailings pipeline is of steel and HDPE construction and was upgraded in 2004. The TSF total capacity is permitted to 100Mt, of which approximately 42Mt has been used, leaving 58Mt capacity.

The cumulative ore mined from the three ore bodies sums to 65Mt. Assuming approximately 2Mt of concentrate production through this period, the LoM tailings will be approximately 63Mt, marginally outside the tailings dam permitted capacity. The ultimate TSF capacity will be further investigated during the FS, along with options to produce a pyrite concentrate, which could reduce storage requirements and minimise storage of acid forming material in the TSF. Capital required to execute the required TSF lifts has been included in the financial modelling.

Transport

All ex-mine gate concentrate transport and storage is assumed to be executed by TasRail, under contract on a cost per wet metric tonne basis, in line with operating practice prior to entering care and maintenance. Concentrate is transported from site by truck to the Melba flats rail siding. From there it is railed and stored at Burnie port, before being loaded on ocean going vessels. Once a clear line of site is available on recommencement of concentrate storage a new contract will be sought.

APPROVALS AND SUSTAINABILITY

All pre-1999 environmental rehabilitation liabilities associated with Mt Lyell are held by the Government of Tasmania. Vedanta currently provides a A$6.1 million environmental bond covering post-1999 rehabilitation requirements. All pre-1999 liabilities are retained by the Tasmanian Government, which has been ratified by an act of Parliament, the *Copper Mines of Tasmania Pty. Ltd. (Agreement) Act 1994* (Tas) (**CMT Act**). Returning Mt Lyell to active operations is considered the best pathway towards enhancing environmental outcomes at the site and New Century will work to achieve a net environmental benefit from operations.

Highlighting the strong government support for the Mt Lyell copper project, the Tasmanian Government recently confirmed the provision of a A$2.3 million grant to assist with de-risking the potential restart of the Mt Lyell copper mine. This funding was the remaining portion of the A$9.5 million financial assistance package the Tasmanian Government announced in 2017. The funds will be directed towards risk mitigation projects, including refurbishment of the North Lyell tunnel to maintain access to dewatering lines, decommissioning the West Queen water dams, and installing a secondary high voltage (11kV) cable in the shaft. These works will subsequently not be required to be undertaken within the project execution.

Further to this grant for de-risking projects, the Tasmanian Government has made available a A$25 million package of non-cash assistance, in the form of royalty and payroll tax relief contingent upon a mine restart. This benefit has been included in financial modelling of the project and further reinforces the strong support from government for the restart of the Mt Lyell Copper Mine.

Two scopes of work were completed as part of the PFS: a Social Impact Assessment (**SIA**) focussed on the effects of a mine restart on Queenstown; and an investigation into permitting and approvals and the CMT Act. Both scopes were conducted by external parties with significant experience in these areas. The investigations identified various risks and opportunities that will be further investigated during the FS.

Two prohibition notices remain in place at the Mt Lyell Copper Mine because of three fatalities at the mine in late 2013 and early 2014. The prohibition notices relate to:

- Prohibition against use of the Prince Lyell Shaft (**Shaft Prohibition Notice**); and
- Prohibition against activity where workers may be exposed to the risk of mudrush (**Mudrush Prohibition Notice**).

To lift the Shaft Prohibition Notice, CMT is required to refit / refurbish the shaft. Specifically, "[in order to use] the shaft again for personnel transport, shaft inspections or skip hoisting, the mine operator must provide WorkSafe Tasmania with a statement from a competent person stating that the shaft is safe to use for that purpose." Allowance has been made within the PFS to fully refurbish the shaft and associated infrastructure.

The Mudrush Prohibition Notice restricts "any development, production or ground support activities on the 1365, 1340, 1315 and the 1290 levels, the decline below 1390 RL and in any other areas where workers may be exposed to the risk of injury from a mudrush". The lifting of this notice requires the submission of a Safety Case to Work Safe Tasmania.

A Safety Case has been submitted to, and accepted by, Work Safe Tasmania, which replied to the submission with Guidance Notes to be satisfied prior to lifting the Mudrush Prohibition Notice.

A further Safety Case and meeting with Work Safe Tasmania will be required prior to the commencement of any activities currently prohibited by the Mudrush Prohibition Notice. The current PFS mine plan does not mine below 1365 level until 2033/34 and allowance has been made for automation to remove persons from the hazard of mudrush.

PROJECT EXECUTION

A Master Project Schedule will be prepared that integrates the various components of the design, engineering, procurement, construction and commissioning. Schedules should be formed so that they can be integrated with the cost control system. The Work Breakdown Structure (**WBS**) will form the basic structure for project schedules.

The FS project schedule will be a simple time-based schedule outlining the key milestones with work sequencing outlined. The critical path method will be used to develop the Master Project Schedule, conduct opportunity analysis and monitor all project activities in a logical, accurate and well-defined manner.

Optimisation workshops will be conducted during the FS to ensure that the project is designed to be executed as fast possible, while ensuring that the other key performance requirements (such as cost and quality controls) are not impacted.

Project summary schedules will be broken down into:

- Detailed design
- Procurement
- Construction and implementation
- Commissioning and hand-over

Figure 26 shows the targeted high-level milestones over the initial years of the project.

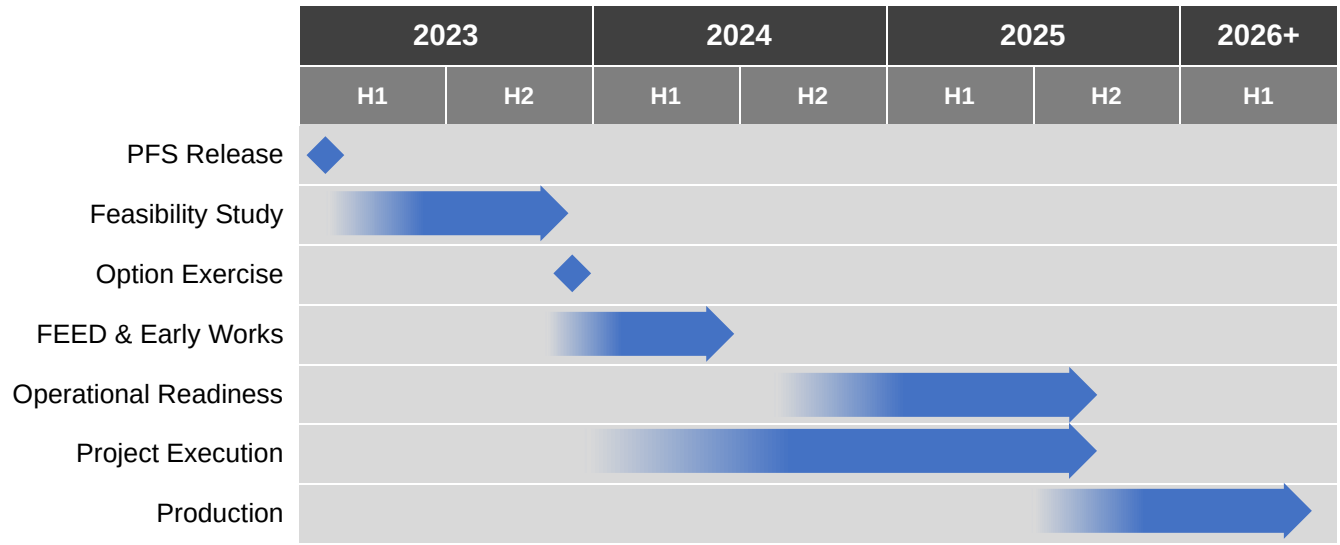

Figure 26 – High-level project timeline

FINANCIALS

During the PFS, a purpose-built Study financial model was developed to receive inputs from a first principal cost model. The cost and financial models were separated to improve auditability and keep the financial modelling separate to the technical cost modelling.

Table 14 shows the key scenario assumptions, macroeconomic inputs, and the financial modelling outcomes for Scenario 2.

Table 14 – Scenario 2 assumptions and financial results

Item	Scenario 2
Scenario Inputs	
Production Rate (Mtpa)	3
Mine Life	25
Mining Method	SLC/Open Stope
Mining Layout	Prince Lyell and Western Tharsis hoisted through Prince Lyell Copper Chert delayed filling schedule
Mine Commercial Management	Contract
Crushing	Modular (surface) crushing transitioning to UG crushing
Process Location	Upper
Process Plant Construction Method	EPCM
Materials Handling	Diesel truck to surface Shaft haulage from year 5 of production
Mobile Maintenance Workshop	Surface then underground from year 5
Accommodation	Construction village converted to permanent in year 4
Base Case Macros (Consensus Pricing Flat from FY27)	
Copper Price (US$/t)	8,454
Gold Price (US$/oz)	1,705
Exchange Rate (A$/US$)	0.68
Scenario Outcomes (Consensus Pricing Flat from FY27)	
Pre-tax NPV_7 (A$M)	560
Pre-tax IRR (%)	22%
Project Capital	279
Max Cash Draw (A$M)	360
Payback (Years)	8
Net Cash Flow (A$M)	1,081
C1 (US$/lb)	1.89
AISC (US$/lb)	2.91
Total Cost (A$M)	5,785
Total Revenue (A$M)	7,365
Breakeven Copper Price (US$/t)	6,436

The PFS has demonstrated robust economics and is most sensitive to revenue factors. Figure 27 shows the project's sensitivity to key financial model inputs.

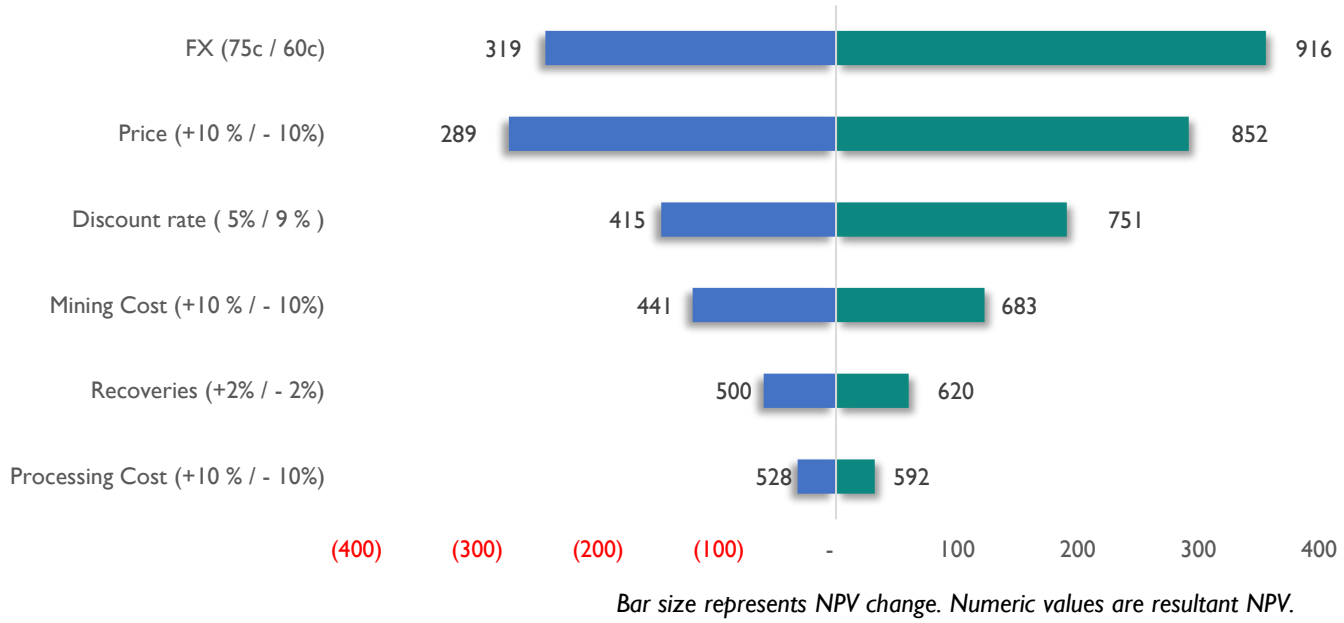

Figure 27 – Sensitivity chart

The Mt Lyell PFS uses the same cost definitions as the Century asset. Table 15 shows the AISC and C1 cost for the project broken into its key cost areas.

Table 15 – Estimated AISC and C1

Item	US$/lb
Mining	1.32
Processing	0.44
General and Admin	0.21
Depreciation	0.59
Treatment Charges	0.19
Shipment	0.17
Royalties	0.18
Vedanta Royalties	0.26
Gold Credit	-0.44
C1	**1.89**
AISC	**2.91**

The Project Period was defined by the project achieving a final investment decision (**FID**) and the completion of the process plant construction. Some commissioning activities will be ongoing post practical completion.

Table 16 – Estimated project capital costs

Item	Cost (A$m)
Processing Plant Capital	187.3
Mine Capital Development	23.8
Surface Infrastructure	17.3
Underground Infrastructure	7.5
Owners Team	3.0
Underground Rehabilitation	1.8
Other	0.5
Contingency	37.7
Total	**278.9**

FUNDING OPTIONS

The Mt Lyell Copper Project is one of the nearest term, substantial copper developments in Australia and has a clear pathway to development. With the current forecasts of substantial copper deficits in the coming decade, New Century is well placed to capitalise on this demand for replacement and new copper supply to be able to finance and develop this significant project. The funding package may include a combination of a corporate loan or bond, a standby working capital facility, export agency assistance, equity and offtake financing arrangements. The Company has commenced investigation of all viable funding options with a view to ensuring that appropriate and competitively priced capital is accessed to deliver strong shareholder value creation.

New Century has a strong track record in raising capital and accessing debt financing. The addition of significant incremental production to the New Century Group and diversification of commodity products will assist this in future. The Company has already received multiple enquiries from concentrate traders and end users, which highlights the keen interest that the project and its projected offtake has generated, indicating a strong appetite to gain access to the long-term clean concentrate and underpinning the Company's funding strategy.

For the purposes of the PFS all financial metrics were based on full equity funding, with the potential for debt or other capital forms to provide enhanced returns for equity holders in the event they are accessed.

FUTURE WORKS AND OPPORTUNITIES

Optimisation Opportunities

The following are a list of opportunities that need to be investigated during FS to improve project value:

- Further drilling of Western Tharsis Orebody – Open at depth, material increases in overall inventory could deliver cut-off grade optionality over targeted mine life and improved economics.
- Mining cost – conduct an Early Contractor Involvement (**ECI**) process to get a better understanding of long-term contract rates. The rates used for the PFS may be considered “top of cycle” rates, however have been applied across the LoM.
- Metallurgical recovery – Recovery could be improved against historic rates via the process automation and modernised technology of the proposed processing plant.
- Mining productivities – The ECI process has potential to enable improved productivity rates.
- Automation –The benefits associated with automation have not been realised in the Study, with the conservative approach to include the required capital, as risk mitigation against achievement of base productivity assumptions.
- Battery electric vehicles (**BEV**) – A BEV study will be included in the FS to assess the potential benefits of moving load and haul to battery electric further leveraging low-cost hydroelectric power.
- Mined grade optimisation and mining method optimisation – Western Tharsis mining method will be evaluated for an open stoping mining method to potentially bring high-grade material forward in the mine plan.
- Materials handling refurbishment timing – In Scenario 2 the materials handling project is completed in year 8 of the project (year 5 of production). Trade-off between early execution capital impact against the bring forward of operating cost savings may result in improved project economics.
- Marketing a clean concentrate – The concentrate is expected to be highly sought after due to its low deleterious element profile and low carbon production profile, leading to potential reduction in treatment charges or premium in price.