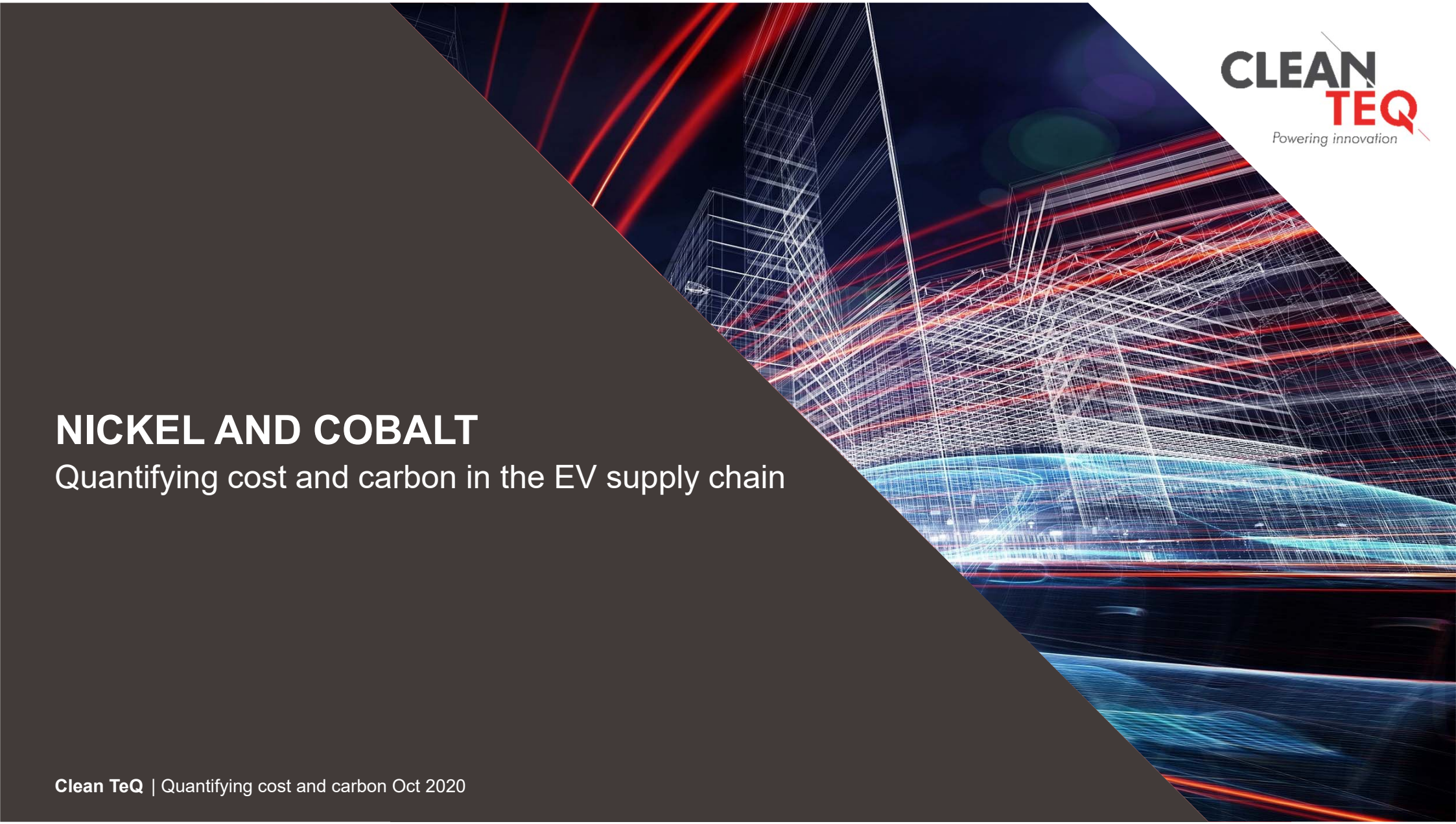


NICKEL AND COBALT

Quantifying cost and carbon in the EV supply chain

Cautionary statement

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

Statements in this news release that constitute forward-looking statements or information include, but are not limited to, statements regarding: financing of the Sunrise Project; the outlook for electric vehicle markets and demand for nickel and cobalt; completing final design and detailed engineering; making a Final Investment Decision; the timing of commencement and/or completion of construction, commissioning, first production and ramp up of the Project; the potential for a scandium market to develop and increase; metal price assumptions; cash flow forecasts; projected capital and operating costs; metal recoveries; mine life and production rates; and the financial results of the Project Execution Plan (PEP) announced on 28 September 2020 including statements regarding the Sunrise Project IRR, the Project's NPV (as well as all other before and after taxation NPV calculations); life of mine revenue; capital cost; average operating costs before and after by-product credits; proposed mining plans and methods; the negotiation and execution of offtake agreements; a mine life estimate; the expected number of people to be employed at the Project during both construction and operations; the availability and development of water, electricity and other infrastructure for the Sunrise Project; the potential for new mineral discoveries at the Company’s exploration licenses; sales of BIOCLENS lenses; award of new Clean TeQ Water Projects; anticipated successful completion of the various Clean TeQ Water projects and outcomes related to research and development undertakings.

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

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

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

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

In references to the Streamlined Life Cycle Report by Energetics (Feb 2020) the greenhouse gas emission intensities of alternative processing routes are based on literature data that cannot be effectively harmonized. For comparison purposes the only harmonization that has occurred has been on end-product (NiSO4) and using economic allocation to end products. Any comparison against Sunrise should be considered indicative only.

Summary

- This presentation quantifies the impact of nickel and cobalt on the cost and carbon footprint of the electric vehicle (EV) supply chain
- Nickel and cobalt comprise ~50% of raw material cost in a battery, and generate the largest GHG footprint
- The cost data in this report has been assembled from an extensive literature review of capital and operating costs for different nickel production routes, checked for accuracy against both engineering estimates and industry cost models
- The greenhouse gas (GHG) emissions data is taken from an independent streamlined Life Cycle Assessment (LCA) study undertaken by Energetics, to allow benchmarking of different battery-grade nickel production routes

The key conclusions:

1. Nickel oxide deposits (laterites) will be the major source of nickel and cobalt for future EV supply chains, but they require higher incentive prices to develop;
2. The substitution of different nickel and cobalt feedstocks has only a minor influence on the delivered cost of battery-grade metal units into the EV supply chain, although the GHG impacts can vary substantially;
3. The largest immediate opportunity for cost savings comes from integrating ownership of resources into the EV supply chain to remove price volatility and guarantee access to metal; and
4. In future the most significant improvements in cost and carbon will most likely be realized from synergies when converting high purity nickel to cathode precursor

Supply risk is about availability and price

Headlines

Tesla in talks with Vale to buy Canadian nickel for electric cars

TECHNOLOGY 27 April 2019

BMW to source cobalt from Australia for EV batteries

"Tesla to buy cobalt from Glencore for new car plants"

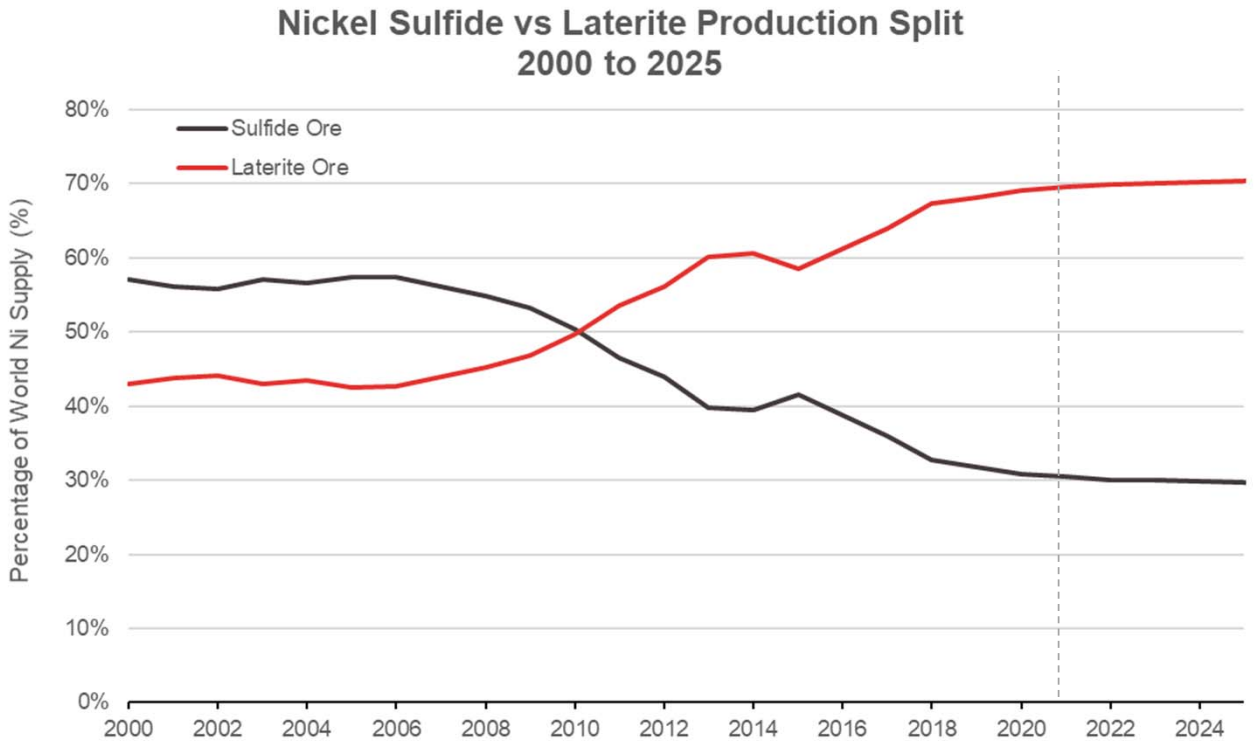
Exclusive: VW moves to secure cobalt supplies in shift to electric cars

Tesla turns to BHP for nickel

- Carmakers are engaging proactively with mining companies to manage supply and reputational risk
- However, metal price volatility represents a far larger risk for carmakers – the size of this exposure is not well understood
- For example, a move in nickel and cobalt prices back to their historic highs will add ~$35/kWh to a battery pack, erasing almost five years of cost reductions through economies of scale and technical innovation
- Most mining companies will NOT accept fixed price contracts, and the ability to hedge metal prices is limited given the volumes involved
- So, how to build a reliable, cost-effective supply chain?

The future will be laterite

There are simply not enough nickel sulfide resources in the global inventory to support EV growth



Source: CRU Nickel & Cobalt Market Study, October 2018

- The world is increasingly dependent for its nickel on laterite ores, both in stainless steel and energy storage
- Hydromet processing using pressure acid leach (PAL) will provide the nickel (and cobalt) units
- The mining industry must develop better capability to deliver PAL projects successfully
- With new development costs at $50-60k/t Ni capacity, expect nickel incentive prices to rise

Ni and Co feedstocks – there are many routes to a battery

The specification for battery-grade nickel and cobalt is extremely high

Nickel Pig Iron (NPI)
(Stainless)
8 - 16% Ni

MHP
(Intermediate)
~40% Ni / 1.5% Co

Matte
(Intermediate)
~75% Ni / 1.5% Co

Sunrise Eluate
(Intermediate)
70% Ni / 18% Co

Ferronickel (FeNi)
(Stainless)
20 - 25% Ni

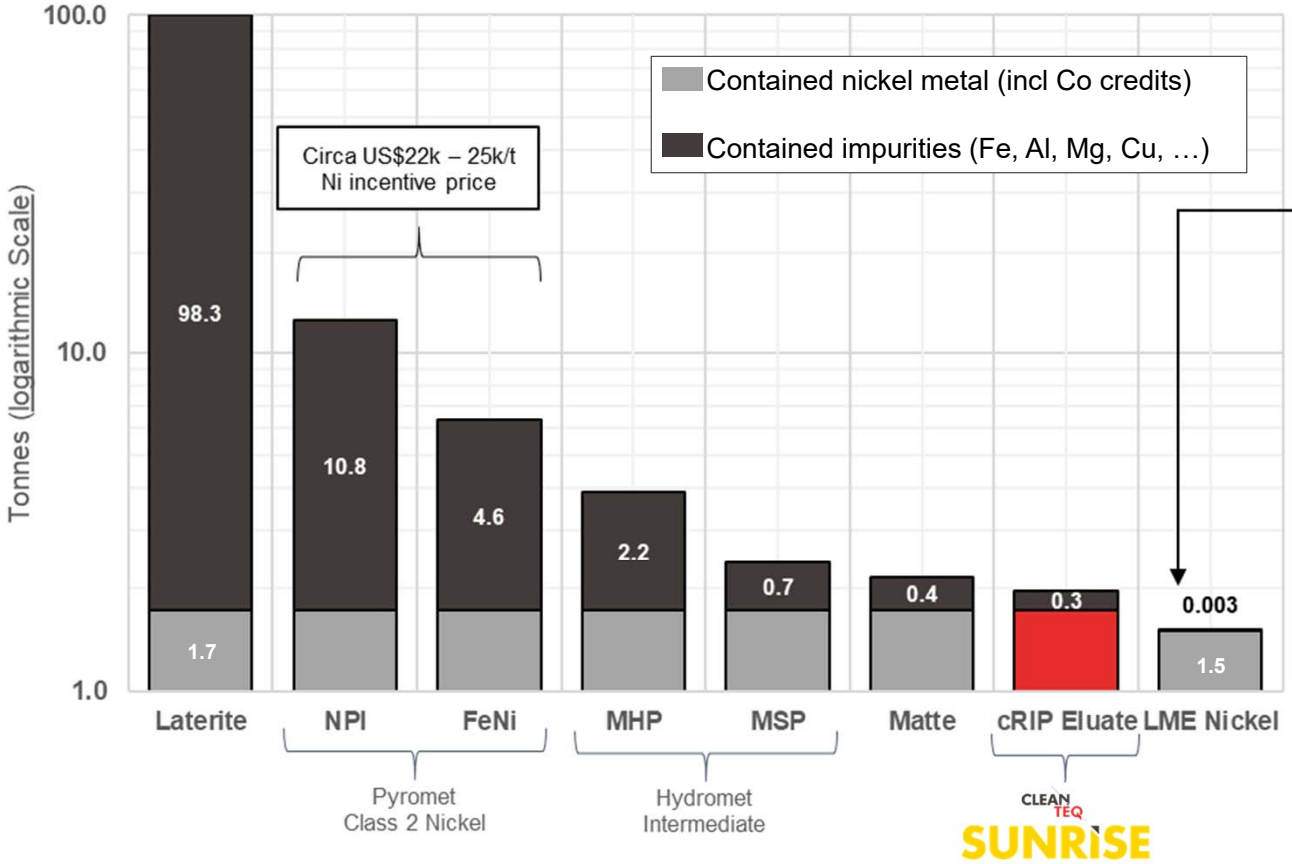
MSP
(Intermediate)
~60% Ni / 4.0% Co

LME Ni Powder
(Intermediate)
99.8% Ni

Sunrise $NiSO_4.6H_2O$
(LiB High Purity)
99.94% Ni

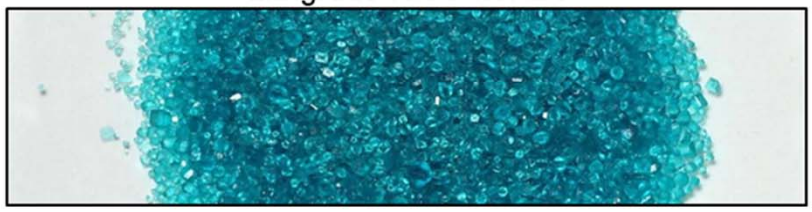
It’s all about impurity removal

Starting with 100 tonnes of laterite ore grading 1.5% nickel and 0.075% cobalt



1.5 tonne of LME-grade nickel contains ~3.0kg of impurities, of which ~2.1kg needs to be removed to produce battery-grade nickel sulfate

LiB grade NiSO4.6H2O



Assumes laterite grading 1.5% Ni and 0.075% Co. Nickel equivalent grade calculated using a US$7.5/lb Ni price and a US$22.5/lb Co price. cRIP eluate impurities include all compounds other than payable nickel, cobalt and sulphate mass. LME Nickel and LiB grade NiSO4.6H2O use nickel grade only, not nickel equivalent (hence a reduction in payable metal).

Feedstock has little impact on cost, but more on carbon

5.6T → Transport: Indonesia to US → Conversion: MHP to LiB Ni → 1T LiB-grade Ni, 50kg LiB-grade Co

Waste stream: Significant

Cost[1]:	$5.51/lb Ni (85% LME)
GHG[2]:	28.3kg CO2e/kg Ni
Cost:	$0.20/lb Ni
GHG:	0.81 kg CO2e/kg Ni
Cost[3]:	$1.92/lb Ni
Credit[4]:	-$0.20 (cobalt)
GHG:	6.00kg CO2e/kg Ni

Cost: $7.43/lb Ni
GHG: 35.8 kg CO2e/kg Ni

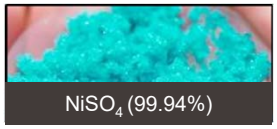
1.0T → Transport: Australia to US → Conversion: Powder to LiB Ni → 1T LiB-grade Ni

Waste stream: Moderate

Cost[1]:	$6.67/lb Ni (103% LME)
GHG[2]:	19.8kg CO2e/kg Ni
Cost:	$0.05/lb Ni
GHG:	0.18 kg CO2e/kg Ni
Cost[3]:	$1.19/lb Ni
Credits[4]:	Nil
GHG:	1.2kg CO2e/kg Ni

Cost: $7.93/lb Ni
GHG: 21.2 kg CO2e/kg Ni

Sunrise Offtake



4.6T → Transport: Australia to US → Conversion: NiSO4 to LiB Ni → 1T LiB-grade Ni

Waste stream: Minimal (credit)

Cost[1]:	$7.13/lb Ni (110% LME)
GHG[2]:	11.7kg CO2e/kg Ni
Cost:	$0.15/lb Ni
GHG:	0.68 kg CO2e/kg Ni
Cost[3]:	Nil
Credits[4]:	Nil
GHG:	Nil

Cost: $7.28/lb Ni
GHG: 12.4 kg CO2e/kg Ni

Notes: 1. Assumes spot LME Nickel price of US$6.48/lb Ni. 2. Energetics, Streamlined *Life Cycle Analysis Report: GHG emission comparison of nickel production routes (Feb 2020)*. 3. Includes both operating and capital cost. Capital costs of conversion facilities amortised over 10 years at a rate of 3% pa. 4. By-product metals recovered in conversion using $26.90/lb Co.

Integrated ownership has an enormous impact on cost

5.6T

Transport:
Indonesia to US

Conversion:
MHP to LiB Ni

Waste stream:
Significant

1T LiB-grade Ni
50kg LiB-grade Co

Cost[1]: $5.51/lb Ni (85% LME)
GHG[2]: 28.3kg CO2e/kg Ni

Cost: $0.20/lb Ni
GHG: 0.81 kg CO2e/kg Ni

Cost[3]: $1.92/lb Ni
Credit[4]: -$0.20 (cobalt)
GHG: 6.00kg CO2e/kg Ni

Cost: $7.43/lb Ni
GHG: 35.8 kg CO2e/kg Ni

1.0T

Transport:
Australia to US

Conversion:
Powder to LiB Ni

Waste stream:
Moderate

1T LiB-grade Ni

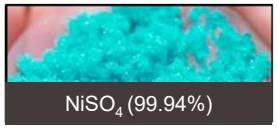
Cost[1]: $6.67/lb Ni (103% LME)
GHG[2]: 19.8kg CO2e/kg Ni

Cost: $0.05/lb Ni
GHG: 0.18 kg CO2e/kg Ni

Cost[3]: $1.19/lb Ni
Credits[4]: Nil
GHG: 1.2kg CO2e/kg Ni

Cost: $7.93/lb Ni
GHG: 21.2 kg CO2e/kg Ni

Sunrise
Integrated Ownership



4.6T

Transport:
Australia to US

Conversion:
NiSO4 to LiB Ni

Waste stream:
Minimal (credit)

1T LiB-grade Ni
210kg LiB-grade Co

Cost[1]: $5.25/lb Ni (production cost)
GHG[2]: 11.7kg CO2e/kg Ni

Cost: $0.15/lb Ni
GHG: 0.68 kg CO2e/kg Ni

Cost[3]: $4.56/lb Ni
Credits[4]: -$5.98 (by-products)
GHG: Nil

Cost: $3.98/lb Ni
GHG: 12.4 kg CO2e/kg Ni

Notes: See previous slide for assumptions. For Sunrise Integrated Ownership case: 1. Nickel production cost at Sunrise uses average C1 cash cost over first decade of operation, before by-product credits. 2. Based on Energetics LCA study. 3. Conversion cost is the Sunrise development capital (US$1.8B) amortised over 10 years at a rate of 3% pa. 4. By-product credits use $26.90/lb Co, $1,500/kg scandium oxide and $130/t ammonium sulphate.

The value of owning Ni/Co in an integrated EV supply chain

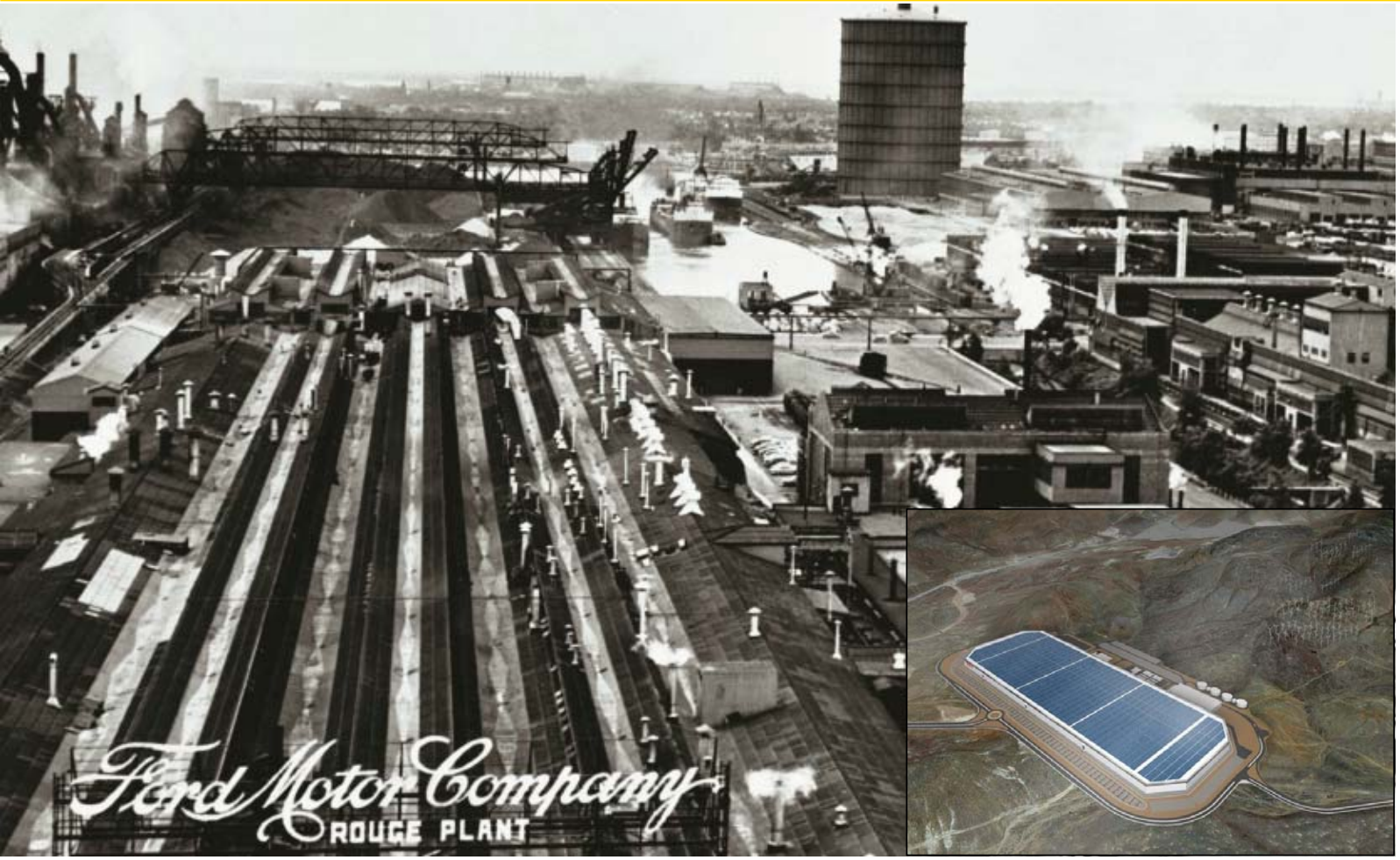
Quantifying savings if Sunrise was owned 100% within an OEM supply chain

	Scenario 1 Spot Prices	Scenario 2 Incentive Prices	Scenario 3 Historic High Prices
Cash procurement savings (US$Mpa)	219	480	1,409
Battery pack savings ($/kWh)	6.34	13.86	40.70
Cost impact ($/EV)	317	693	2,035

Without controlling nickel and cobalt cost, there is no economic EV strategy

Note: Indicative cash procurement savings that may be achieved by an EV supply chain participant as owner and sole off-taker of the Sunrise Project versus the cost of procuring the equivalent metal units on market. Assumes Sunrise average annualised production rates (Ni 21.3ktpa and Co 4.4ktpa) and real cash costs (negative US$1.04/lb Ni after credits, including royalties but excluding depreciation and tax) over years 2-11 of operations. Price scenarios are: Spot $6.76/lb Ni and $15.41/lb Co; Incentive $9.96/lb Ni and $26.87/lb Co; and Historic High $25/lb Ni and $50/lb Co. Assumes nil sulphate premia for nickel and cobalt. Battery pack savings and vehicle cost impacts assumes NMC811 chemistry and an average 50kWh battery pack.

Déjà vu – the world's first Gigafactory



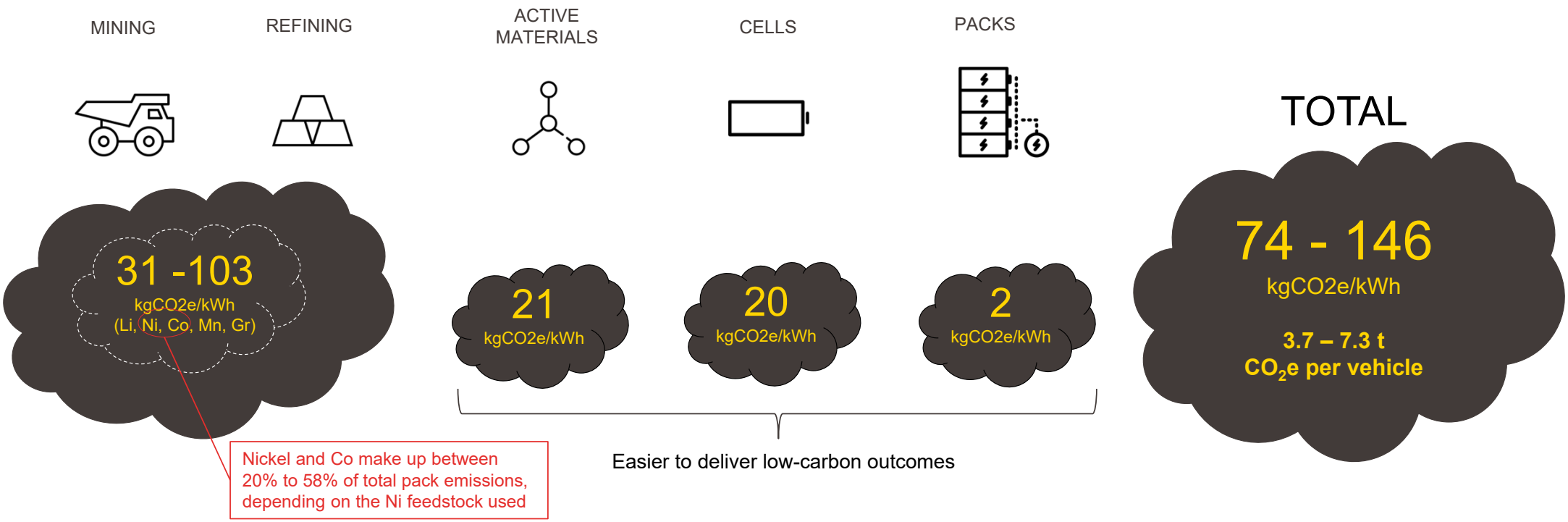
We have forgotten how integration allowed carmakers to lower cost and secure raw materials – the strategy was built on controlling supply chains back to their source

"Henry Ford's ultimate goal was to achieve total self-sufficiency by owning, operating and coordinating all the resources needed to produce complete automobiles…no one has ever come so close on such a grand scale."

The Henry Ford Rouge

A closer look at carbon in the EV supply chain

Mining and refining of metal determines the GHG emissions intensity of a battery



Source: Energetics report and internal company analysis (GREET; ANL BatPac Model; Avicenne; Bernstein), modified to reflect the kg CO2e per kWh of pack capacity utilizing NMC 811 cathode chemistry. Mining and Refining, assumes nickel and cobalt is refined through to nickel and cobalt sulfate for conversion to precursor. Electrical energy mix assumes FeNi and NPI production is in China, HPAL in Indonesia (using black coal) and NiS is in Australia. Note that the technology for conversion of FeNi or NPI to battery-grade sulfate has not been proven at industrial scale, may not be economically viable and may add further GHG emissions which have not been accounted for in this study.

CLEAN TEQ SUNRISE

Building the template for low-cost, low-carbon raw material supply

Sunrise - the template for battery material supply

1

Cost

Clean-iX® is the simplest, lowest-cost and most direct route to battery-grade metal, by-passing intermediate products and third-party refineries and shortening the supply chain

2

Carbon

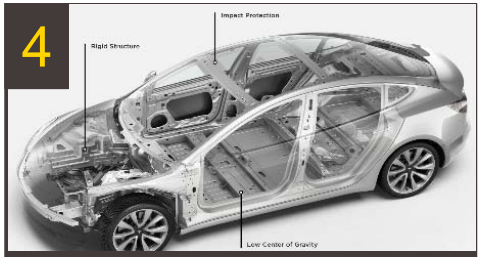
Sunrise will have one of the lowest carbon footprints in the industry, connected to renewable power within one of Australia's largest renewable energy corridors

3

Recycling

The Sunrise refinery adopts regenerative design principles to recycle spent cathode and recover nickel, cobalt and other metals

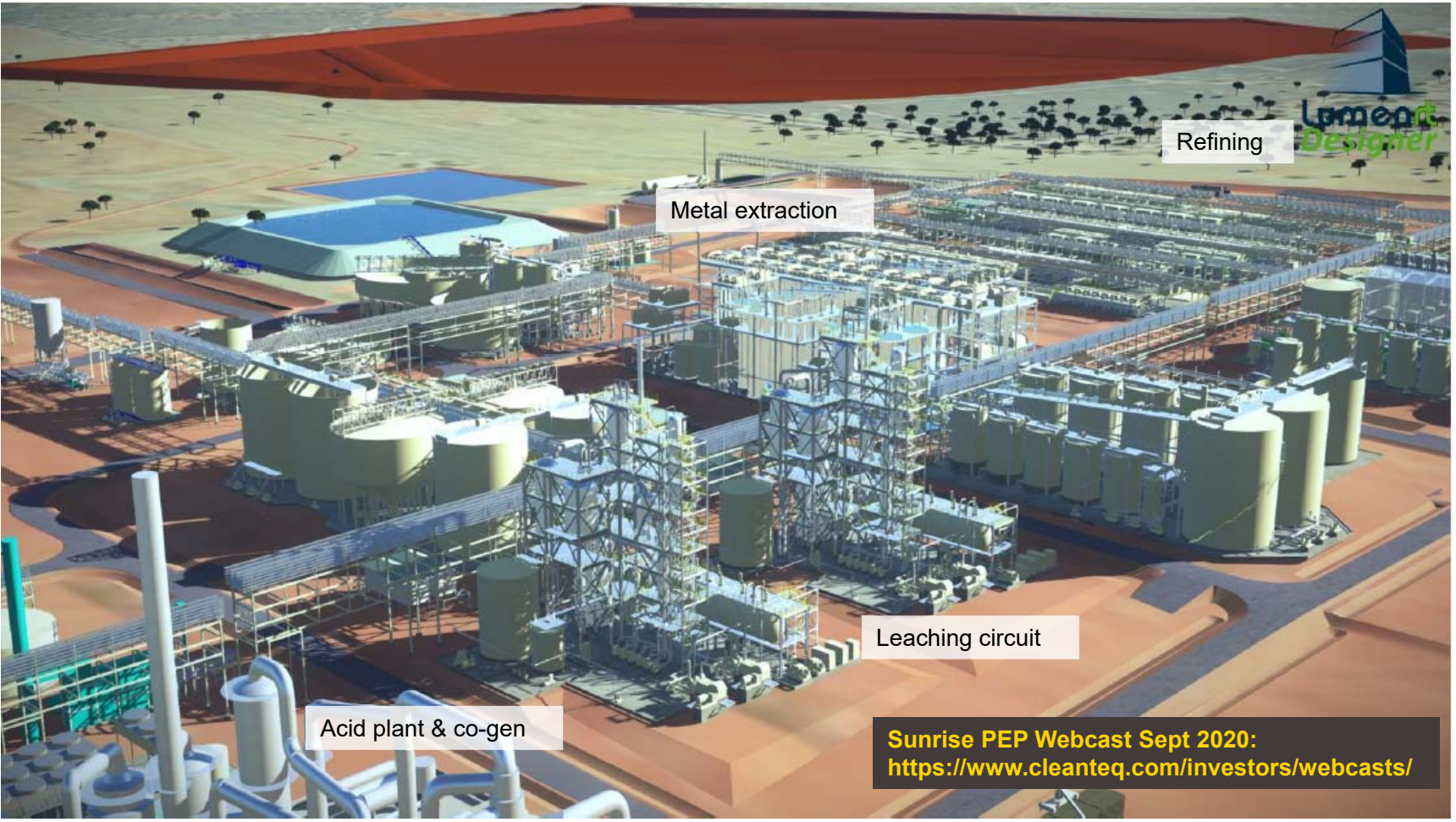
4



Light-weighting

Scandium can deliver lighter, corrosion resistant, formable and printable aluminum alloys for aerospace and automotive

Sunrise Project Execution Plan



By the Numbers

1 million

Approximate number of EVs supported by Sunrise's annual nickel and cobalt production[1]

-US$0.80

Negative C1 cash cost per pound of nickel (after by-product credits) over first 25 years of operation

50+

Years of operation based on current mineral resources and planned throughput

1. Assumes NMC811 chemistry and average 50kWh battery pack size

Sunrise Phase 2: direct-to-precursor

Sc

Ni/Co

Ni

Separation
Purification
Crystallisation

Co

NMC
Precursor

Mn

NMC
CAM

Li

Increasing value of metal, reduction in energy and minimal rehandling

Sc

Ni/Co

Purification

NMC
Precursor

Mn

NMC
CAM

Li

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