Revolutionizing the Mineral Supply Chain for Fast Growing EV Demand

Analyst Day presentation, 17 May 2021

Disclaimer.

This presentation is being furnished solely for the purpose of considering a potential transaction involving Sustainable Opportunities Acquisition Corporation ("SPAC") and DeepGreen Metals, Inc. ("DGM"). By accepting this presentation, the recipient acknowledges and agrees that all of the information contained herein is confidential, that the recipient will distribute, disclose and use such information only for such purpose and that the recipient shall not distribute, disclose or use such information in any way detrimental to DGM.

ANY SECURITIES OF SPAC TO BE OFFERED IN ANY TRANSACTION CONTEMPLATED HEREBY HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY APPLICABLE STATE OR FOREIGN SECURITIES LAWS. ANY SECURITIES TO BE OFFERED IN ANY TRANSACTION CONTEMPLATED HEREBY HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES EXCHANGE COMMISSION, ANY STATE SECURITIES COMMISSION OR OTHER UNITED STATES OR FOREIGN REGULATORY AUTHORITY, AND WILL BE OFFERED AND SOLD SOLELY IN RELIANCE ON THE EXEMPTION FROM THE REGISTRATION REQUIREMENTS PROVIDED BY THE SECURITIES ACT AND RULES AND REGULATIONS PROMULGATED THEREUNDER (INCLUDING REGULATION D OR REGULATION S UNDER THE SECURITIES ACT). THIS DOCUMENT DOES NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY IN ANY STATE OR OTHER JURISDICTION TO ANY PERSON TO WHOM IT IS UNLAWFUL TO MAKE SUCH OFFER OR SOLICITATION IN SUCH STATE OR JURISDICTION.

Prospective investors in Canada should refer to the slide entitled "Notice to Canadian Investors" at the end of this presentation.

Any investment in or purchase of any securities of SPAC is speculative and involves a high degree of risk and uncertainty. Certain statements in this presentation may constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995, each as amended. Forward-looking statements provide current expectations of future events and include any statement that does not directly relate to any historical or current fact. Words such as "anticipates," "believes," "expects," "intends," "plans," "projects," or other similar expressions may identify such forward-looking statements. Actual results may differ materially from those discussed in forward-looking statements as a result of factors, risks and uncertainties over which SPAC and DGM have no control. These factors, risks and uncertainties include, but are not limited to, the following: (i) conditions to the completion of the proposed business combination and PIPE investment, including shareholder approval of the business combination, may not be satisfied, or any regulatory approvals required for the proposed business combination may not be obtained on the terms expected or on the anticipated schedule; (ii) the occurrence of any event, change or other circumstance that could give rise to the termination of the business combination agreement between the parties or the termination of any PIPE investor's subscription agreement; (iii) the effect of the announcement or pendency of the proposed business combination on DGM's business relationships, operating results, and business generally; (iv) risks that the proposed business combination disrupts DGM's current plans and operations and potential difficulties in DGM's employee retention as a result of the proposed business combination; (v) risks related to diverting management's attention from DGM's ongoing business operations; (vi) potential litigation that may be instituted against SPAC or DGM or their respective directors or officers related to the proposed business combination or in relation to DGM's business; (vii) the amount of the costs, fees, expenses and other charges related to the proposed business combination and PIPE investment; (viii) risks relating to the uncertainty of the projected financial information with respect to DGM; (ix) risks related to the satisfaction of DGM's business objectives and the timing of expected business milestones; (x) the effects of competition on DGM's future business; (xi) the amount of redemption requests made by SPAC's public shareholders; (xii) the impact of the global COVID-19 pandemic on any of the foregoing risks; and (xiii) such other factors as are set forth in SPAC's periodic public filings with the SEC, which are available via the SEC's website at ww.sec.gov. None of the Placement Agents (as defined below), SPAC or DGM undertake any duty to update these forward-looking statements or the other information contained in this presentation.

Neither SPAC nor DGM makes any representation or warranty, express or implied, as to the accuracy or completeness of this document or any other information (whether written or oral) that has been or will be provided to you. Nothing contained herein or in any other oral or written information provided to you is, nor shall be relied upon as, a promise or representation of any kind by SPAC or DGM. Without limitation of the foregoing, SPAC and DGM expressly disclaim any representation regarding any projections concerning future operating results or any other forward-looking statement contained herein or that otherwise has been or will be provided to you. Neither SPAC nor DGM shall be liable to you or any prospective investor or any other person for any information contained herein or that otherwise has been or will be provided to you, or any action heretofore or hereafter taken or omitted to be taken, in connection with this potential transaction. You will be entitled to rely solely on the representations and warranties made to you by SPAC in a definitive written agreement relating to a transaction involving DGM, when and if executed, and subject to any limitations and restrictions as may be specified in such definitive agreement. No other representations and warranties will have any legal effect.

SPAC has engaged Citigroup Global Markets Inc., Nomura Securities International, Inc. and Fearnley Securities, Inc. as placement agents (together with their affiliates, partners, directors, agents, employees, representatives, and controlling persons, the "Placement Agents") on a potential transaction to which this document relates. The Placement Agents are acting solely as placement agents (and, for the avoidance of doubt, not an underwriter, initial purchaser, dealer or any other principal capacity) for SPAC in connection with a potential transaction. The Placement Agents have not independently verified any of the information contained herein or any other information that has been or will be provided to you. The Placement Agents do not make any representation or warranty, express or implied, as to the accuracy or completeness of this document or any other information (whether written or oral) that has been or will be provided to you. Nothing contained herein or in any other oral or written information provided to you is, nor shall be relied upon as, a promise or representation of any kind by the Placement Agents, whether as to the past or the future. Without limitation of the foregoing, the Placement Agents expressly disclaim any representation regarding any projections concerning future operating results or any other forward-looking statement contained herein or that otherwise has been or will be provided to you. The Placement Agents shall not be liable to you or any prospective investor or any other person for any information contained herein or that otherwise has been or will be provided to you, or any action heretofore or hereafter taken or omitted to be taken, in connection with this potential transaction.

This document is being distributed solely for the consideration of sophisticated prospective purchasers who are institutional accredited investors with sufficient knowledge and experience in investment, financial and business matters and the capability to conduct their own due diligence investigation and evaluation in connection with a potential transaction. This document does not purport to summarize all of the conditions, risks and other attributes of an investment in SPAC and DGM. Information contained herein will be superseded by, and is qualified in its entirety by reference to, any other information that is made available to you in connection with your investigation of SPAC and DGM. Each prospective purchaser is invited to meet with a representative of SPAC and/or DGM and to discuss with, ask questions of, and receive answers from, such representative concerning DGM and the terms and conditions of any potential transaction.

SPAC, DGM and the Placement Agents are free to conduct the process for any transaction as they in their sole discretion determine (including, without limitation, negotiating with any prospective investors and entering into an agreement with respect to any transaction without prior notice to you or any other person), and any procedures relating to such transaction may be changed at any time without notice to you or any other person. No sales will be made, no commitments to invest in SPAC will be accepted, and no money is being solicited or will be accepted at this time. Any indication of interest from prospective purchasers in response to this document involves no obligation or commitment of any kind. This document should not be distributed to any person other than the addressee to whom it was initially distributed.

This presentation contains certain information that has not been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and such information is intended to supplement and not substitute for comparable GAAP measures.

This presentation contains financial forecasts. Neither SPAC nor DGM 's independent auditors have studied, reviewed, complied or performed any procedures with respect to the projections for the purpose of their inclusion in this presentation, and accordingly, neither of them has expressed an opinion or provided any other form of assurance with respect thereto for the purpose of this presentation. These projections are for illustrative purposes only and should not be relied upon as being necessarily indicative of future results.

The mineral resource estimates in this presentation were prepared in accordance with the requirements of National Instrument 43-101 "Standards of Disclosure for Mineral Projects" of the Canadian Securities Administrators and not in accordance with the requirements of the Modernization of Property Disclosures for Mining Registrants set forth in subpart 1300 of Regulation S-K, as promulgated by the United States Securities and Exchange Commission (the "SEC Mining Rules"). An updated presentation which contains mineral resource estimates and other information prepared in accordance with the SEC Mining Rules, which are expected to be substantially similar to the estimates and information provided herein, will be provided when available.

Agenda.

90 min Presentation	Area	Presenter
	Introduction	Scott Leonard, CEO of SOAC
10 min	Company overview	Gerard Barron, Chairman & CEO
15 min	Valuation, project economics & financing	Craig Shesky, CFO
10 min	The ESG case for nodules	Erika Ilves, Chief Strategy Officer
10 min	Regulatory context	Corey McLachlan, ISA & Sponsoring States
15 min	Developing projects on schedule & on budget	Tony O'Sullivan, Chief Development Officer
10 min	Collecting nodules from the seafloor	Jon Machin, Head of Offshore Engineering
10 min	Marine environment: baselining & mitigating impacts	Dr Michael Clarke, Environmental Program Manager
10 min	Processing nodules into metal products	Dr Jeff Donald, Head of Onshore Processing
60 min	Q&A	

DeepGreen Metals

+

SOAC

=

the metals company

Investment highlights.

The world's largest estimated source of battery metals
Enough nickel, copper, manganese and cobalt in situ to electrify 280 million EVs[1]

Four battery metals in high concentrations in a single resource
3.2% nickel equivalent[2] vs. 0.3-1.9% for the world's largest undeveloped nickel projects

Low-cost production
Expecting to be the 2nd lowest cost nickel producer on the planet[3]

70-99% reduction of lifecycle ESG impacts
Including zero solid waste, 90% less CO_2 equivalent emissions[4]

Attractive valuation with significant upside
0.35x P/NAV multiple only on 22% of the resource vs. 1.6x median for producing peers

Best-in-class strategic investors / partners

GLENCORE	MAERSK	Allseas	HATCH
Offtakes Processing	Vessel operations	Offshore collection technology	Onshore processing technology

"EV battery in a rock"

[1] Assuming 75kWh batteries with NMC811 chemistry and nodule resource grade and abundance, "Where Should Metals for the Green Transition Come From?", Paulikas et al, LCA white paper, April 2020. Calculation based on estimated contained value of nickel.
[2] Nickel equivalence calculation uses NORI-D Model price deck as stated on page 53. Based on converting the economic value of other metals into nickel using the average commodity prices across life of mine for NORI-D. Life of mine model based on Canadian NI 43-101 Compliant Preliminary Economic Assessment (PEA) for NORI-D Area, AMC, February 2021.
[3] Canadian NI 43-101 Compliant Preliminary Economic Assessment (PEA) for NORI-D Area, AMC, February 2021; Metals Cost Curve, Wood Mackenzie, August 2020.
[4] "Where Should Metals for the Green Transition Come From?", Paulikas et al, LCA white paper, April 2020. "Life cycle climate change impacts of producing battery metals from land ores versus deep-sea polymetallic nodules", Paulikas et al, December 2020.

Business combination.

The business
- Founded in 2011, DeepGreen Metals, Inc. is the developer of the world's largest estimated deposit of battery metals[1]—seafloor polymetallic nodules—with the lowest expected lifecycle ESG footprint on the planet and people[2]

Transaction size
- Sustainable Opportunities Acquisition Corp. (NYSE: SOAC) is a special purpose acquisition company with $300mm of cash in trust
- Fully committed, upsized $330 million PIPE

Valuation
- Pro forma equity value of $2.9bn
- Attractively valued entry multiple for a unique resource with significant upside, proven technology, timing of estimated first production/ revenue aligned with expected significant shortages in key battery metals
- 2027E EBITDA of $2bn[3]
- Net present value of $6.8n[3] for NORI-D
- Net present value of $31.3bn[3] for the full portfolio

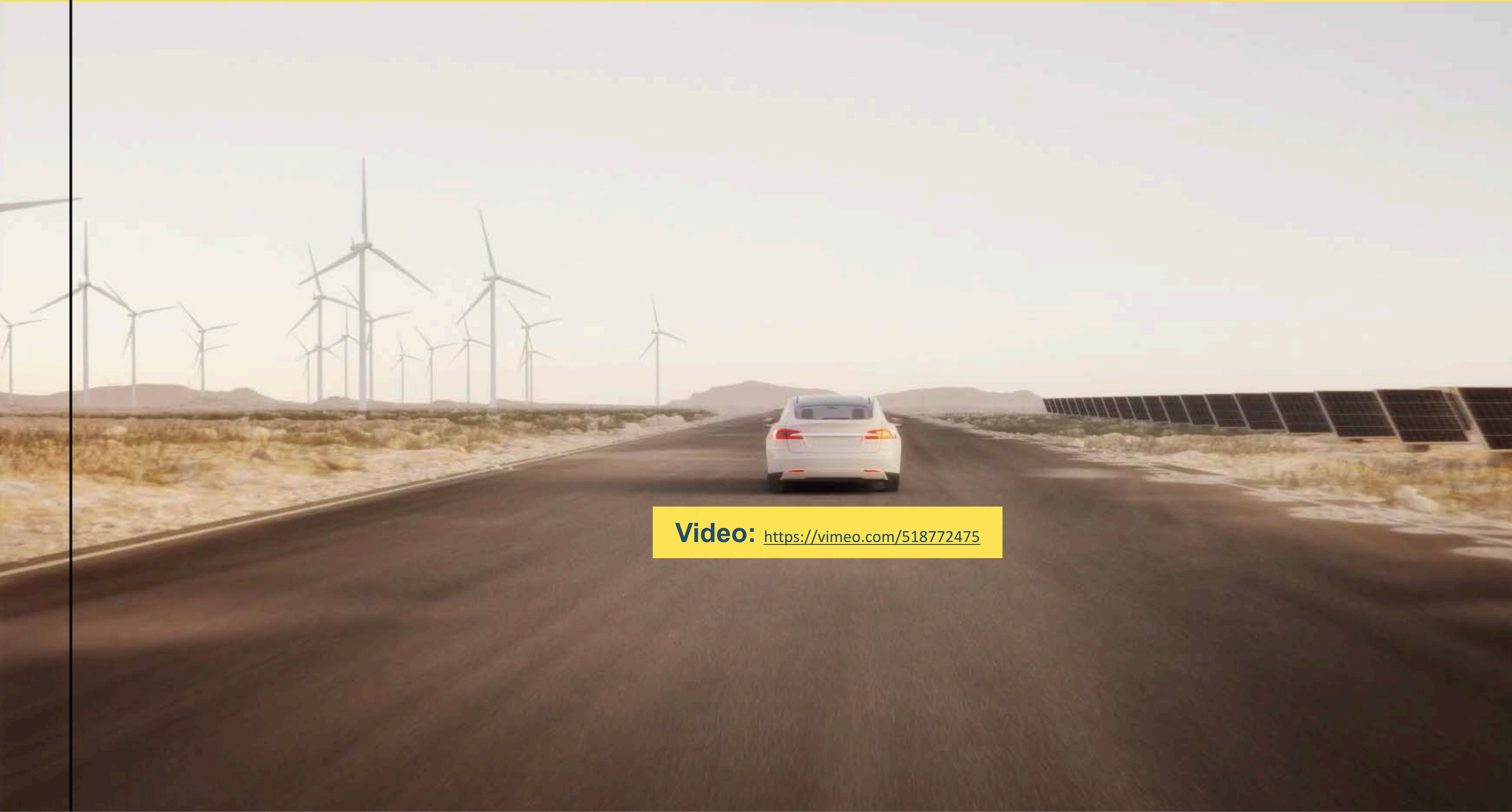
Capital structure
- DeepGreen shareholders rolling 100% of their equity
- $570mm net cash (assuming no redemptions) expected to fully fund operations to first expected revenue in 2024

Pro Forma Ownership
- 76% existing shareholder equity roll over
- 12% SPAC and founder shares
- 11% PIPE investors

[1] Global Nickel Industry Cost Summary, Wood Mackenzie, August 2020.
[2] "Where Should Metals for the Green Transition Come From?", Paulikas et al, LCA white paper, April 2020.
[3] Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Resource Statement for full field financial model (internal DeepGreen development scenario). Net present value as of January 1, 2021, assuming 9% discount rate.

Company overview

Gerard Barron, Chairman & CEO


Video: https://vimeo.com/518772475

Using a rock to change the world.

Our mission is to build a carefully managed metal commons that will be used, recovered, and reused again and again—for millennia.

Nickel Sulfate

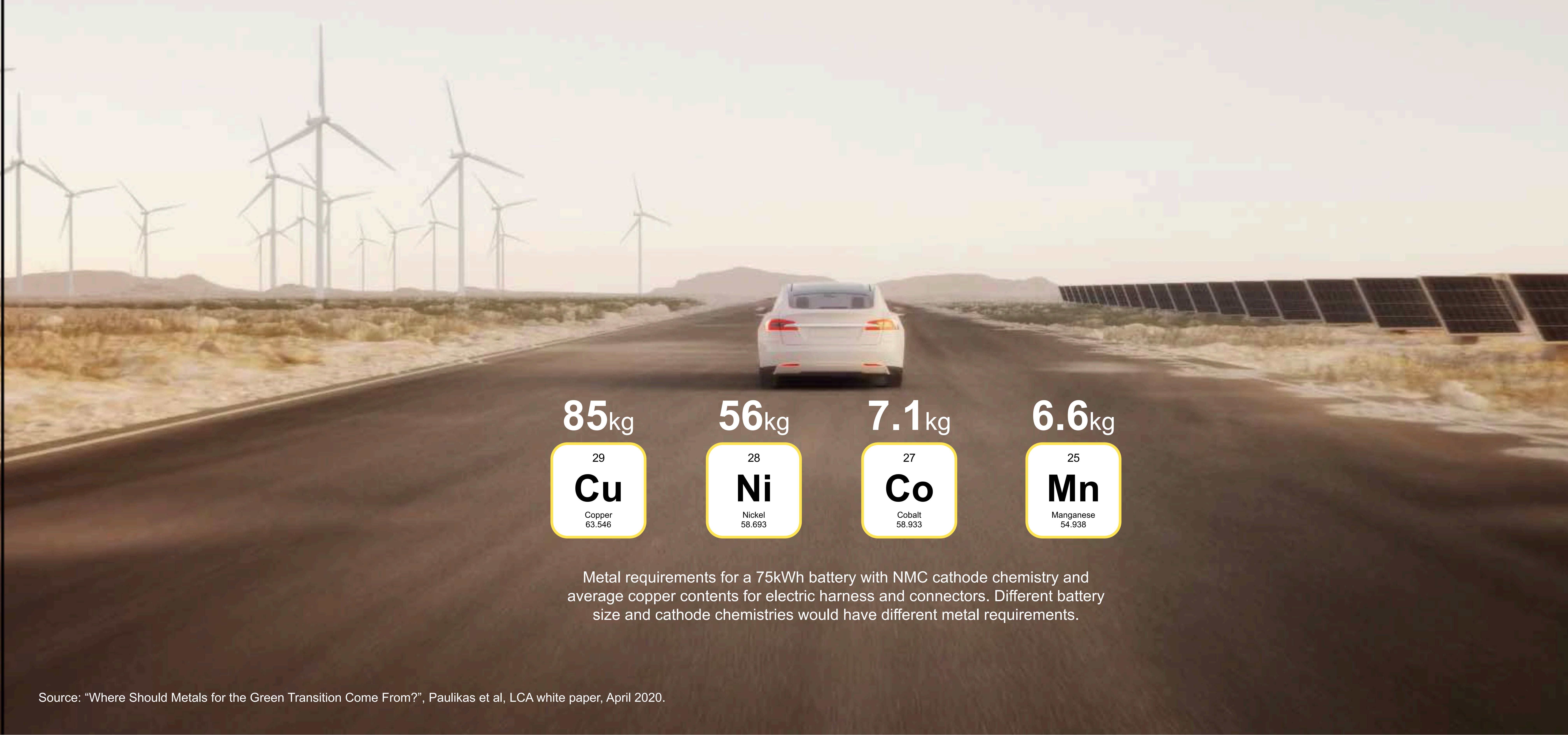
28

Ni

58.693

$[Ar]3d^8 4s^2$

EV revolution is metal intensive.



85kg	56kg	7.1kg	6.6kg
29	28	27	25
Cu	Ni	Co	Mn
Copper	Nickel	Cobalt	Manganese
63.546	58.693	58.933	54.938

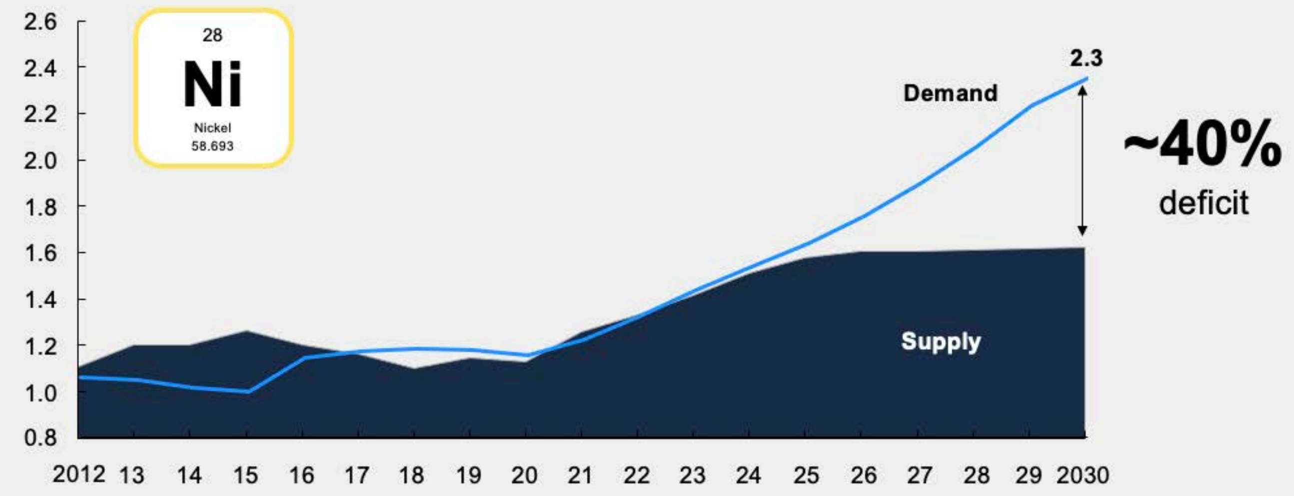
Metal requirements for a 75kWh battery with NMC cathode chemistry and average copper contents for electric harness and connectors. Different battery size and cathode chemistries would have different metal requirements.

Source: “Where Should Metals for the Green Transition Come From?”, Paulikas et al, LCA white paper, April 2020.

Four upstream challenges EV manufacturers should be worried about.

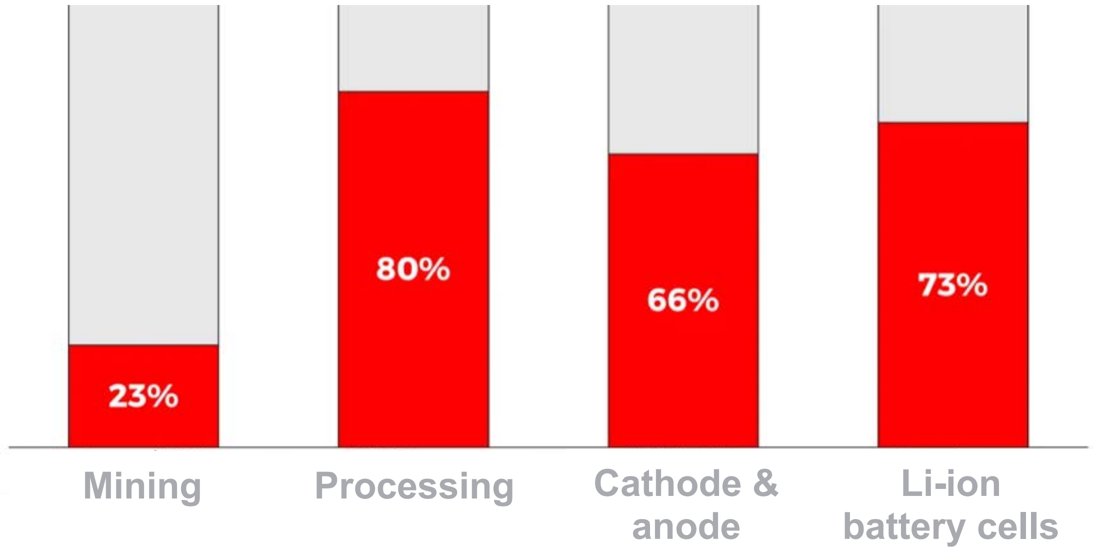
Availability: Shortages expected

Nickel class 1 deficit without greenfield developments
Global refined nickel supply and demand, in Mt[1]



Security: China dominates supply[2]

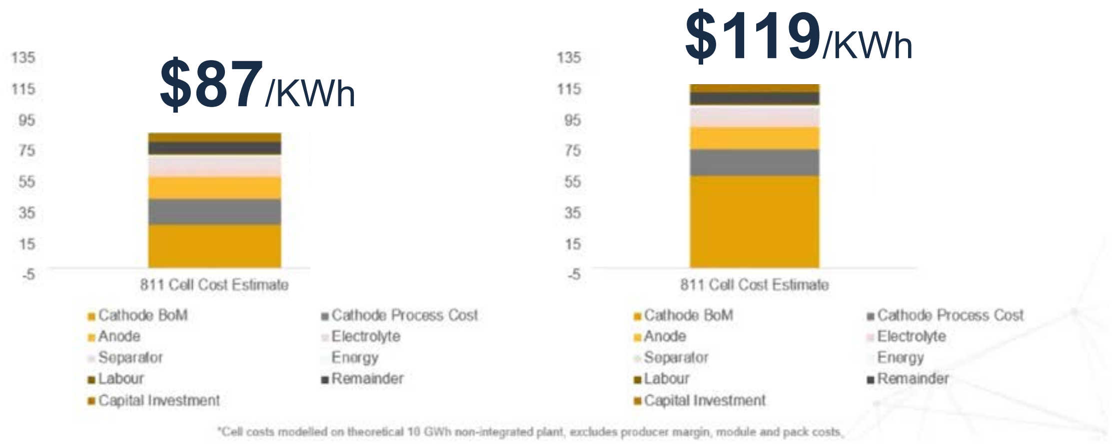
China's share of production, 2019
Lithium, cobalt, nickel, manganese, cathode, anode & cells



Price: EV/ICE price parity?[3]

What happens to next generation NMC 811 Li-ion battery costs if critical mineral shortages see price increases?

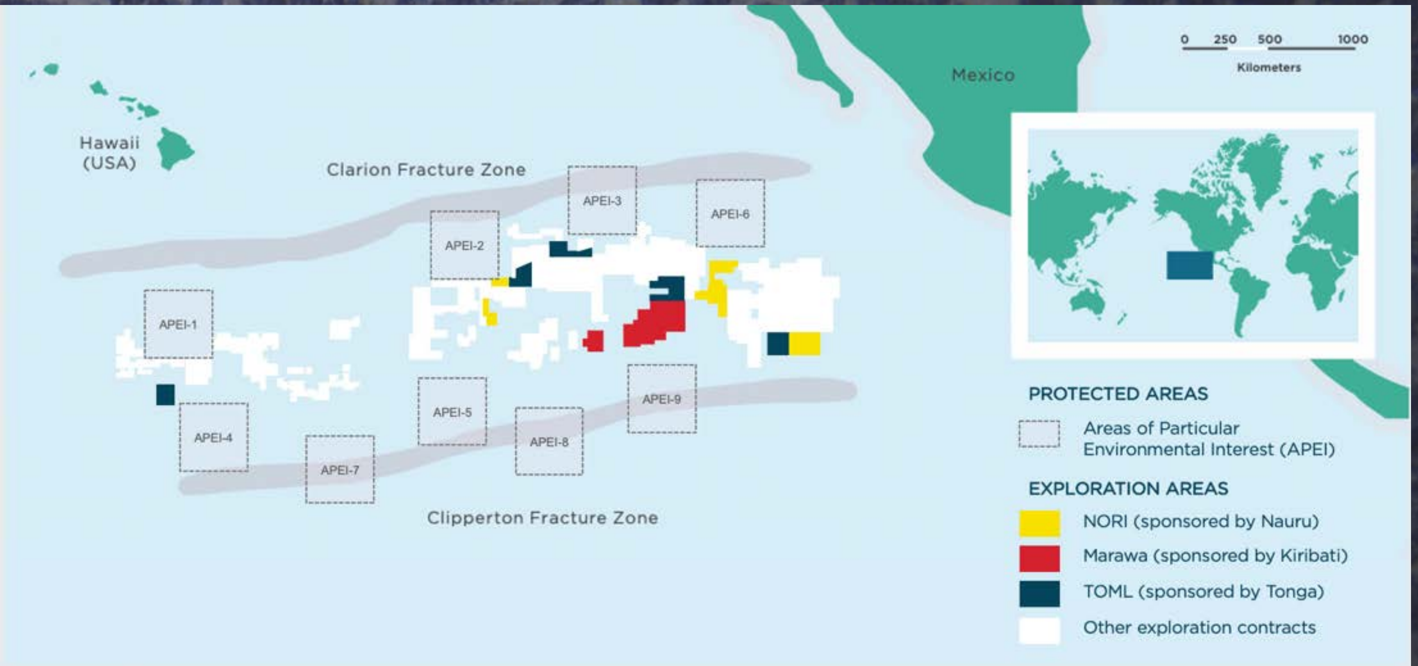
Nov 2020 prices | Decade price highs



ESG: The dirty secret

1 "How clean can the nickel industry become?", McKinsey, September 2020.
2 Graphite based on natural flake, spherical and anode material. Can also be synthetically manufactured; Benchmark Mineral Intelligence
3 Benchmark Minerals Intelligence, Dec 1, 2020

Solving availability: *in situ* resource sufficient to electrify the entire U.S. car fleet.



Exploration contract area	NORI[1]	TOML[2]	Marawa
Sponsoring state	Republic of Nauru	Kingdom of Tonga	Republic of Kiribati
Exploration area	74,830 km^2	74,713 km^2	74,990 km^2
Technical resource statement	Yes	Yes	Resource definition work in progress
Polymetallic nodules Inferred resource	866[4] million tonnes (wet)	756 million tonnes (wet)	--
Metal grade: Mn	29.5%	29.2%	--
Metal grade: Ni	1.3%	1.3%	--
Metal grade: Cu	1.1%	1.1%	--
Metal grade: Co	0.2%	0.2%	--
Electric vehicles *in situ* resource sufficient for[3]	150 million EVs	130 million EVs	--

[1] Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.
[2] Canadian NI 43-101 Compliant TOML Clarion Clipperton Zone Project Mineral Resource Estimate, AMC, July 2016.
[3] Assuming 75kWh batteries with NMC811 chemistry and nodule resource grade and abundance; "Where Should Metals for the Green Transition Come From?", Paulikas et al, LCA white paper, April 2020. Calculation based on estimated contained value of nickel.
[4] Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate, AMC, March 2021 – 11 Mt inferred @ 1.4% Ni, 1.1% Cu, 0.1% Co and 31.0 % Mn and 15.6 Kg/m2 abundance, 341Mt Indicated @ 1.4% Ni, 1.1 %Cu, 0.1% Co and 31.2% Mn and abundance 17.1Kg/m2, 4 Mt Measured @1.4% Ni, 1.1% Cu, 0.1% Co and 32.2% Mn and 18.6 Kg/m^2.

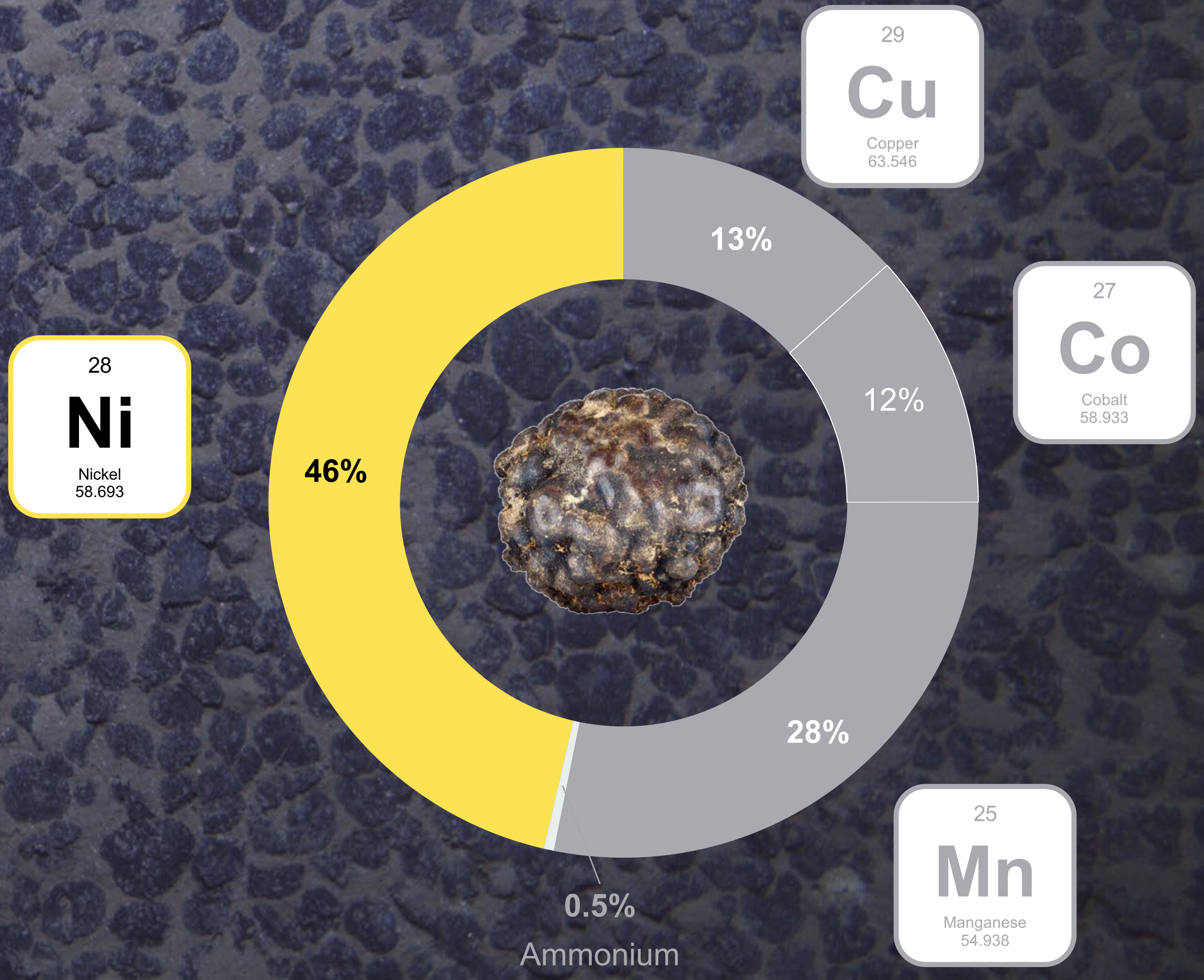
Solving availability: nickel for nickel-rich battery chemistries.

920,000 tonnes
Expected nickel supply deficit, 2030[1]

120,000 tonnes
Expected production, NORI-D[2]

~500,000 tonnes
Production potential, NORI+TOML[3]

NORI-D project revenue by product[2]



[1] "How clean can the nickel industry become?", McKinsey, September 2020.
[2] Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.
[3] Canadian NI 43-101 Resource Statement for full field financial model (internal DeepGreen development scenario).

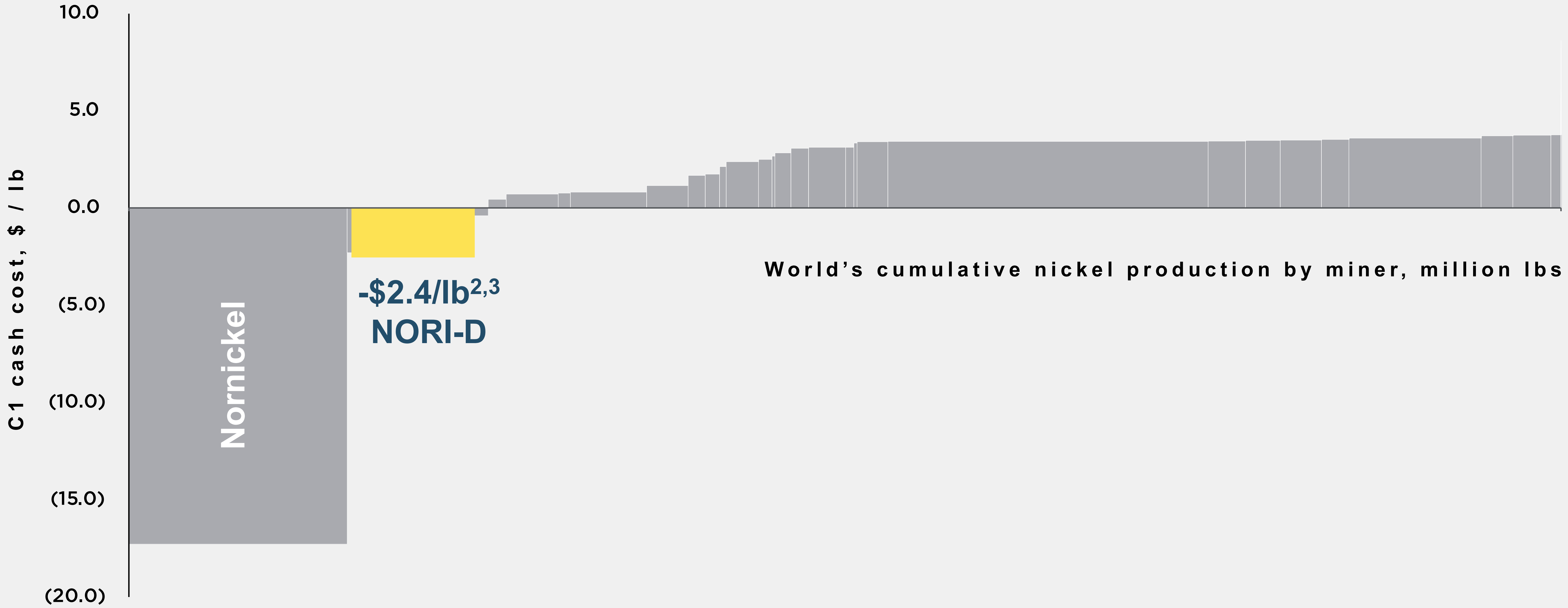
Solving security: we can localize our onshore plants on any continent.[1]

1 GSL Location Study prepared for the company. Locations selected based on access to deep-water port, access to renewable power and proximity to manganese and battery customers.

Solving price: we expect to become the second lowest-cost nickel producer in the world.

Nickel C1 cost curve on a by-products' basis[1]

C1 Cash Cost represents all direct costs, incl. mining, processing, freight, SGA minus revenue from by-products



[1] Nickel C1 Cost Curve, Wood Mackenzie, August 2020.
[2] Average for the steady state years 2030-45.
[3] Canadian NI 43-101 Compliant Preliminary Economic Assessment (PEA) for NORI-D Area, AMC, February 2021.

Solving ESG footprint: we expect to be able to compress most of it.

Land ores vs. nodules

Resource use

-75%	-94%	-89%	+new use
Ore	Land	Water	Seafloor

Climate change

-70%	-94%
CO_2e emissions	Stored carbon at risk

Habitat damage

-100%	-98%	-99%	-99%
Solid processing waste	Terrestrial ecotoxicity	Freshwater ecotoxicity	Eutrophication potential

Humans

-99%	-97%	-100%
Human toxicity	Human lives at risk	Child labor risk

Wildlife

-93%	-93%	remains
Biomass at risk	Megafauna wildlife at risk	Biodiversity loss risk

Note: Lifecycle analysis done on a cradle-to-gate basis including the mining/collection phase, transport, processing & refining phase.
Source: “Where Should Metals for the Green Transition Come From?”, Paulikas et al, LCA white paper, April 2020.

World-class partners: why we can move faster than anyone else.

OFFSHORE | ONSHORE

RESOURCE → COLLECT → SHIP → PROCESS

DEFINITION

MAERSK

Invested $25M in 2017. Provides project management services including vessel operations and supplier management on all resource definition and environmental offshore campaigns.

TECHNOLOGY DEVELOPMENT

Allseas

Invested $70M in 2019-2020. Developing a pilot and first commercial nodule collection system (partially covered by DeepGreen equity).

ENVIRONMENTAL IMPACTS

Several world's leading deep-sea research institutions contributing to Environmental & Social Impact Assessment program consisting of over 100 discrete studies. These organizations are independent and expect to openly publish their research in peer-reviewed journals.

FLOWSHEET

HATCH

Developed a zero solid waste flowsheet, overseeing Pilot Plant program being completed at FLSmidth's and Glencore's facilities.

GLENCORE

Invested in 2012. Holds offtake on NORI Area:

- 28 Ni Nickel 58.693 — 50% of production
- 29 Cu Copper 63.546 — 50% of production

Key milestones ahead.

2011-today

Funding
- ✓ ~$200M raised prior to the SOAC transaction

Resource
- ✓ Exploration rights to three nodule areas in the CCZ
- ✓ Canada & US standards compliant resource statements on NORI & TOML

Offtakes
- ✓ 50% of Ni & Cu to Glencore from NORI area

Vessel operations
- ✓ Partnership with Maersk
- ✓ 9 offshore campaigns

Collecting nodules
- ✓ Strategic partnership with Allseas
- ✓ Pilot system designed, lab tested, long-lead items procured
- ✓ Production vessel acquired

Processing nodules
- ✓ Zero-waste flowsheet with Hatch
- ✓ Lab-tests at KPM
- ✓ Pilot plant program in progress with FLS and XPS

Environmental and social impacts
- ✓ 5 comparative lifecycle assessments
- ✓ The world's most comprehensive seafloor-to-surface ocean research in progress in partnership with the world's leading institutions

Q3&4 2021

- Offtake: NiCuCo, P0
- Offtake: Mn silicate, P0
- Pilot: onshore processing
- EIS: collection pilot, CCZ
- MoU: pyromet plant, P0
- Contract: collection, P0

2022-2023

- Pilot: collection, Atlantic
- Pilot: collection, CCZ
- Pilot: onshore refining
- EIS: NORI-D production
- Application: ISA-NORI Exploitation Contract
- Offtakes: EV battery precursors, P1
- Offtakes: Mn silicate, P1

2024

- Contract: ISA-NORI
- **Commercial production:** P0, 1Mtpa nodules
- PFS & FS, construction, P1
- EIS: TOML-F
- Application: ISA-TOML Exploitation Contract

2025—

- **Commercial production:** P1, 10Mtpa nodules
- Contract: ISA-TOML
- Permitting new areas and bringing them into production

Fully funded | New funding required

CCZ	The Clarion Clipperton Fracture Zone
ISA	International Seabed Authority
EIS	Environmental Impact Statement
PFS	Pre-feasibility Study
FS	Feasibility Study
P0	Project Zero
P1	Project One
Mpta	Millions of tonnes per annum

Key business risks.

Resource

Size & quality of resource
Security of access

Regulatory

Exploit. Regs—unworkable terms
Exploit. Regs—delayed adoption
Exploitation Contract—delayed grant
Exploitation Contract—rejection

Social license

Calls for moratorium
Negative public perception
Brands boycotting marine minerals

Market

Commodity price fluctuations
Changing product formats
Changing battery chemistries
NiCuCo intermediate payables
NiCuCo intermediate placement
Mn silicate value-in-use & pricing
Mn silicate placement
Geopolitical constraints on trade
Supply overcapacity

Technology

Nodule collection—feasibility
Nodule collection—efficiency
Nodule processing—feasibility
Nodule processing—recoveries

Production

Nodule collection—financing availability
Nodule collection—build delays
Nodule collection—system reliability
Nodule collection—system CAPEX overruns
Nodule collection—system OPEX overruns
Nodule processing—site availability
Nodule processing—financing availability
Nodule processing—build delays
Nodule processing—plant CAPEX overruns
Nodule processing—plant OPEX overruns

Board of Directors: independent and mission-aligned.*

Gerard Barron
Chairman & CEO

Andrew Hall
Lead Independent

Eric Branderiz
Audit Committee Chair

Scott Leonard
Nom & Gov Comm Chair

Sheila Khama
Compensation Committee Chair

Riva Krut
Sustainability Committee Chair

Christian Madsbjerg
Sustainability / Nom & Gov / Comp Committees

Andrei Karkar
Comp Committee

TMC Board Director nominees as per S-4 amendments filed on May 18, 2021.
Note: Riva Krut is expected to start board service on September 1, 2021.

Leadership team.

26 people
Working for
The Metals Company

~250 people
Working on the project incl. partners and contractors

Gerard Barron
Chairman & CEO

Craig Shesky
CFO

Tony O'Sullivan
Chief Development Officer

Erika Ilves
Chief Strategy Officer

Dr Greg Stone
Chief Ocean Scientist

Corey McLachlan
Head of Sponsoring State and ISA Relations

Jon Machin
Head of Offshore Engineering

Dr Mike Clarke
Environmental Program Manager

Dr Jeff Donald
Head of Onshore Processing

Valuation, project economics & financing

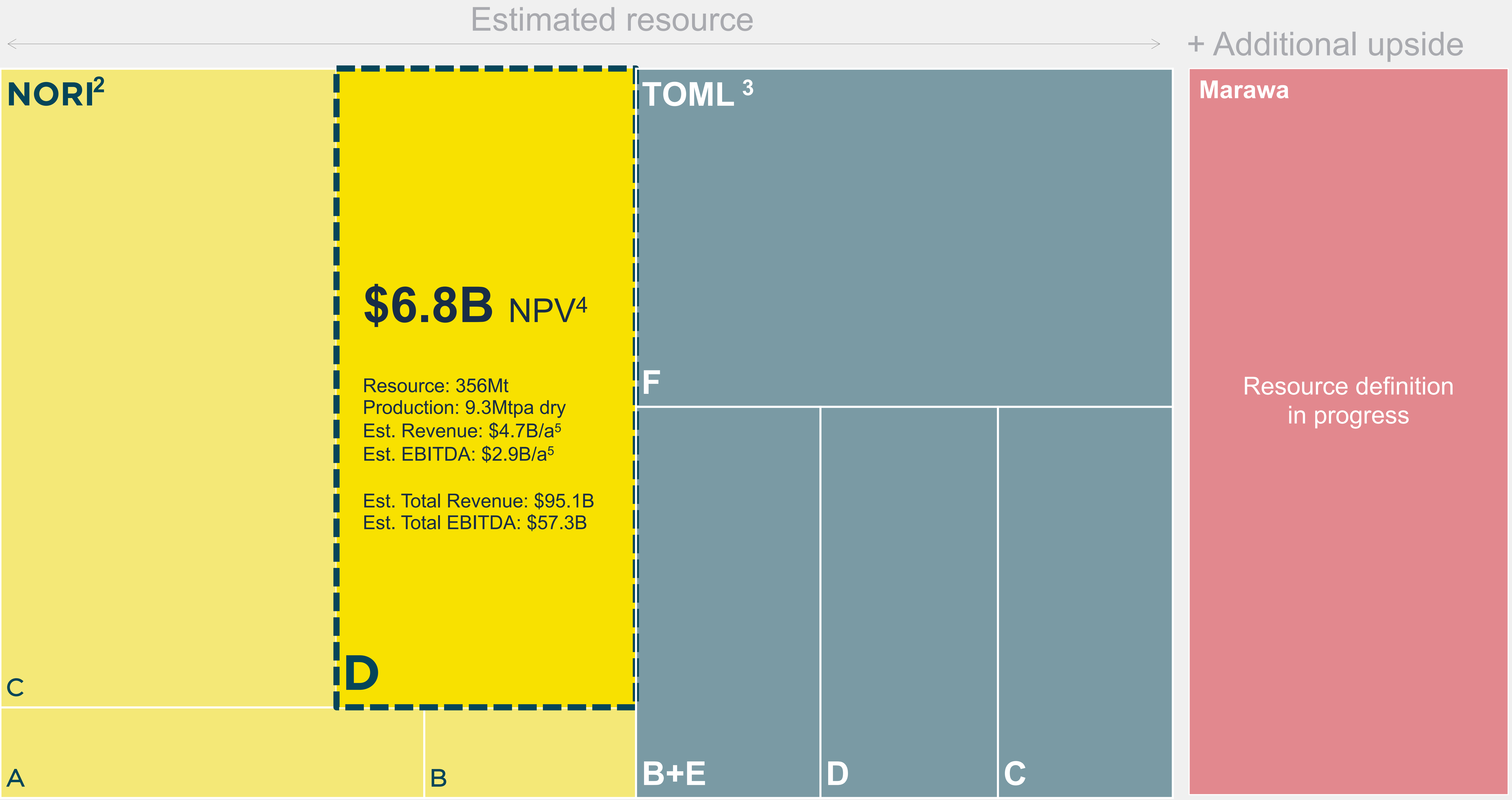
Craig Shesky, CFO
craig@metals.co

Project economics: massive estimated resource leads to massive economic upside.

Full portfolio[1]
Estimated resource
$31.3B NPV[4]

Resource: 1.6Bt
Production: 56Mtpa dry
Est. Revenue: $20.2B/a
Est. EBITDA: $12.9B/a

Est. Total Revenue: $389B
Est. Total EBITDA: $247B



[1] Canadian NI 43-101 Resource Statement for full field financial model (internal DeepGreen development scenario).
[2] Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.
[3] Canadian NI 43-101 Compliant TOML Clarion Clipperton Zone Project Mineral Resource Estimate, AMC, July 2016.
[4] January 1, 2021, assuming 9% discount rate.
[5] Average estimated annual revenue and EBITDA 2030-2046.

Project economics: NORI-D planned production expected to reach ~$2 billion in EBITDA in 2027.

NORI-D NPV using current spot prices: ~$10.5b[3]

Project economics – unleveraged[1]

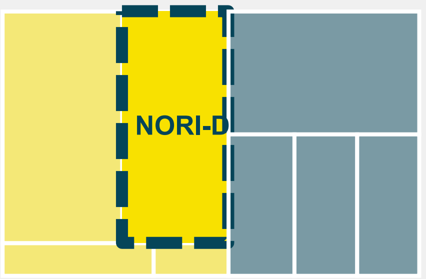
DISCOUNTED CASH FLOW JAN 2021[1] Net present value at 9% discount rate	$6.8 billion
EST. ANNUAL REVENUE[2]	$4.7 billion
EST. ANNUAL EBITDA[2]	$2.9 billion
EST. PRE-CONSTRUCTION CAPEX	$0.2 billion
EST. OFFSHORE CONSTRUCTION CAPEX	$2.2 billion
EST. ONSHORE CONSTRUCTION CAPEX	$4.8 billion

$USD millions

Financials	Life of Project	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2043	2044	2045	2046
Revenue	95,090	-	-	-	251	1,172	2,253	3,677	4,409	3,780	4,889	5,459	5,190	5,124	4,823	4,423	4,230	3,749	3,203
Operating costs	37,761	64	75	88	215	751	1,410	1,693	1,906	1,432	1,821	2,067	1,969	1,939	1,818	1,678	1,613	1,439	1,225
EBITDA	57,330	(64)	(75)	(88)	35	421	843	1,983	2,503	2,348	3,068	3,392	3,221	3,185	3,005	2,745	2,617	2,309	1,978
Depreciation	9,476	-	-	-	182	451	707	756	835	864	726	651	654	648	583	149	132	95	95
EBIT	47,854	(64)	(75)	(88)	(147)	(30)	136	1,227	1,668	1,483	2,342	2,741	2,567	2,538	2,422	2,595	2,485	2,214	1,883
Taxes and Royalties	16,318	-	-	-	10	46	88	351	467	573	835	965	908	897	850	854	817	726	616
Earnings	31,535	(64)	(75)	(88)	(157)	(76)	49	876	1,201	910	1,506	1,776	1,659	1,640	1,571	1,741	1,668	1,489	1,268
Cash Flow	**Total**																		
Revenue	95,090	-	-	-	251	1,172	2,253	3,677	4,409	3,780	4,889	5,459	5,190	5,124	4,823	4,423	4,230	3,749	3,203
Opex	(37,524)	-	-	-	(206)	(751)	(1,410)	(1,693)	(1,906)	(1,432)	(1,821)	(2,067)	(1,969)	(1,939)	(1,818)	(1,678)	(1,613)	(1,439)	(1,225)
Capex	(10,607)	(64)	(142)	(297)	(893)	(1,666)	(2,151)	(617)	(1,035)	(854)	(360)	(59)	(59)	(168)	(168)	(168)	(81)	(106)	(559)
Taxes and Royalties	(16,318)	-	-	-	(10)	(46)	(88)	(351)	(467)	(573)	(835)	(965)	(908)	(897)	(850)	(854)	(817)	(726)	(616)
Net Cash Flow	30,641	(64)	(142)	(297)	(859)	(1,291)	(1,395)	1,015	1,002	921	1,872	2,368	2,254	2,120	1,986	1,722	1,719	1,478	803
Cumulative Cash Flow	30,641	(64)	(206)	(503)	(1,361)	(2,652)	(4,047)	(3,032)	(2,031)	(1,110)	762	3,130	5,384	7,503	9,490	26,641	28,360	29,838	30,641

[1] Company economics expected to be different from fundamental unleveraged project economics as TMC pursues capital light project development strategies and non-dilutive sources of capital resulting in e.g., lower CAPEX/higher OPEX; higher return on equity.
[2] Average estimated annual production and revenue 2030-2046.
[3] Based on spot prices as of May 12, 2021. Nickel price of $17,797/ton (LME Spot Close), copper price of $10,445/ton (LME Spot Close), cobalt price of $44,645/ton (LME Spot Close) and manganese price of $5.50/dmtu (SMM - Mn 44% Ore - CIF Tianjin).
Source: Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.

Project economics: high operating margins on conservative price assumptions with significant upside.



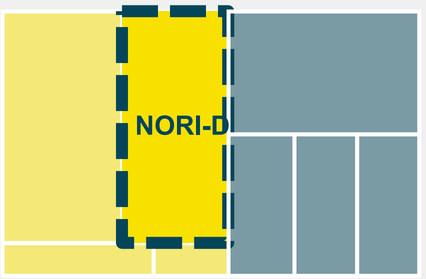
NORI-D Financial Model

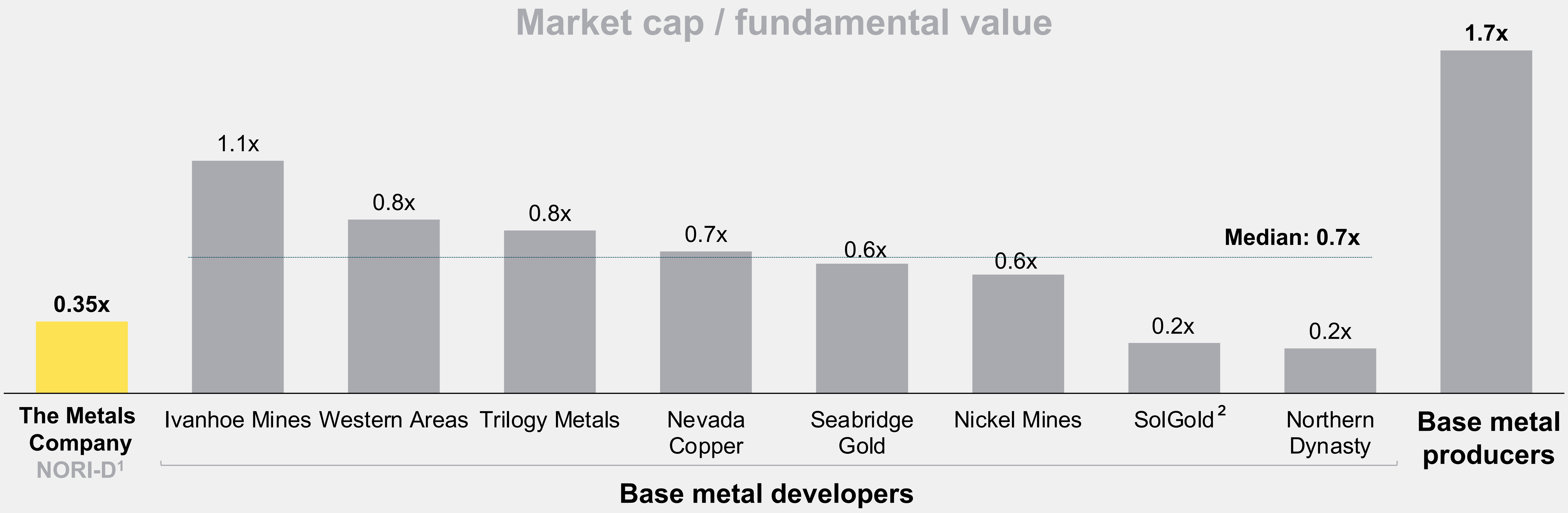
$ billions unless otherwise noted

Prices			
	CRU forecast	**Current spot**	**Delta**
Nickel	$16,106/t	$17,797/t	10%
Copper	$6,787/t	$10,445/t	54%
Cobalt	$46,416/t	$44,645/t	-4%
Mn silicate	$4.53/dmtu	$5.50/dmtu	21%
Project economics—cumulative over project life			
Total revenue	**95.1**	**110.9**	**17%**
Nickel	44.0	47.7	
Copper	12.7	19.5	
Cobalt	10.4	10.7	
Mn silicate	27.2	32.6	
Total OPEX	**37.5**	**37.5**	**0%**
Total EBITDA	**57.3**	**73.2**	**28%**
EBITDA margin	*60%*	*66%*	*5.7 pts*
NPV[2]	**6.8**	**10.5**	**54%**

[1] Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.
[2] January 1, 2021, assuming 9% discount rate.

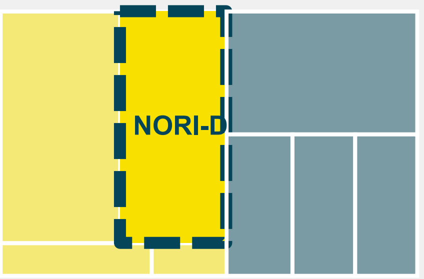
Valuation:
significant discount at its current valuation compared to trading levels of base metal producers.

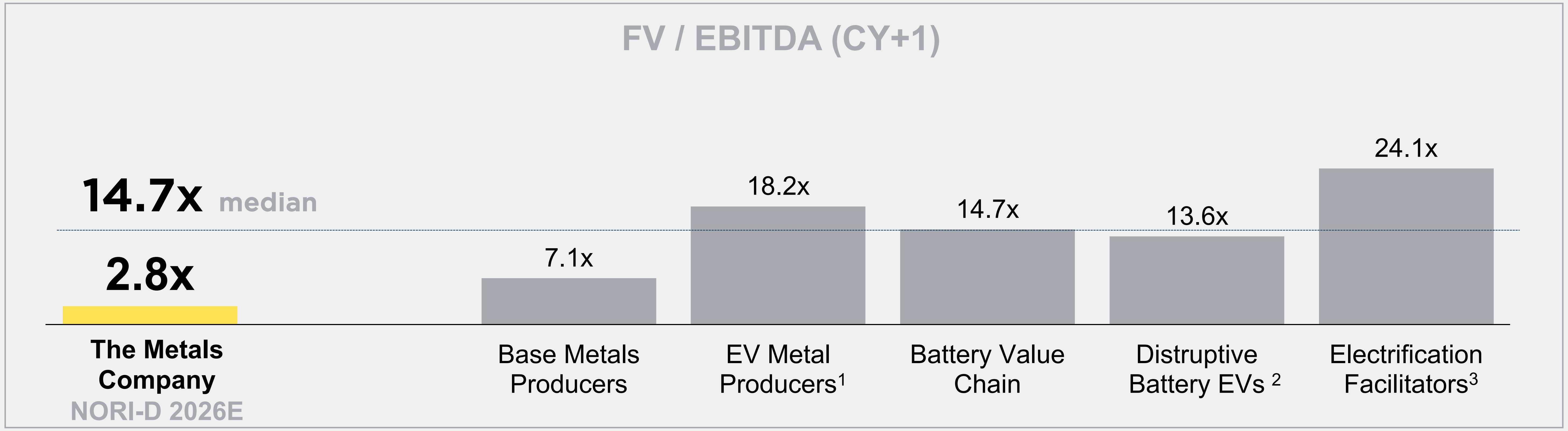


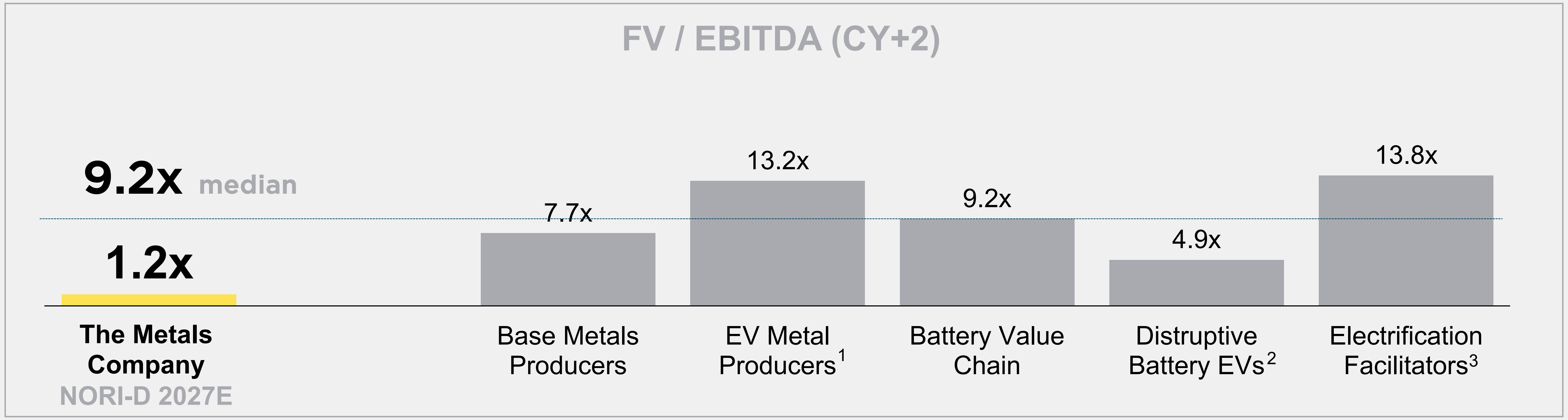


[1] Fundamental value calculation based on information provided in Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.
[2] Fundamental value for SolGold based on median NAV from broker reports published by Hannam, Peel Hunt and Cantor Fitzgerald on February 5, 2021, January 19, 2021 and December 10, 2020, respectively.
Source: Market capitalization and NAV estimates as per FactSet as of May 7, 2021.

Valuation: traditional miners provide a long-term floor valuation with upside to more disruptive peers in the EV value chain.







[1] Quantumscape multiples based on 2027E and 2028E. Microvast multiples based on 2023E and 2024E.
[2] Disruptive battery EV multiples based on 2023E and 2024E. Proterra multiple based on 2024E and 2025E multiples.
[3] Electrification facilitators multiples based on 2023E and 2024E. Chargepoint multiple based on 2025E and 2026E multiples. EVBox 2023E multiple was not considered as it exceeds 150x and its 2024E multiple was not considered due to the lack of a 2024E EBITDA projection.
Note: The Metals Company multiples based on 2026E and 2027E EBITDA for NORI-D.
Source: Firm value and EBITDA estimates per FactSet as of May 7, 2021 and company filings. Firm value and EBITDA projections stated in investor presentations at time of SPAC transaction used for Microvast, Proterra, Lion Electric, EVBox, EVGo.

Project finance: Project Zero is already funded.

Products	Production[1]
NiCuCo alloy	21Kt
Mn in silicate	331Kt

Products	Production[4]
Nickel	119 Kt
Manganese	2,847 Kt
Copper	89 Kt
Cobalt	9 Kt
Fertilizer	254 Kt

PROJECT ZERO
1.3Mt (wet)
1.0Mt (dry)

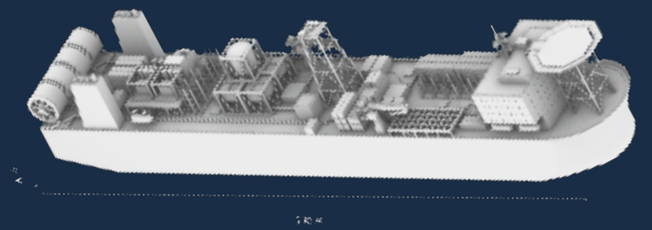
~$193M
Construction CAPEX to start commercial production[2,3]

PROJECT ONE
12.2Mt (wet)
9.3Mt (dry)

~$57.3billion
expected EBITDA over NORI-D project life

~$7.0billion
expected construction CAPEX to ramp up to full run-rate production

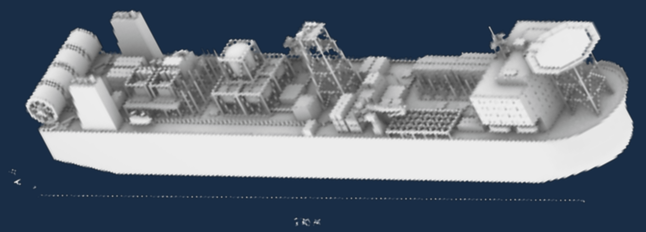
Production vessels
Hidden Gem acquired, conversion in progress



Collector robots
Procurement of lead items in progress for pilot collector (#1)

RKEF lines (x0)
Planned tolling through existing facilities

Converted drillship

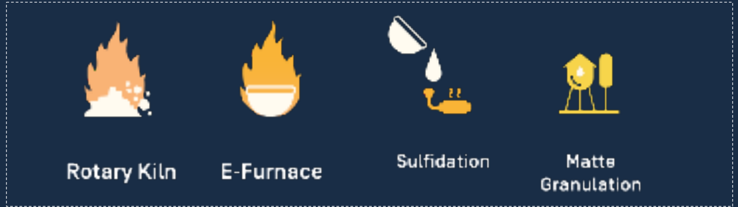


Purpose-built collection vessel

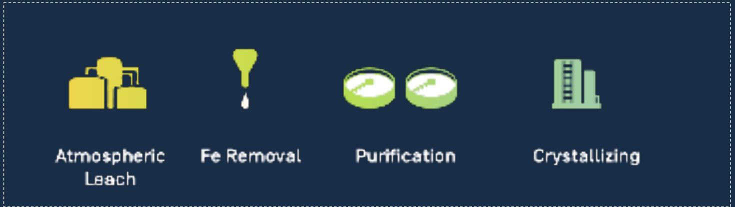
Support vessel

$2.2billion
offshore construction CAPEX

RKEF lines (x4)
New construction



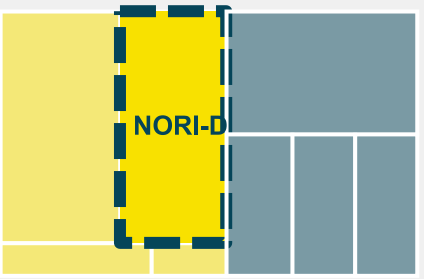
Refineries (x2)
New construction



$4.8billion
onshore construction CAPEX

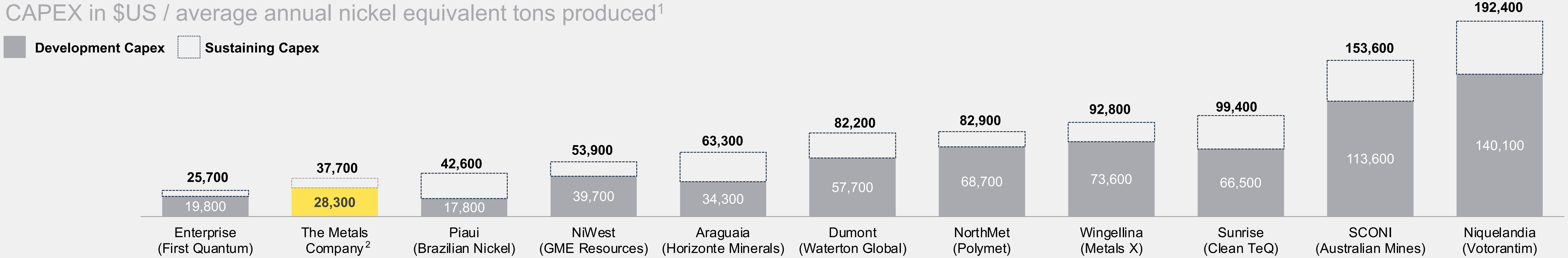
[1] Production based on 1.0Mpta (wet) with a single subsea collector.
[2] Another collector will be added to the Hidden Gem production vessel in 2029. Associated CAPEX is included in Project One CAPEX.
[3] $163mm for Hidden Gem modification and $30mm for Onshore Capex. Does not include 40mm of contingency allocation.
[4] Total NORI-D stable state production including both Project Zero and Project One, 2030-2046 average.
Source: Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.

Project finance: low CAPEX intensity and low OPEX compared to peers.



Capital intensity

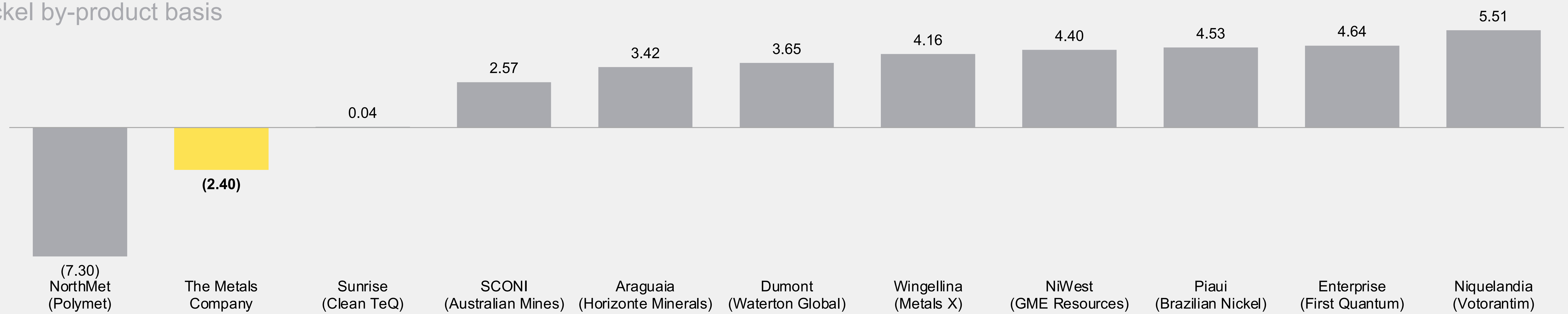
CAPEX in $US / average annual nickel equivalent tons produced[1]



	Enterprise (First Quantum)	The Metals Company	Piaui (Brazilian Nickel)	NiWest (GME Resources)	Araguaia (Horizonte Minerals)	Dumont (Waterton Global)	NorthMet (Polymet)	Wingellina (Metals X)	Sunrise (Clean TeQ)	SCONI (Australian Mines)	Niquelandia (Votorantim)
Ni Equivalent Resources (Mt)	**0.5**	**15.4**	**0.8**	**1.0**	**1.9**	**6.5**	**3.5**	**2.4**	**1.3**	**0.5**	**0.4**

Unit cash costs

$US / lb, nickel by-product basis



[1] Figures rounded to the nearest $100.
[2] Based on estimated production between 2027 (run-rate year) – 2042. Calculations include nickel tonnage related to tolling. Development capex excluding tolling is $33,500/T.
Note: Calculated using projections out to 2040. Assumes average price of $16,106 per tonne of nickel, $6,787 per tonne of copper, $46,416 per tonne of cobalt, $4.53 per dmtu of manganese, $1,823 per ounce of gold, $27 per ounce of silver and $1,224 per ounce of platinum. The nickel, copper, cobalt and manganese pricing is consistent with the pricing used in Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion ClippertonZone Mineral Resource Estimate and associated financial model, AMC, March 2021 The gold, silver and platinum prices are based on spot prices as of May 12, 2021.
Source: Wood Mackenzie Reports. Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.

Project finance: Project One in capital planning phase, with significant flexibility.

$7 billion CAPEX

CAPEX-light approach

Debt financing

Cash flow

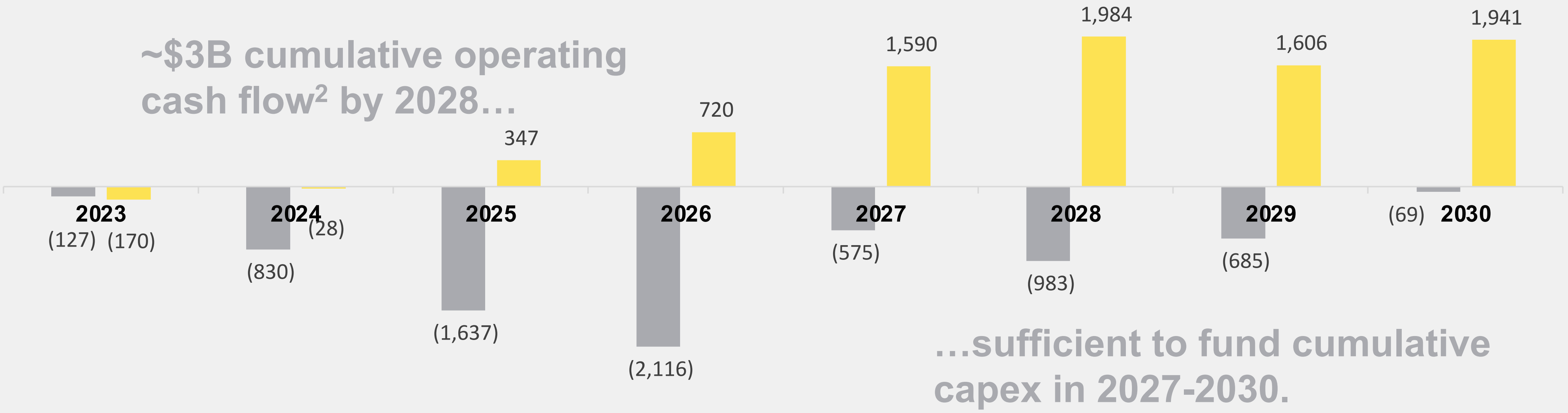
Pursue lower CAPEX options:
- Offshore: convert more drillships instead of purpose build vessels
- Onshore: acquire distressed RKEF lines

Use partners' existing capital assets:
- Offshore: nodule collection contracts at fixed price per tonne
- Onshore: tolling nodules through existing RKEFs and intermediates through existing refineries

Pursue multiple sources of debt financing (illustrative):
- $0.8-1 billion (25-33%) US **government supported capital** (discussions ongoing)
- $0.5-0.75 billion (17-25%) **offtaker financing** (discussions ongoing)
- $0.5-0.75 billion (17-25%) **uncovered term loan**
- $1-1.5 billion (33-50%) **export credit agencies**

The tenor, amortisation profile and cost of debt will be available once a financing plan has been developed and market sounding has been conducted. The average cost of debt will depend on the final size of each of the various pockets of liquidity, and for the commercial debt, the risk allocation associated with the onshore project.

NORI-D CAPEX vs. positive cash flows[1]



[1] Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.
[2] Cash flows from operations through mid 2028 at current metals prices as of May 12, 2021.

Project finance: lower offshore CAPEX option achieved for Project Zero and can be used for Project One.

Project Zero

Production vessel—conversion

~$200 million

Expected CAPEX

=

<$50 million [$700 million new build price]

Acquisition cost by Allseas in Feb 2020

+

$163 million

Conversion CAPEX budgeted in the IA

Project One

Production vessel—new build

$1.3 billion

CAPEX (incl. contingency) budgeted in the NORI-D IA model

Production capacity of one new build vessel could be achieved with 3x converted vessels at ~$200 million per conversion, providing us with:

- Lower overall CAPEX intensity
- Ability to scale CAPEX in increments

Project finance: we can convert CAPEX into OPEX = lower margin / higher ROE.

$7 billion CAPEX

$2.2billion offshore CAPEX

$4.8billion onshore CAPEX

- **$2.8billion RKEF Lines (x4)**
  Structures and substation, raw material handling, rotary kilns, calcine transfer, electric furnaces, converter aisle.
- **$2.0billion Refinery (x2)**
  Leaching & purification, sulfate crystallization & packaging, reagents & utilities.

Option:

Commercial contracts

Award long-term contracts at a fixed price per ton and shift offshore asset CAPEX to contractor balance sheet

- Increase offshore OPEX
- Eliminate offshore CAPEX

Option:

Tolling contracts

Award long-term contracts at a fixed price per ton and shift onshore RKEF and refinery CAPEX to contractors' balance sheet

- Increase onshore OPEX
- Eliminate onshore CAPEX

$503 revenue/dry ton

$197 OPEX/dry ton

- $137onshore OPEX
- $30 offshore OPEX
- $27 shipping cost
- $3 corporate cost

$306 EBITDA margin (~60%)

Source: Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.

Project finance: we can reduce onshore CAPEX by reducing scope.

$7 billion CAPEX

$2.2 billion offshore CAPEX

$4.8 billion onshore CAPEX

- **$2.8 billion RKEF Lines (x4)**
  Structures and substation, raw material handling, rotary kilns, calcine transfer, electric furnaces, converter aisle.
- **$2.0 billion Refinery (x2)**
  Leaching & purification, sulfate crystallization & packaging, reagents & utilities.

Option:

Produce and sell NiCuCo matte & Mn silicate:

- $2.0 billion refinery capital eliminated
- Revenue reduced from $503 to $420 revenue / dry ton (85% of LME)

Project finance: Illustration of how we can finance onshore CAPEX with debt.

($mm)		2021	2022	2023	2024	2025	2026	2027	2028	2029
Onshore capital spend	**$4,756**				**476**	**616**	**1,708**	**563**	**810**	**582**
Project-level equity / partners	$1,756		200		150	200	560	190	265	191
Government supported capital	$850				350	75	200	50	100	75
Export credit agencies (ECAs)	$1,150					175	450	150	225	150
Uncovered term loan financing	$500					75	200	50	100	75
Offtaker financing	$500					75	200	50	100	75

Could be back-ended if secured with well-rated LCs

Drawdowns

Illustrative sequencing

- Discussions with governmental bodies around the financial support they will provide to the project are already ongoing
- Once these discussions reach a developed stage, the sizing of the other sources of liquidity could be firmed up
- Bank lenders will require a 12-18 month lead time to perform the required due diligence and make a financing package available
- ECAs will be engaged throughout the process, particularly when various export contracts are awarded
- Offtaker financing could be arranged with a quicker timeframe, and off-takers would be engaged once there is clarity on the bank and ECA financing package

Project finance: our capital plan has many precedents for non-dilutive financing.

Precedent examples of similar financing strategies

Royalty/ streaming
Anglo Pacific, Franco-Nevada, Nomad, Orion, Royal Gold, Inc, Triple Flag Precious Metals, CPP Investments, Maverix Metals Inc., Ontario Teachers' Pension Plan, Osisko Gold Royalties, Sandstorm, Wheaton Precious Metals

Offtake financing
Glencore, IXM, Mitsubishi, Sumitomo Corporation, Tesla, Other EV Manufacturers, Itochu, Marubeni, Mitsui & Co., Trafigura, Lucid

Debt financing
ECA-backed, project finance, capital markets

AngloAmerican	First Quantum Minerals Ltd.	Ivanhoe Mines	Minsur / Alxar	SolGold	Teck
Quellaveco	Cobre Panama	Kamoa Kakula	Mina Justa	Cascabel	Quebrada Blanca

Base Metal Producers[1] Median LTM Net Leverage: 1.0x

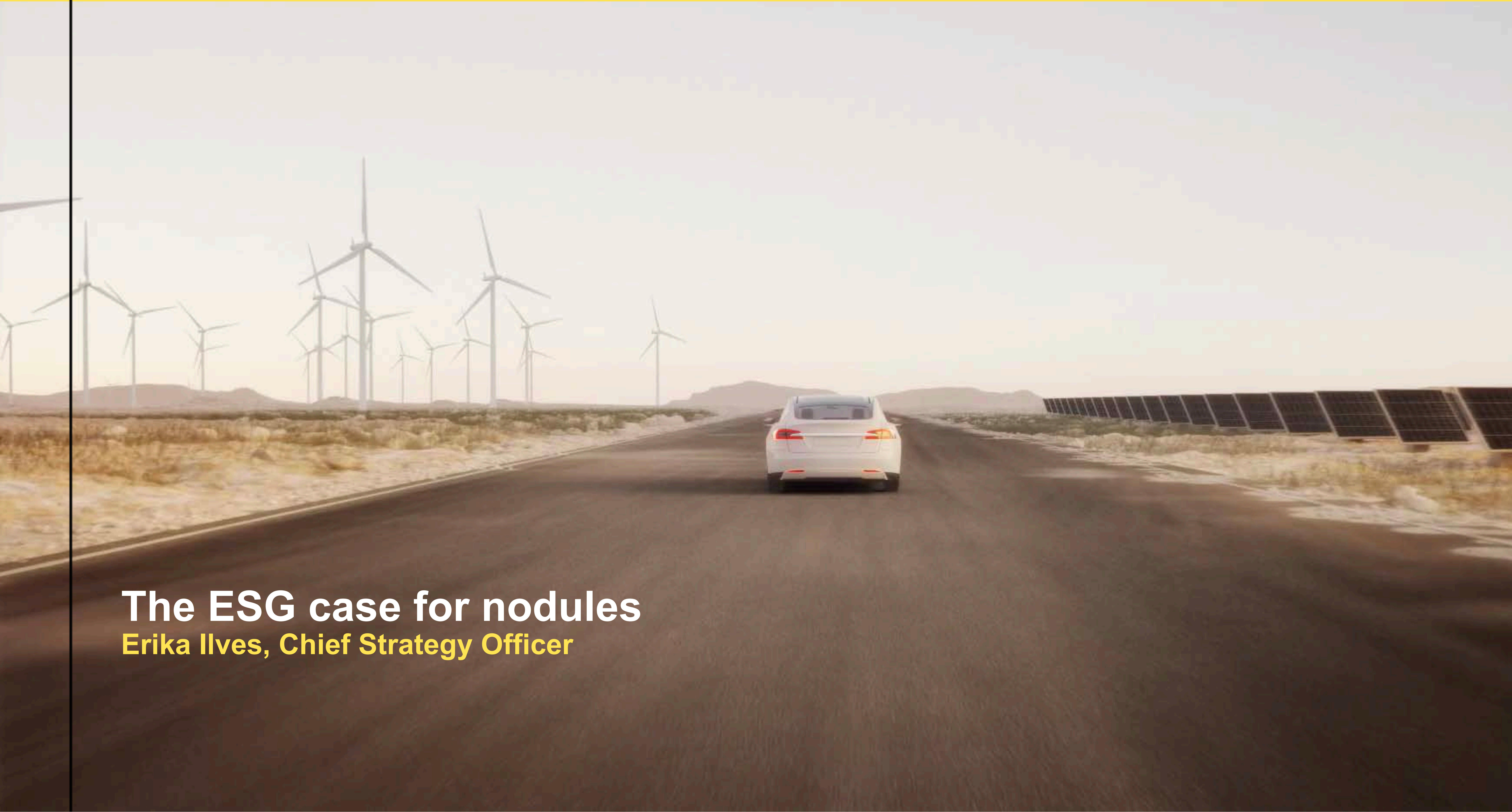
Capital reduction
Leasing equipment from core providers

Asset owners/operators: SFL, BW Offshore, KNOT Offshore Partners LP, MODEC, MOL, SBM Offshore

Resource owners: bp, equinor, Perenco, Petrobras, Yamal LNG

Cash flow from operations

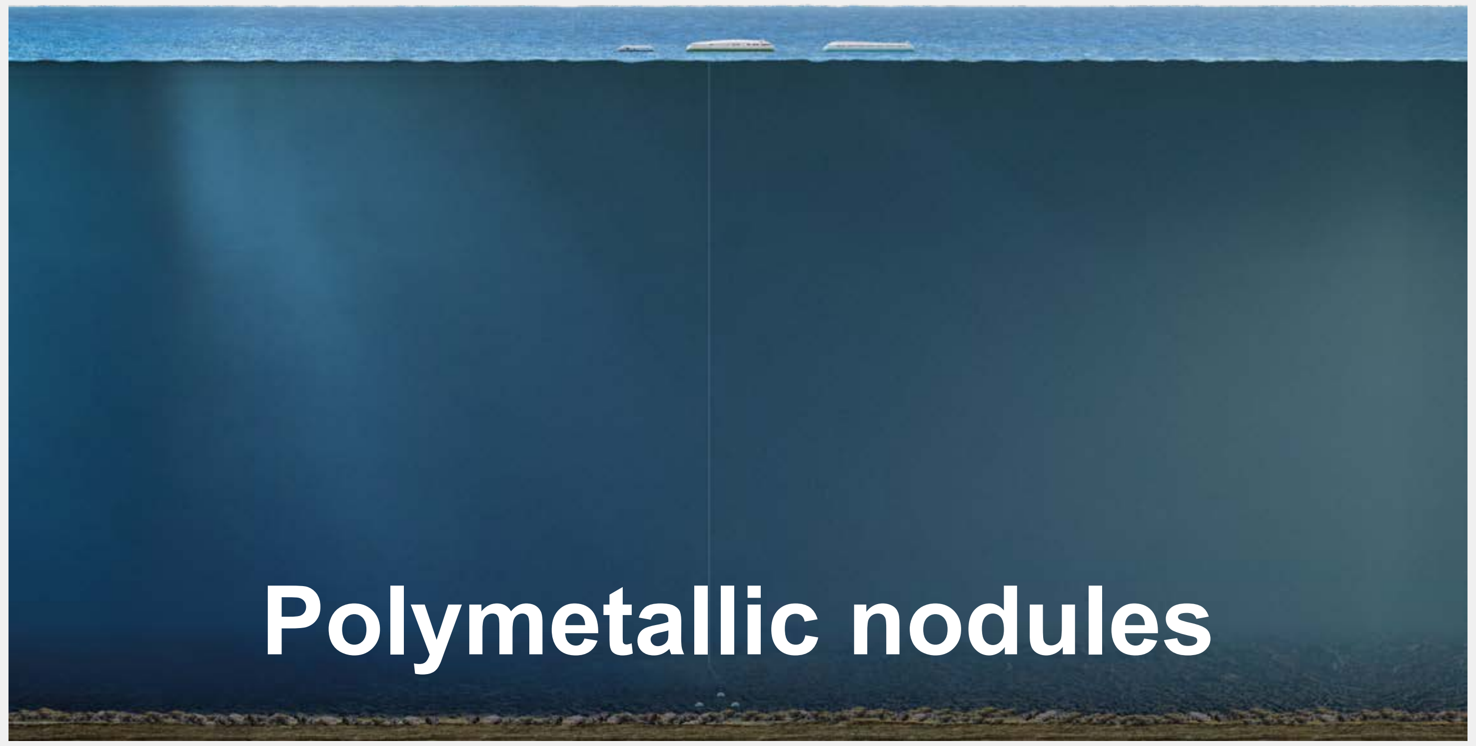
[1] Base metal producers include Southern Copper, OZ Minerals, Freeport McMoRan, Antofagasta, Lundin Mining and First Quantum Minerals.
Source: FactSet. Leverage data based on market data as of May 7, 2021.



The ESG case for nodules

Erika Ilves, Chief Strategy Officer

Primary metal mining is not sustainable.



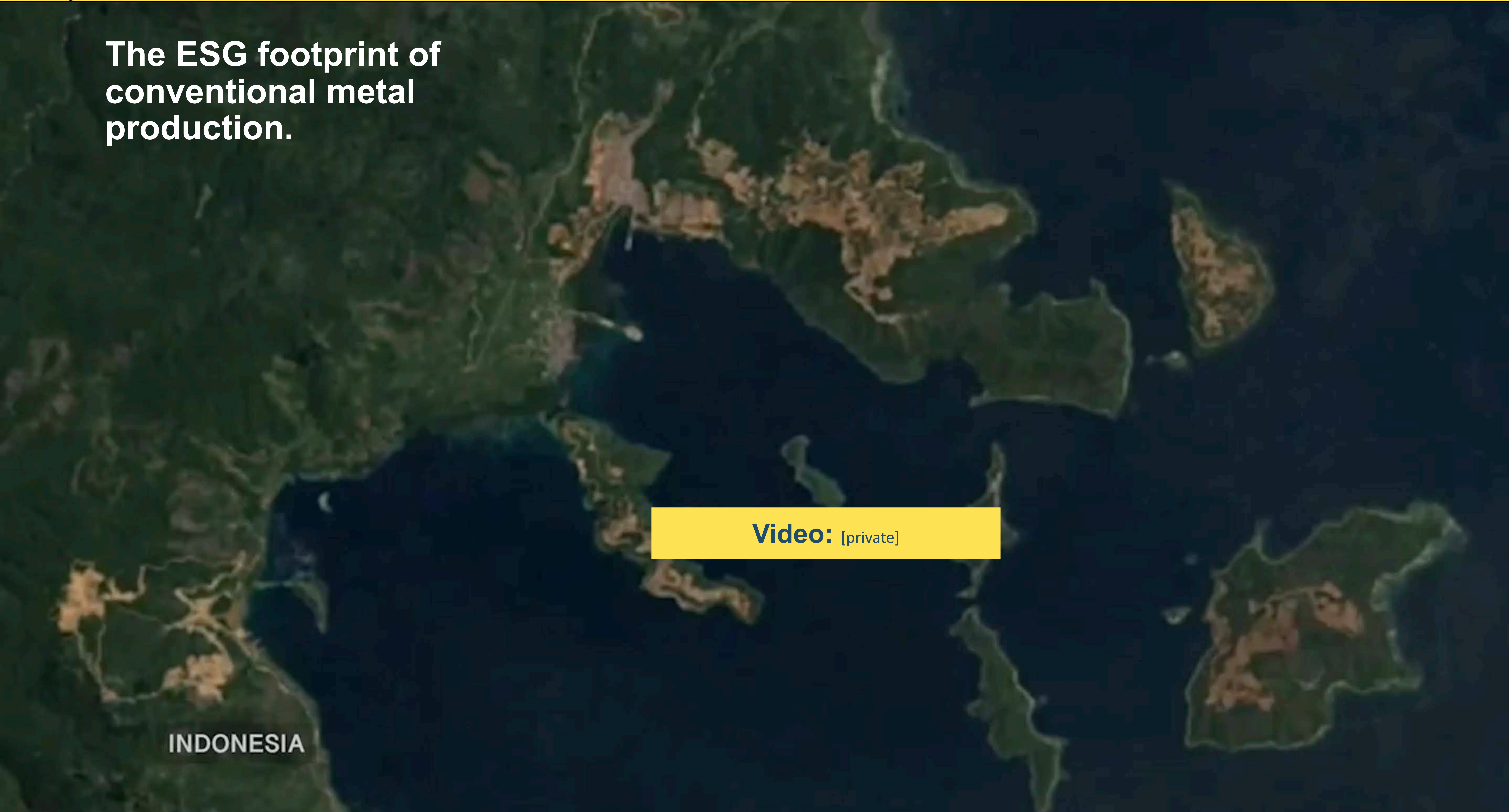
1-10

million years for nickel laterite to form through wet leaching of unweathered rock under rainforests

1-10

million years for a nodule to form through precipitation of metal that is in solution in sea- and sediment pore-water

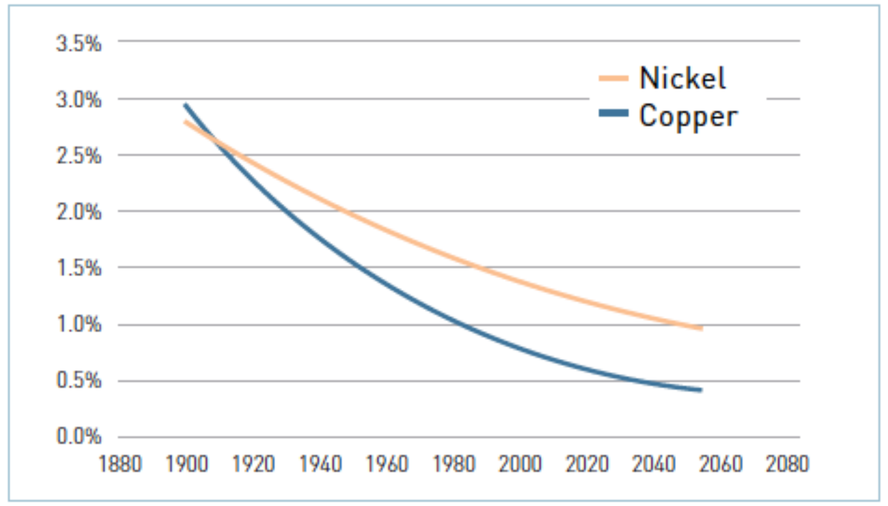
The ESG footprint of conventional metal production.

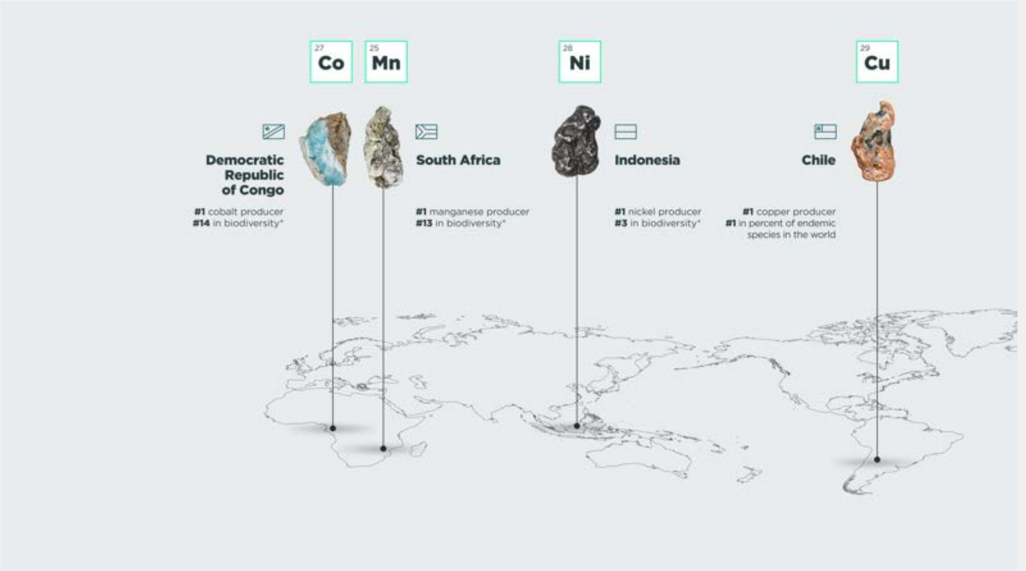


Video: [private]

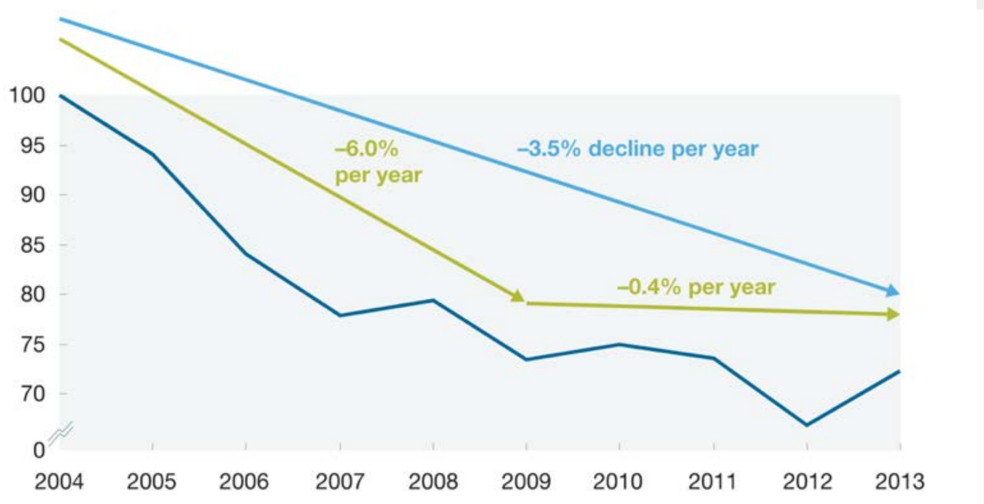
Structural challenges of land-based producers: things will get worse.

Nickel & copper grades, fitted[1]





MineLens productivity index, 2004=100[2]



Falling grades

More ore to get at the same amount of metal

More land / energy / water use

Falling grades x sharply rising demand = exponential increase in tailings

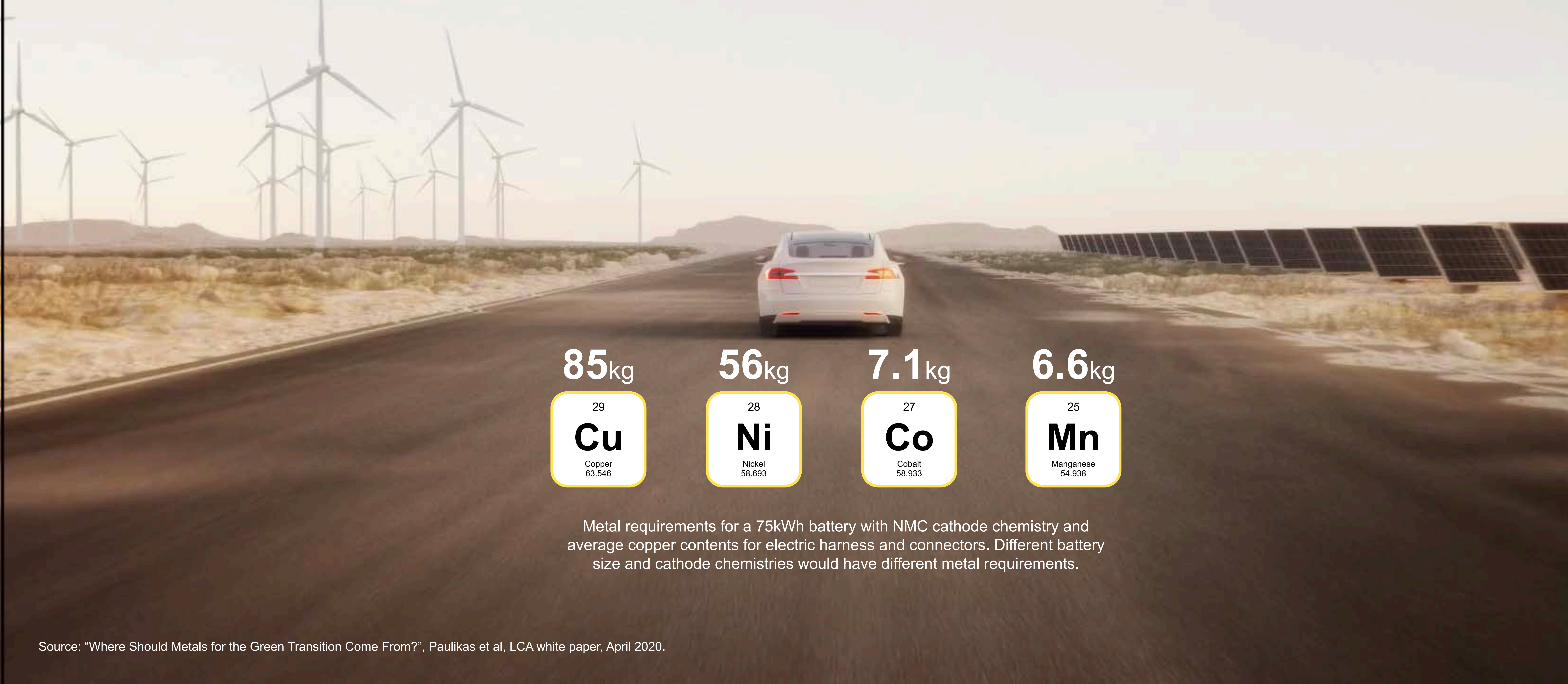
Problematic locations

Remaining projects increasingly in higher-risk and some of the most biodiverse places on the planet with large carbon sinks and sequestration services

Hard choices

Need to invest in decarbonizing production, reducing energy / water use and management of rapidly increasing tailings volumes while tackling CAPEX / OPEX pressure stemming from falling grades

Consider the ESG impacts of producing just 155 kg of metals for one electric vehicle today using conventional sources…

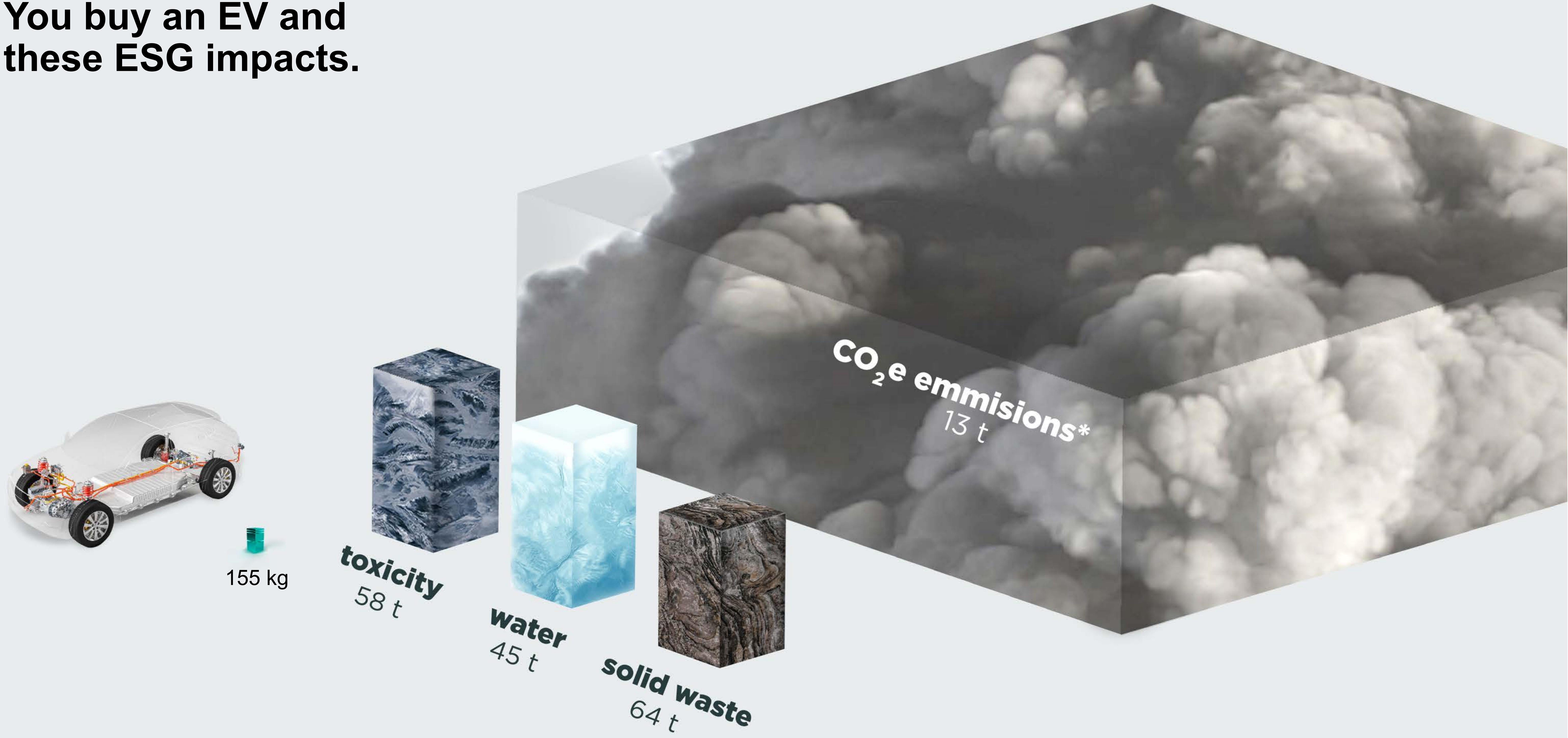


85kg	56kg	7.1kg	6.6kg
29 **Cu** Copper 63.546	28 **Ni** Nickel 58.693	27 **Co** Cobalt 58.933	25 **Mn** Manganese 54.938

Metal requirements for a 75kWh battery with NMC cathode chemistry and average copper contents for electric harness and connectors. Different battery size and cathode chemistries would have different metal requirements.

Source: "Where Should Metals for the Green Transition Come From?", Paulikas et al, LCA white paper, April 2020.

You buy an EV and these ESG impacts.



*Include direct emissions from metal mining, processing & refining; release of carbon stored in vegetation, detritus & soil; and emissions from land use change
Source: Paulikas et al, Where Should Metals for the Green Transition Come From? April 2020

Metal production from nodules can be much better.

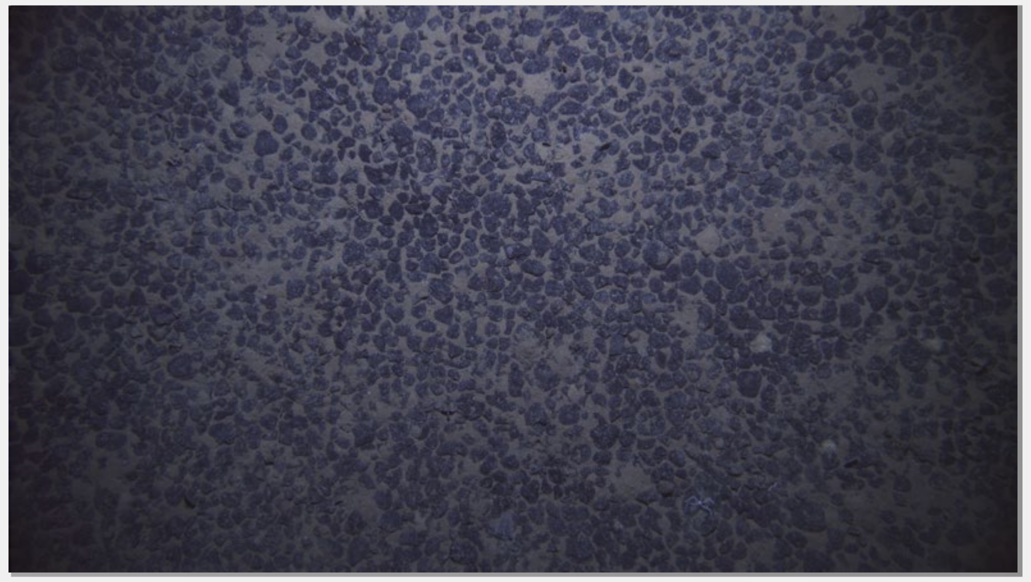
Resource

High-grades of four metals in a single ore – **much less ore mass to process**

Very low contents of hazardous elements – **can turn 100% of mass into products**

Unobstructed access to nodules—**no overburden to remove**

Loose sitting – **no need for drilling & blasting**



Location

Far offshore — **no deforestation, no social displacement, no fixed infrastructure**

Very deep – **no release of carbon sequestered in seafloor sediments**

Marine desert— **no plants, orders of magnitude less biomass to impact**

Most common habitat on the planet—**easier to set aside areas for conservation**

Our choices

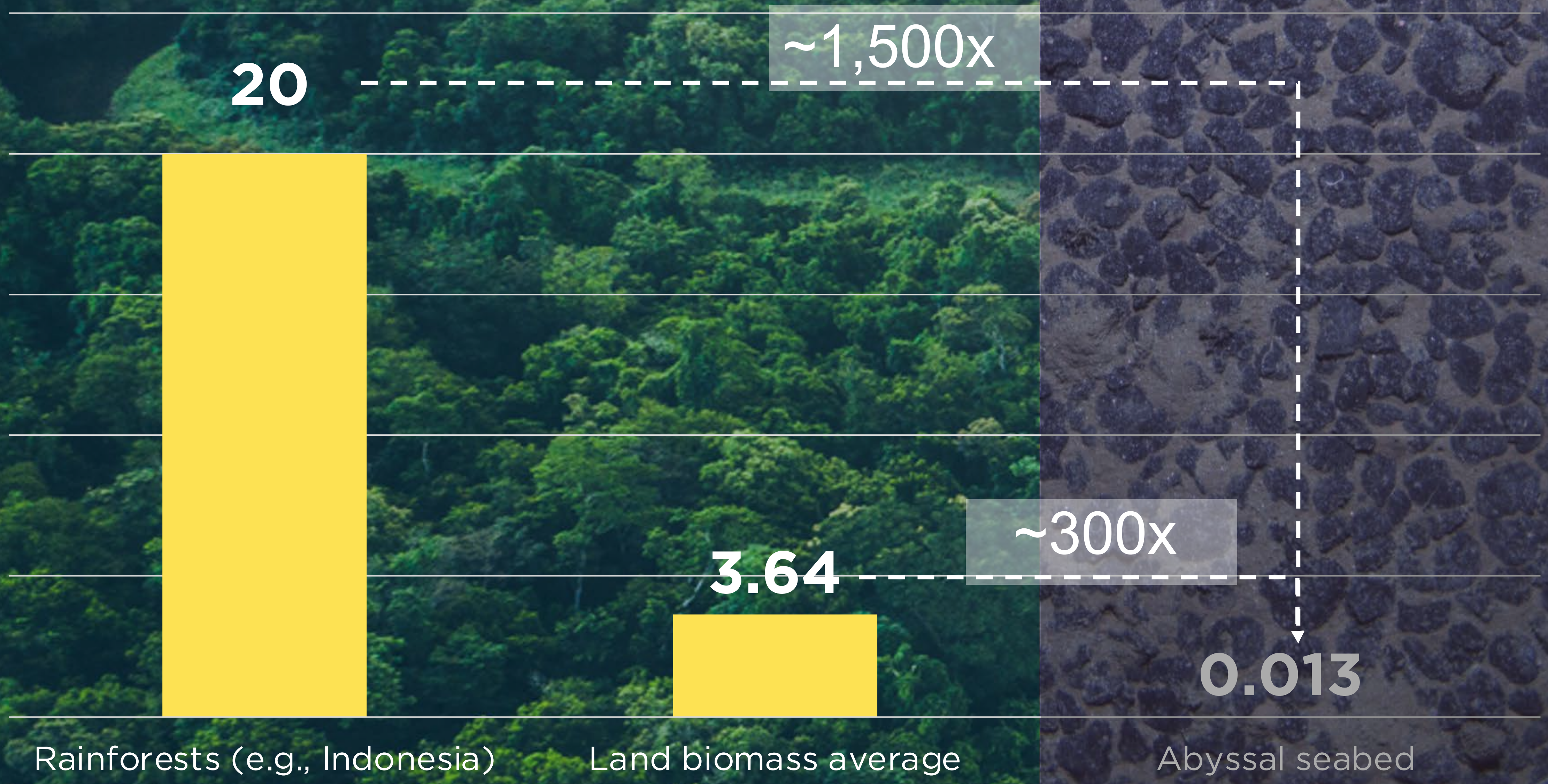
Invest in zero-waste flowsheet design

Power processing plant with renewables

The Abyssal Plain advantage: one of the lowest biomass & carbon sequestration environments on the planet.

Biomass

Contained carbon kg/m²



Stable, food-poor environment dependent on particles sinking from oligotrophic surface waters

Very low biomass

- No plants
- ~70% of biomass is bacteria
- Most wildlife is small <4cm

Note: The seafloor-biomass value incorporates an estimate of seamounts and hydrothermal vents attributed to Wei, et al., 2010. It is also an overestimate because it includes all fish in the water column, rather than focusing only on the seafloor and mid-water column. The overall biomass of earth's ice-free terrestrial area was 472.7 gigatonnes of carbon, compared to 2.49 gigatonnes of carbon for the global abyssal seabed.
Source: Bar-On, Phillips, & Milo, 2018; Wei, et al., 2010.

Ethical labeling: what you buy when you buy a billion EVs.

Impact facts

Cradle-to-gate production of nickel sulfate, manganese sulfate, cobalt sulfate and copper cathode
Assuming NMC811 cathode chemistry and 75kWh battery size

Serving size: 1 billion electric cars

	Land	Nodules	% change
Climate change			
GWP – CO_2 equivalent emissions, Gt	1.47	0.45	**-70%**
Carbon sinks at risk, Gt	9.30	0.58	**-94%**
Disrupted carbon sequestration, GT	2.06	0.24	**-88%**
Resource use			
Ore, Gt	25	6	**-75%**
Land, km^2	156,000	9,800	**-94%**
of which forests, km^2	66,000	5,200	**-92%**
Seafloor, km^2	2,000	508,000	**new use**
Water, km^3	45	5	**-89%**
Primary and secondary energy, PJ	24,500	25,300	**+3%**
Waste			
Solid waste, Gt	64	0	**-100%**
Terrestrial ecotoxicity, 1,4-DCB equivalent Mt	33	0.5	**-98%**
Freshwater ecotoxicity, 1,4-DCB equivalent Gt	21	0.1	**-99%**
Eutrophication potential, PO4 equivalent, Mt	80	0.6	**-99%**
Human & wildlife health			
Human toxicity, 1,4-DCB equivalent, Mt	37,000	286	**-99%**
SO_x and NO_x emissions, Mt	180	18	**-90%**
Human lives at risk, number	1,800	47	**-97%**
Megafauna at risk, trillion organisms	47	3	**-93%**
Biomass at risk, Mt	568	42	**-93%**
Biodiversity loss risk	Present	Present	**No change**

Source: Paulikas et al, Where Should Metals for the Green Transition Come From? April 2020 White Paper; D. Paulikas, S. Katona, E. Ilves, S.H. Ali, “Life cycle climate change impacts of producing battery metals from land ores versus deep-sea polymetallic nodules,” *Journal of Cleaner Production,* 275 (2020) 123822.

Conflicting narratives: why good people are divided on deep-sea mining.

"Intuitions come first, strategic reasoning second."

"People bind themselves into political teams that share moral narratives. Once they accept a particular narrative, they become blind to alternative moral worlds."

"When a group of people make something sacred, the members of the cult lose the ability to think clearly about it. Morality binds and blinds."

Intuition

Mining has had devastating impacts on land.
We must protect the oceans from mining.

Magical solutions

We don't need to mine.
We can degrowth, reuse, recycle.

Black-and-white thinking

Ban all deep-sea mining and focus on fixing land based mining.

Source: Jonathan Haidt, The Righteous Mind: Why Good People Are Divided by Politics and Religion (2012).

Our approach to earning a social license.

“The human mind is a **story processor**, not a logic processor.”

“Moral reasons are the tail wagged by the intuitive dog. A dog’s tail wags to communicate. You can’t make a dog happy by forcibly wagging its tail. And you **can’t change people’s minds by utterly refuting their arguments**.”

“If you really want to change someone’s mind on a moral matter, you’ll need to **see things from that person’s angle** as well as your own. And if you do truly see it the other person’s way—deeply and intuitively—you might even find your own mind opening in response. **Empathy is an antidote to righteousness**, although it’s very difficult to empathize across a moral divide.”

Source: Jonathan Haidt, The Righteous Mind: Why Good People Are Divided by Politics and Religion (2012).

Tell better stories

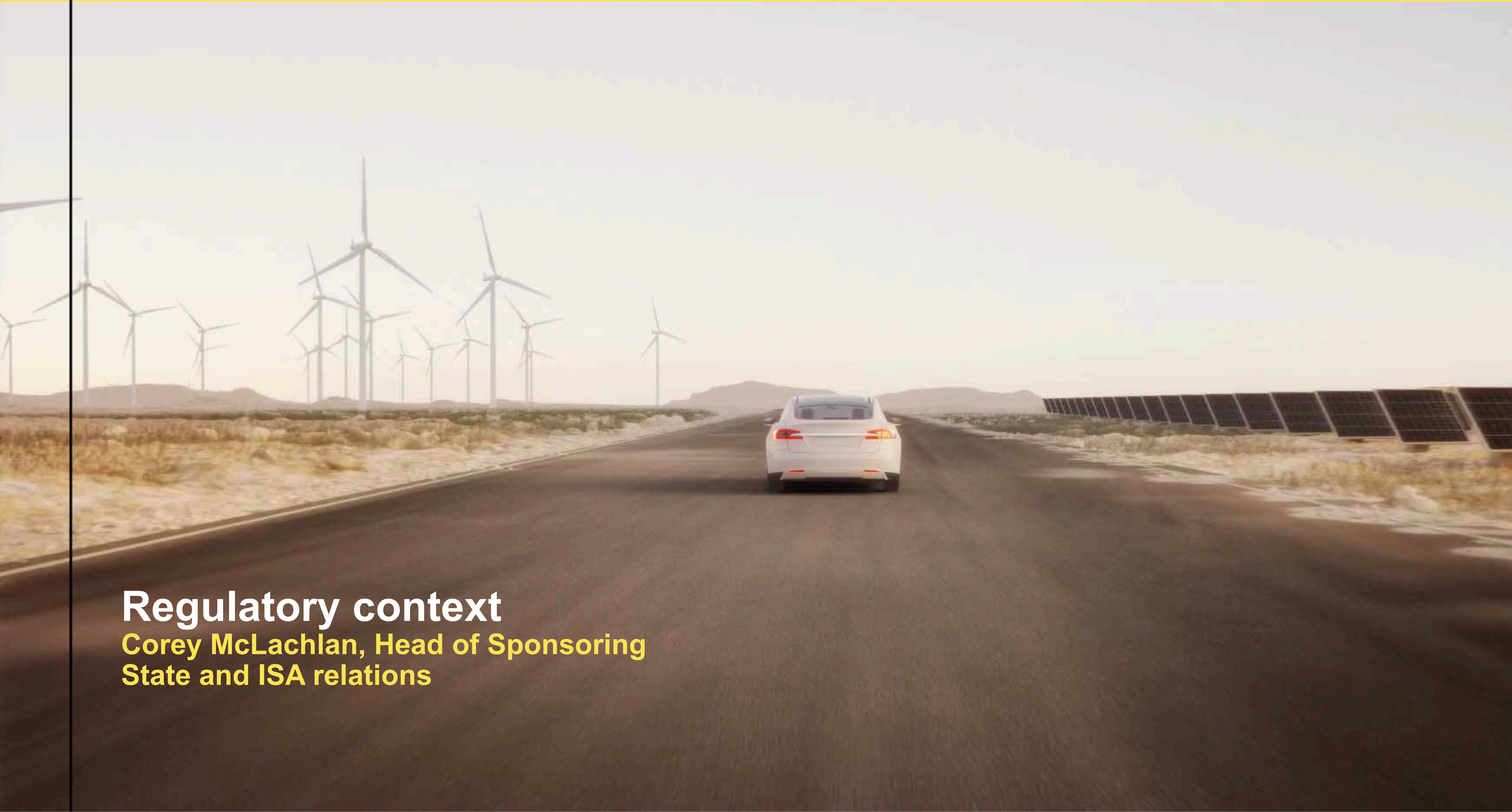
Analysis is a prerequisite but stories is how we interface with the world. Sometimes our stories are best told by others.

Radical transparency

We compete on ethics. Radical transparency is non-negotiable in a world where a product’s impact story is as important as its function and price.

Engage & stay open

Seek to understand opposing perspectives. Establish shared ground. Be prepared to change our minds.



Regulatory context

Corey McLachlan, Head of Sponsoring State and ISA relations

International regulator with a clear mandate and a 27-year track record.

"The deep-sea mining regime in the convention is the most innovative legal regime ever designed by humankind for the equitable and sustainable use of natural resources."

"The reality is that never before has such a comprehensive regulatory regime been established before any commercial activity begins and never before has an extractive industry been subject to so much scrutiny or has such a precautionary approach to development been taken."

Michael Lodge, Secretary General, International Seabed Authority (ISA)

Mandate

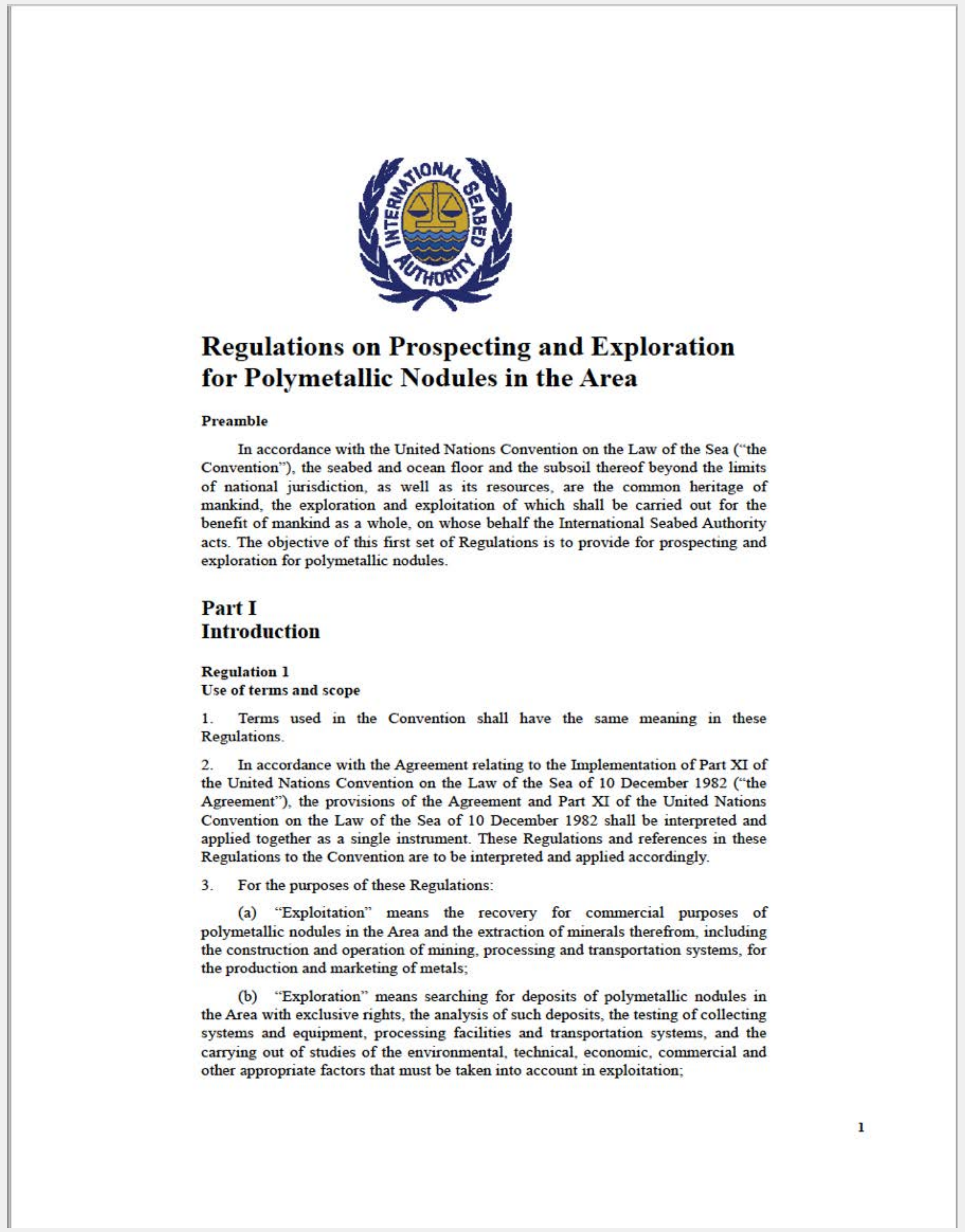
United Nations Law of the Sea Convention (UNCLOS), 1982
UNCLOS Implementation Agreement, 1994

- Organize, control and regulate all mineral related activities in the international seabed on behalf of humankind
- Ensure effective protection of the marine environment

Track record

✓ Established in 1994: 167 Member States & the EU
✓ Exploration Regulations developed for three types of seabed resources
✓ 31 Exploration Contracts awarded
✓ Exploitation Regulations, Standards & Guidelines, nearing completion
✓ Developing States and marine environment prioritized

Exploration regime: similar to what you see on land but with a strong application of the precautionary principle.



Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area

Preamble

In accordance with the United Nations Convention on the Law of the Sea ("the Convention"), the seabed and ocean floor and the subsoil thereof beyond the limits of national jurisdiction, as well as its resources, are the common heritage of mankind, the exploration and exploitation of which shall be carried out for the benefit of mankind as a whole, on whose behalf the International Seabed Authority acts. The objective of this first set of Regulations is to provide for prospecting and exploration for polymetallic nodules.

Part I
Introduction

Regulation 1
Use of terms and scope

1. Terms used in the Convention shall have the same meaning in these Regulations.

2. In accordance with the Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 ("the Agreement"), the provisions of the Agreement and Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 shall be interpreted and applied together as a single instrument. These Regulations and references in these Regulations to the Convention are to be interpreted and applied accordingly.

3. For the purposes of these Regulations:

(a) "Exploitation" means the recovery for commercial purposes of polymetallic nodules in the Area and the extraction of minerals therefrom, including the construction and operation of mining, processing and transportation systems, for the production and marketing of metals;

(b) "Exploration" means searching for deposits of polymetallic nodules in the Area with exclusive rights, the analysis of such deposits, the testing of collecting systems and equipment, processing facilities and transportation systems, and the carrying out of studies of the environmental, technical, economic, commercial and other appropriate factors that must be taken into account in exploitation;

1

Exploration regulations

Adopted in 2000, updated in 2013

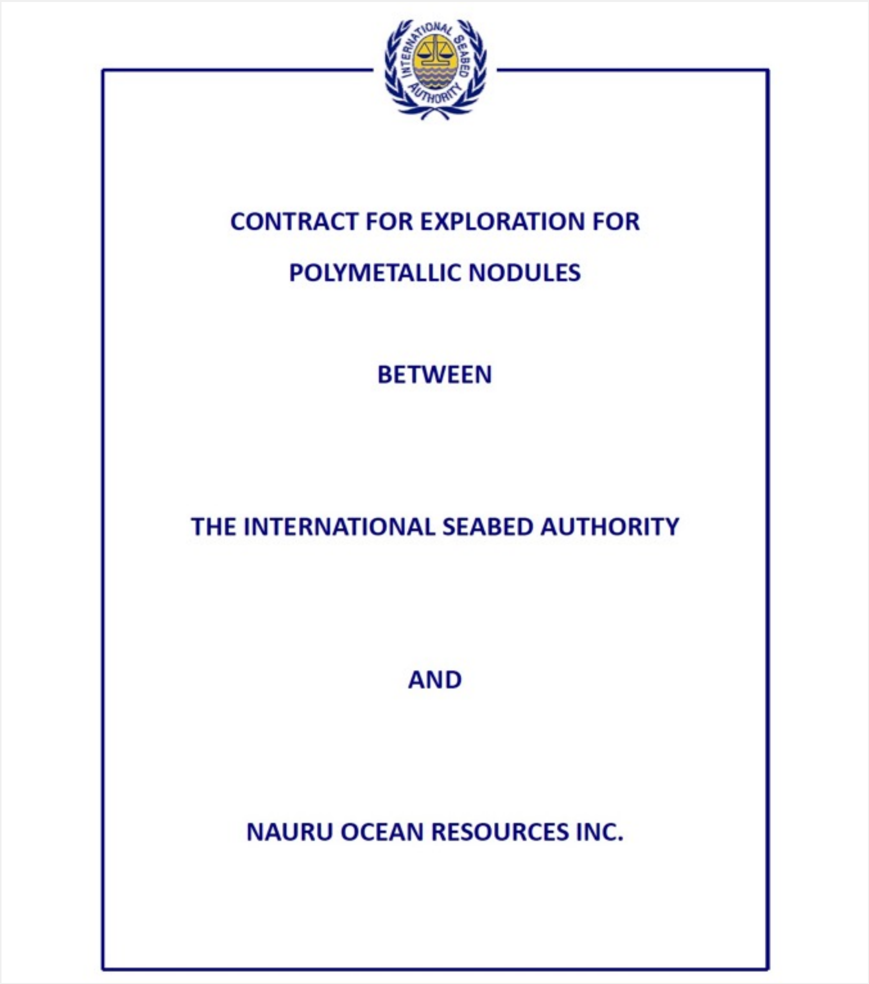
- 15-year exploration contracts
- 5-year work programs
- Exclusive right to explore
- Exclusive right to apply for exploitation

Exploration contract awards

- 19 polymetallic nodules contracts
- 7 polymetallic sulphides contracts
- 5 cobalt crusts contracts
- Demonstrated ability to extend contracts (2016 & 2021)

Our exploration rights: three ISA exploration contracts…

2011 NORI



CONTRACT FOR EXPLORATION FOR
POLYMETALLIC NODULES

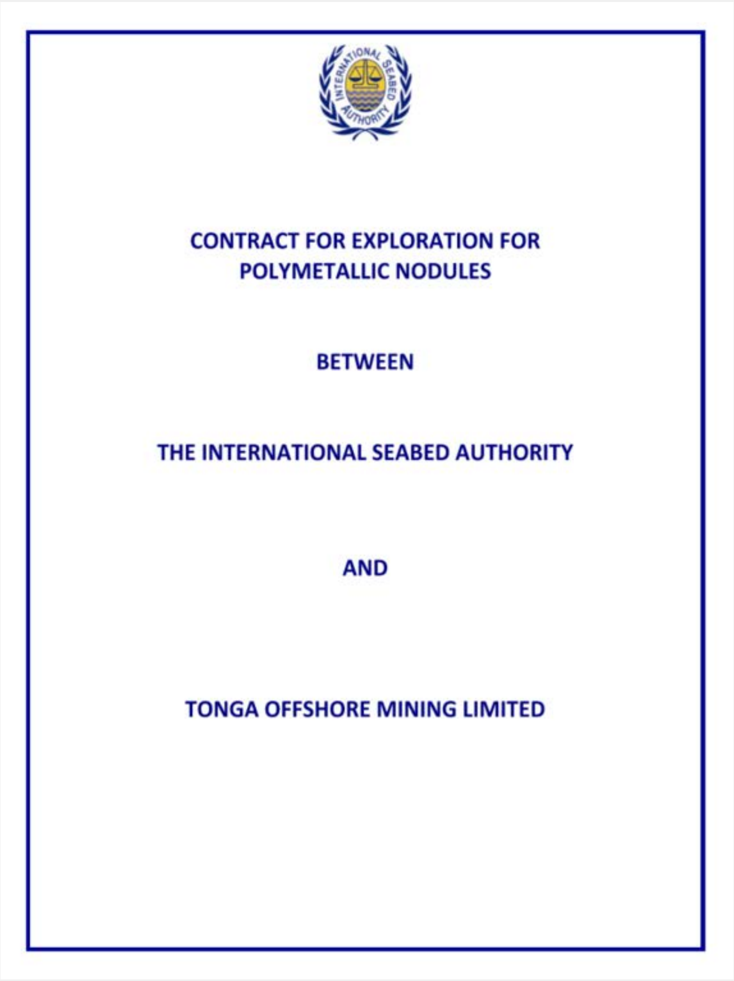
BETWEEN

THE INTERNATIONAL SEABED AUTHORITY

AND

NAURU OCEAN RESOURCES INC.

2011 TOML



CONTRACT FOR EXPLORATION FOR
POLYMETALLIC NODULES

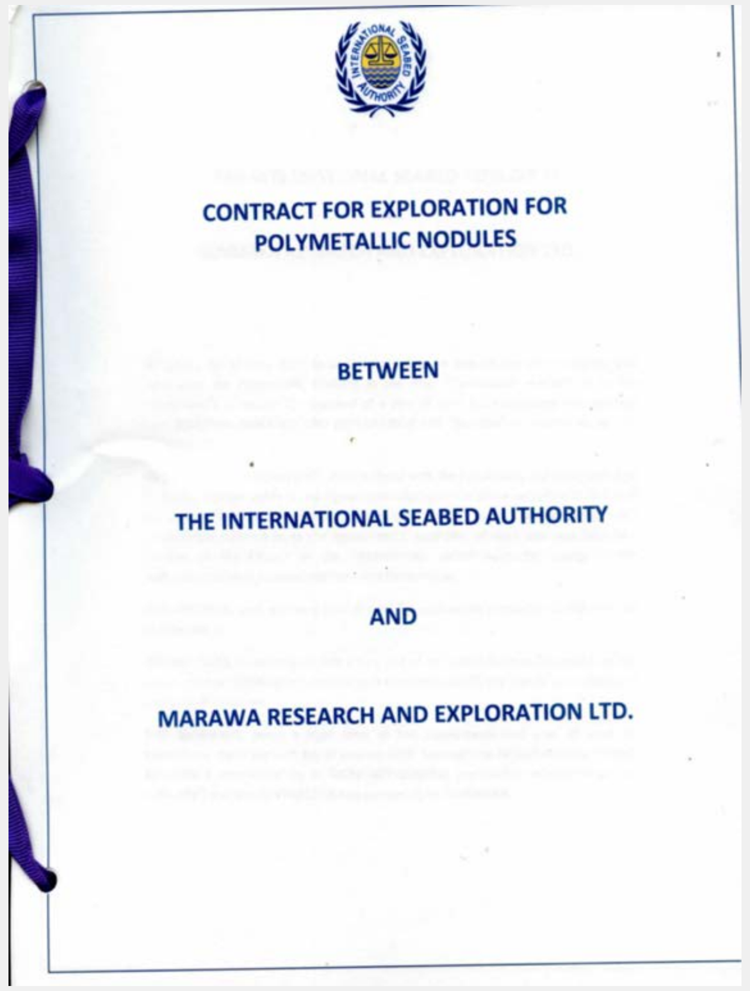
BETWEEN

THE INTERNATIONAL SEABED AUTHORITY

AND

TONGA OFFSHORE MINING LIMITED

2015 Marawa



CONTRACT FOR EXPLORATION FOR
POLYMETALLIC NODULES

BETWEEN

THE INTERNATIONAL SEABED AUTHORITY

AND

MARAWA RESEARCH AND EXPLORATION LTD.

…sponsored by three developing nations.

"Another first for the Authority was the approval of two applications by private sector interests, sponsored by developing States, for plans of work for exploration for polymetallic nodules in the so-called reserved areas. The Council approved applications by Nauru Ocean Resources Inc., sponsored by the Republic of Nauru, and by Tonga Offshore Mining Ltd., sponsored by the Kingdom of Tonga. Not only are these the first applications for exploration licences in the international Area by genuinely private-sector entities, but also they are the first applications to have been made for reserved areas, on the basis of sponsorship by developing States.

This is a tremendously important development. I would like to remind the Assembly that **the original purpose** behind the parallel system of exploitation as set out in the Convention **was to provide developing States with a practical and realistic means of participating in seabed mining**… The only realistic option for most developing States therefore is to form partnerships with commercial interests that have access to the financial capital and technology that are necessary to conduct deep sea exploration. This is exactly what has happened in the case of Nauru and Tonga. This could not have happened, however, unless the private sector had sufficient confidence in the regulatory system that has been developed by the Authority over the past 15 years to make such an investment in the first place.

Nii Allotey Odunton
Secretary General of the ISA
Speech given to the UN General Assembly in 2011

Republic of Nauru

2015 Nauru Seabed Minerals Act
2017 Sponsorship Agreement

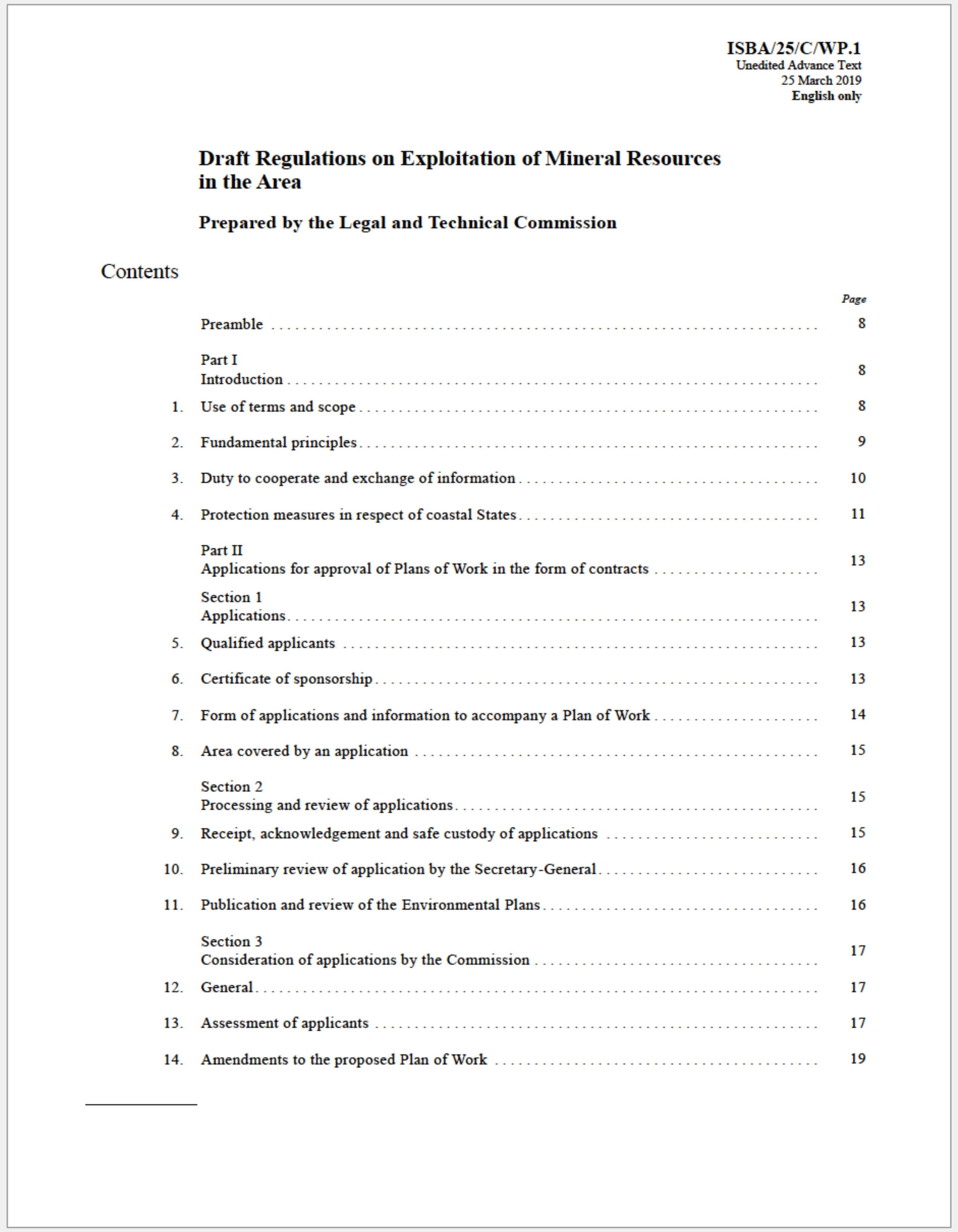
Kingdom of Tonga

2014 Tonga Seabed Minerals Act
2008 Sponsorship Agreement

Republic of Kiribati

2017 Tonga Seabed Minerals Act
2013 Sponsorship Agreement

Exploitation regime: nearing completion and adoption.


ISBA/25/C/WP.1
Unedited Advance Text
25 March 2019
English only

Draft Regulations on Exploitation of Mineral Resources in the Area

Prepared by the Legal and Technical Commission

Contents

Adoption was expected in July 2020 but COVID has delayed negotiation & adoption

Exploitation Regulations

- 4th draft released in 2019 / stakeholder comments in 2020
- Now with Council for final negotiation / Working Groups have been established to negotiate text

Financial Regime

- Deep seabed minerals cannot be advantaged or disadvantaged compared to terrestrial resources
- Comparative study of terrestrial royalties released in 2020
- Revised model to be released prior to next Council meeting

Standards & Guidelines

- 10 standards & guidelines will be adopted
- 3 have received stakeholder comment; final 7 are out for public comment
- Council will review all 10 at the next meeting

Exploitation contract: what we need to do to secure it.

Application

- ✓ Certificate of Sponsorship
- ✓ Mining Plan
- ✓ Financing Plan
- ✓ Environmental Impact Statement
- ✓ Emergency Response and Contingency Plan
- ✓ Health and Safety Plan & Maritime Security Plan
- ✓ Training Plan
- ✓ Environmental Management and Monitoring Plan
- ✓ Closure Plan

Process

45 days

Secretary General will review the application for completeness

120 days

If no amendments required, LTC reviews the application

60 days

Environmental Plans are published

90 days

For amending application, LTC reviews at next session (2x annual). The Council then reviews and if acceptable approves application.

315 days

From initial filing application could be approved—assuming no significant changes to the timelines.

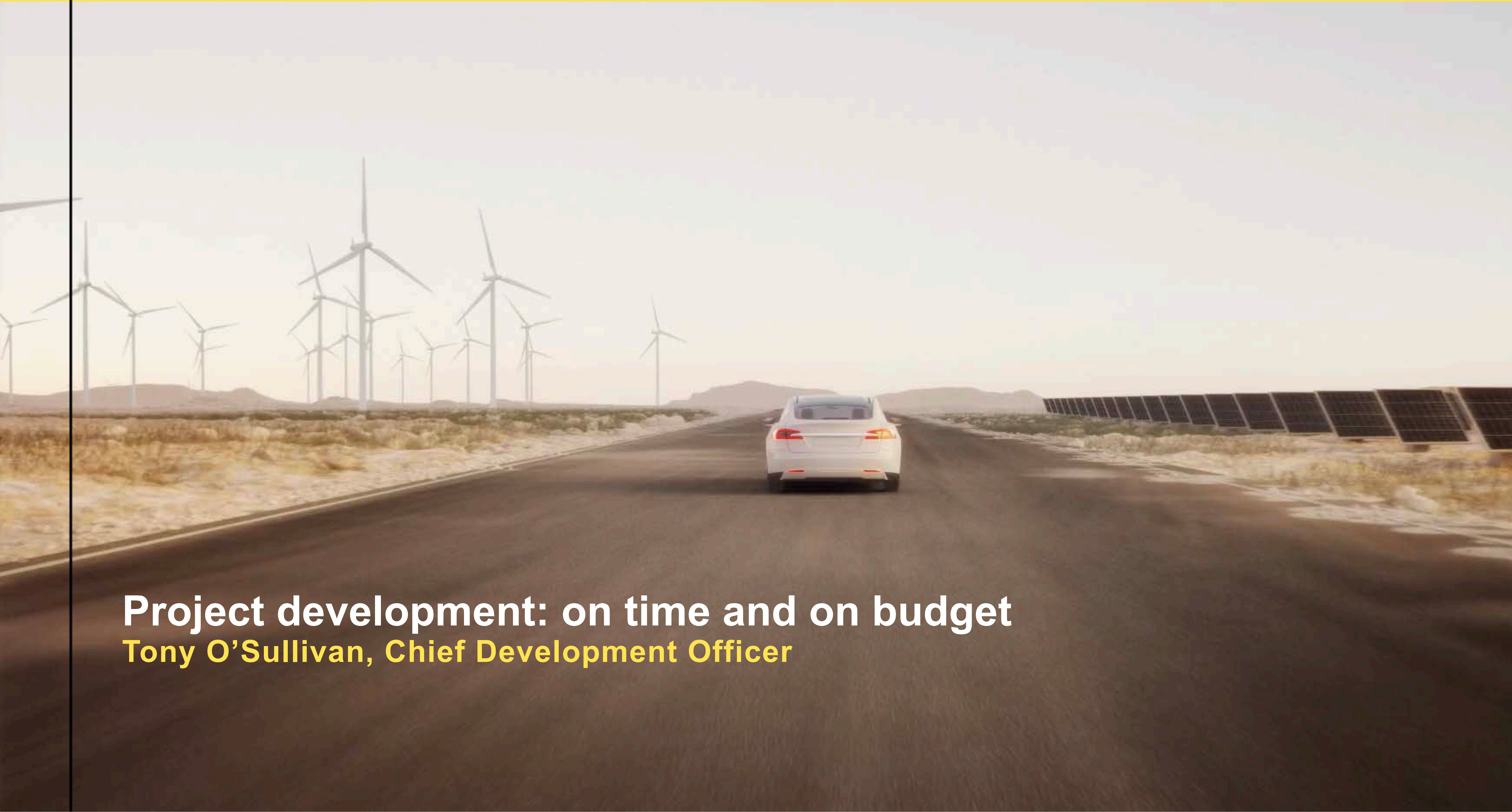
Exploitation regime: mitigating potential delay risk.

Timeline

July 2020 ISA stated goal for adoption—delayed due to COVID
2021-2022 Tentative new timeline for adoption
Q2 2023 NORI plans to submit application for Exploitation Contract

Mitigation

Article 15 of the 1994 Implementation Agreement empowers a Member State whose national contractor is 2 years away from being ready to lodge an application for the ISA Exploitation Contract to notify the ISA of upcoming application. This notice obliges the ISA **"to consider and provisionally approve"** this application based on the state of the Exploitation Regulations at the time of the application (whether final or draft.)



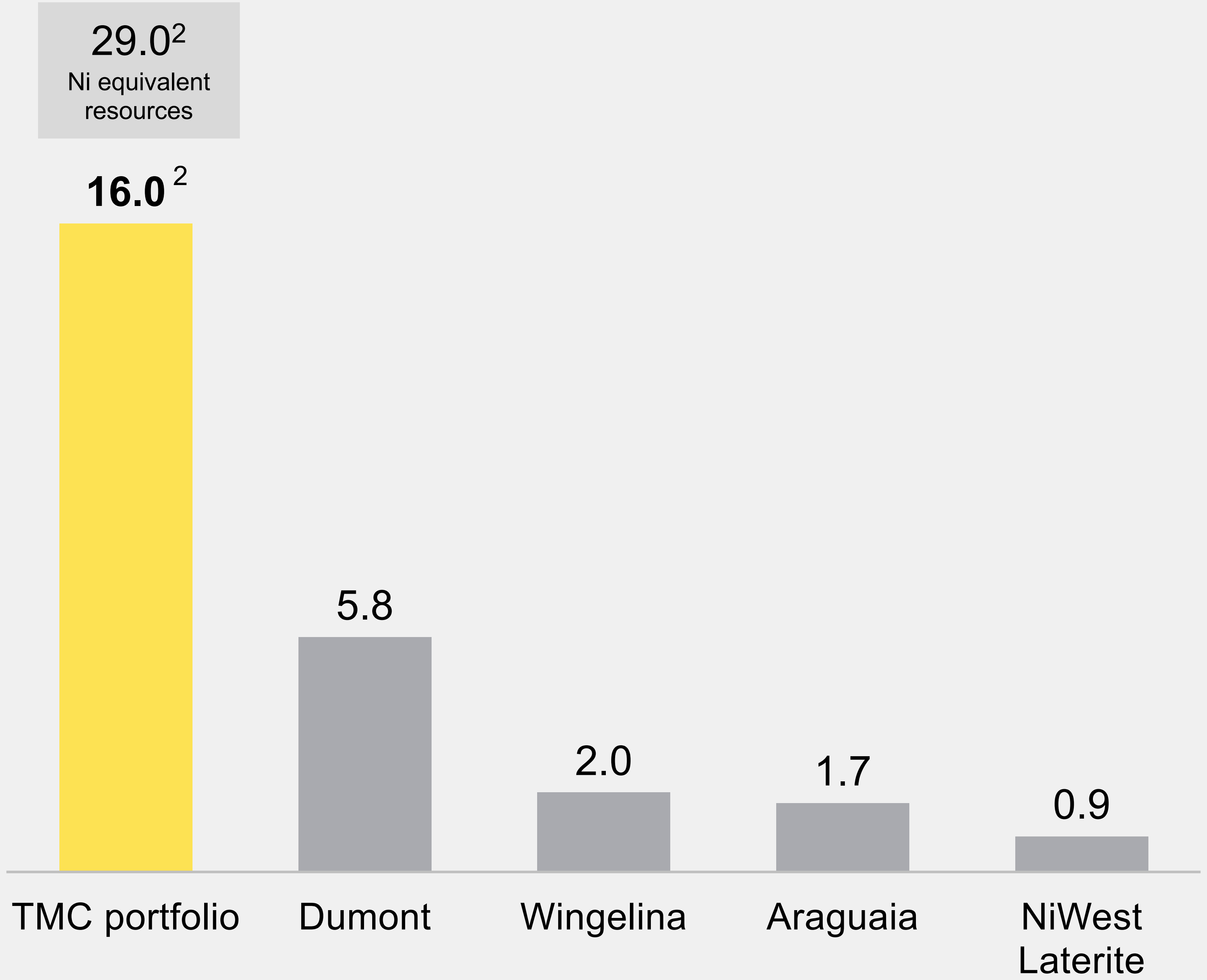
Project development: on time and on budget

Tony O’Sullivan, Chief Development Officer

World-class resource: #1 largest undeveloped nickel project, with very high grades.

World's largest undeveloped nickel projects

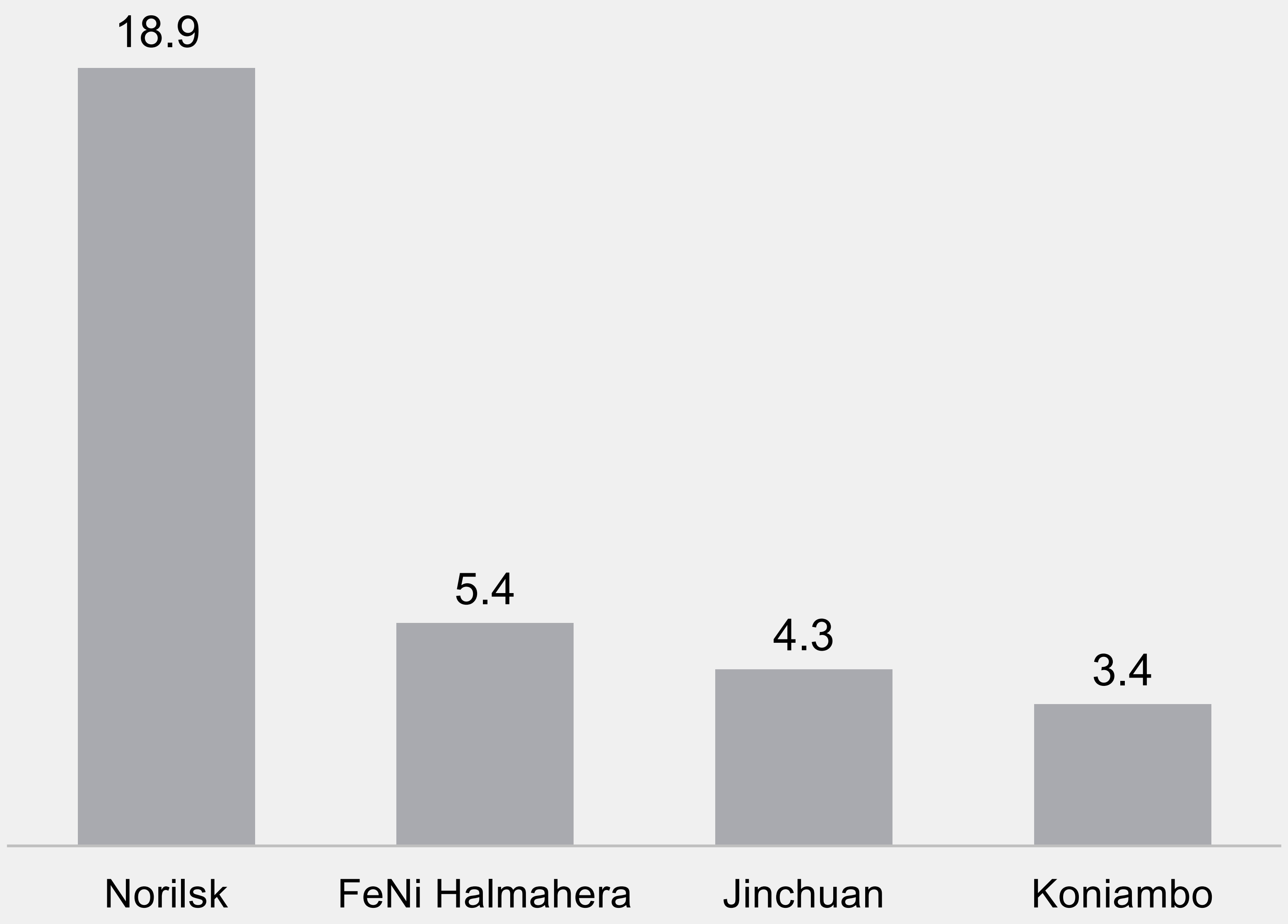
Total resources (inferred, indicated & measured), in Mt[1,3]



Nickel equivalent grades[4]	TMC portfolio	Dumont	Wingelina	Araguaia	NiWest Laterite
	3.2%	0.2%	1.2%	1.8%	1.1%

World's largest nickel producers

Total resources (inferred, indicated & measured), in Mt[1,3]

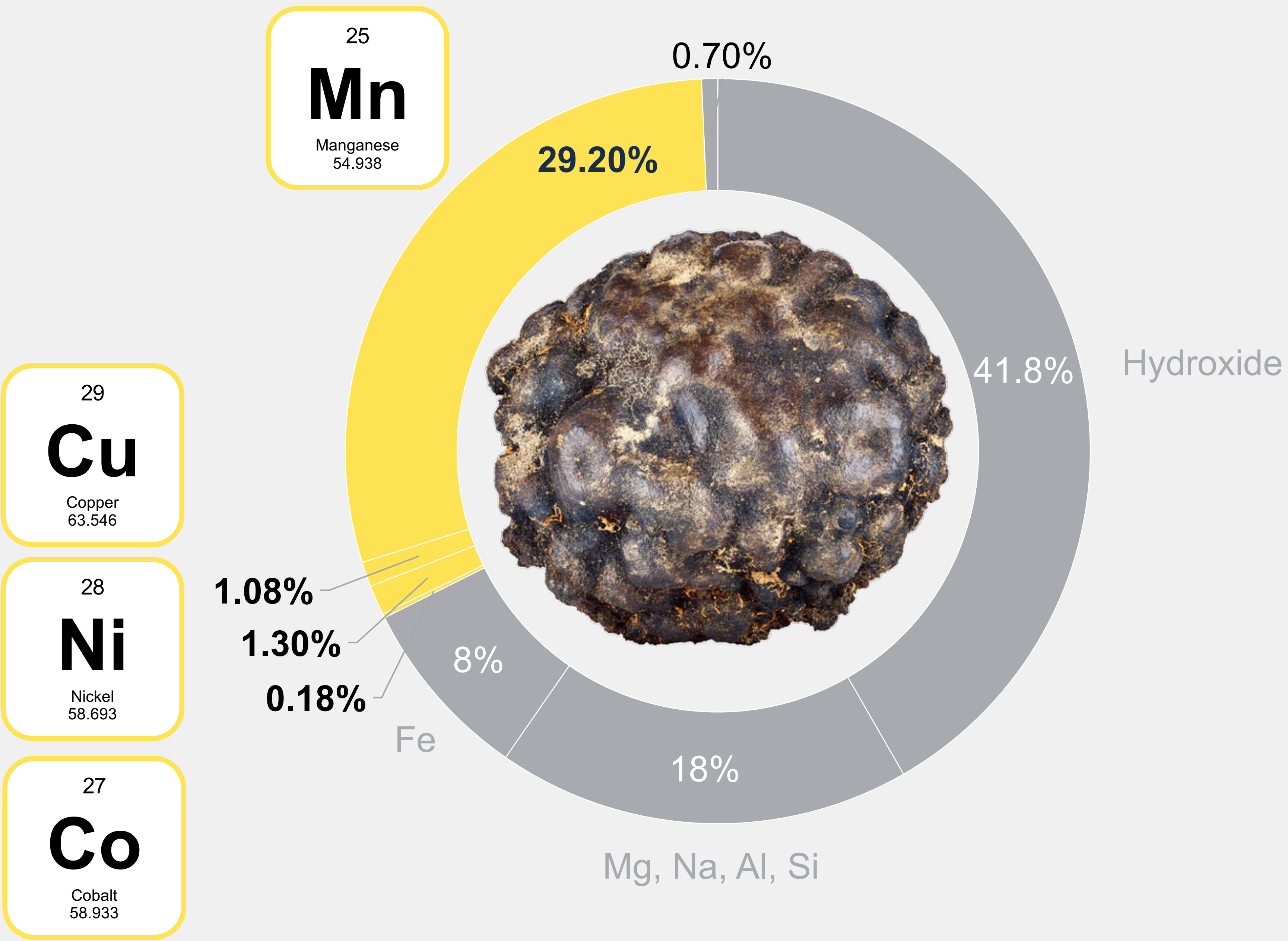


Norilsk	FeNi Halmahera	Jinchuan	Koniambo
2.3%	1.9%	1.3%	2.5%

[1] Global Nickel Industry Cost Summary, Wood Mackenzie, August 2020; inclusive of reserves.
[2] Canadian NI 43-101 Resource Statement for full field financial model (internal DeepGreen development scenario). Metals and mining recoveries have not been considered.
[3] Asset Reports for Dumont, Wingellina, Araguaia, NiWest Laterite, Norilsk, FeNi Halmahera, Jinchuan and Koniambo, Wood Mackenzie.
[4] Nickel equivalence calculation uses NORI-D Model price deck as stated on page 63 of March 4 - PIPE investor deck. For gold ($1,823/oz), platinum ($1,224/oz) and silver ($27/oz), spot prices as of May 12, 2021 are used.

World-class resource: with several advantages.

Nodule composition breakdown



Unbound to the seafloor – **no need for drilling & blasting**

Four metals in a single ore – **much less ore mass to process**

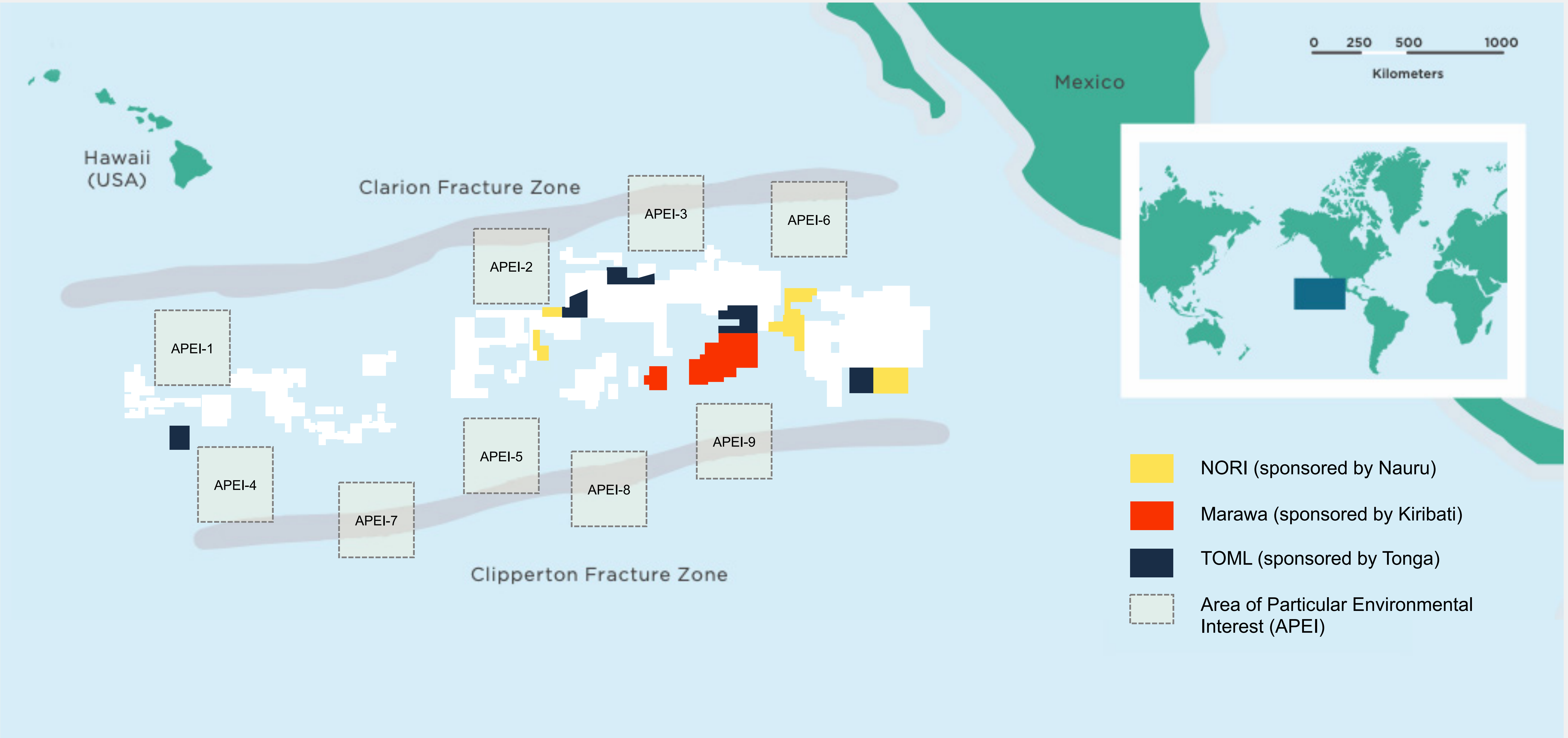
Very low hazardous elements like As, Sb, Hg – **no toxic processing tailings**

Low head-grade variability – **easier to process**

2-10 cm diameter – **easy to handle**

Microporous – **easier to smelt**

Advantageous location: Onshore development optionality, which is not available to most projects.



Project development: NORI-D on time and on budget to achieve expected commercial production in 2024.

we are here

exploration | planned production

Exploration Contracts and 43-101 resource statements → Initial Assessment (IA) → Prefeasibility study (PFS) → Feasibility study → **Project Zero** 1.3Mt (wet) → **Project One:** 11.3Mt (wet)

2011-2015
Exploration Contracts for
- NORI
- Marawa
- TOML

2016-2021
Resource Statements issued for
- NORI (2012, 2019, 2021)
- TOML (2013, 2016)

2019
NORI PEA

2021
NORI-D IA

2020-2021
Processing pilot plant program in North America

2022
Pilot collection test in the CCZ

2023
NORI-D Exploitation Contract Application, including Environmental Impact Assessment, on track for submission

2024
Start small scale commercial production

2030
Steady state commercial production

Note: Timeline represents estimates and may be subject to change.

Project development: key work streams.

OFFSHORE		ONSHORE	PRODUCT
RESOURCE DEFINITION	COLLECTION SYSTEM	PROCESSING SYSTEM	BATTERY CATHODE MATERIALS
ENVIRONMENTAL PROGRAM	REGULATIONS & EXPLORATION/ EXPLOITATION CONTRACTS	PLANT SITE SELECTION	Mn SILICATE PRODUCT

Project development: achieved so far.

OFFSHORE		ONSHORE	PRODUCT
RESOURCE DEFINITION ✓ 7 campaigns ✓ Maersk partnership ✓ Indicated & measured methodology ✓ 43-101 & SK 1300 resource statements	**COLLECTION SYSTEM** ✓ System design ✓ Allseas partnership ✓ Pilot system design ✓ Pilot system procured ✓ Pilot system fabrication commenced ✓ Production vessel	**PROCESSING SYSTEM** ✓ Flowsheet design with Hatch ✓ Lab tests with KPM ✓ Pilot plant program with FLS & XPS/Glencore ✓ Product definition and marketing strategy	**BATTERY CATHODE MATERIALS** ✓ Offtakes with Glencore for Ni and Cu from NORI Area ✓ Engagements with half a dozen players in the EV/ battery supply chain
ENVIRONMENTAL PROGRAM ✓ Science advisory board ✓ Biological sampling ✓ Moorings installed ✓ 3 campaigns completed ✓ 5 campaigns planned ✓ LCA white paper ✓ LCA climate change	**REGULATIONS & CONTRACTS** ✓ ~20 submissions to ISA ✓ Contributions at legal & technical workshops ✓ Industry coordination	**PLANT SITE SELECTION** ✓ Global location study ✓ Long list of 13 jurisdictions ✓ Short list of 6 jurisdictions & ~20 sites ✓ Discussions with 6 potential partners	**MN SILICATE PRODUCT** ✓ Mn marketing strategy ✓ Engagements with several Mn alloy producers

Resource definition: easy and effective to define.

BOX CORE SAMPLING[1]

250
box cores collected[2]

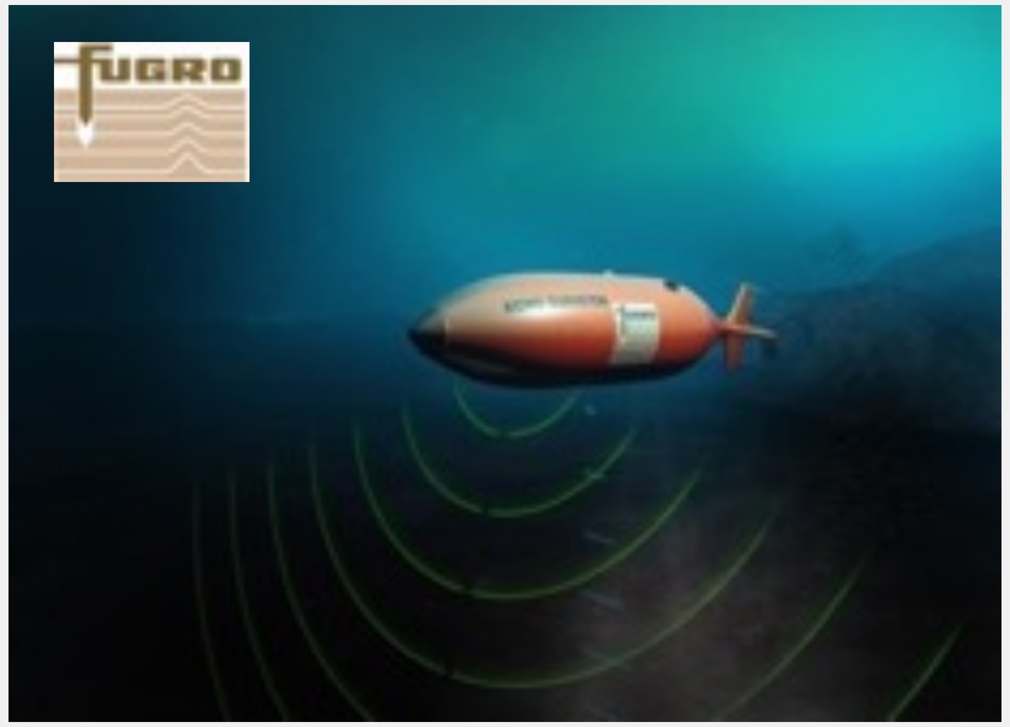
82,000
kg (wet) nodules collected[2]

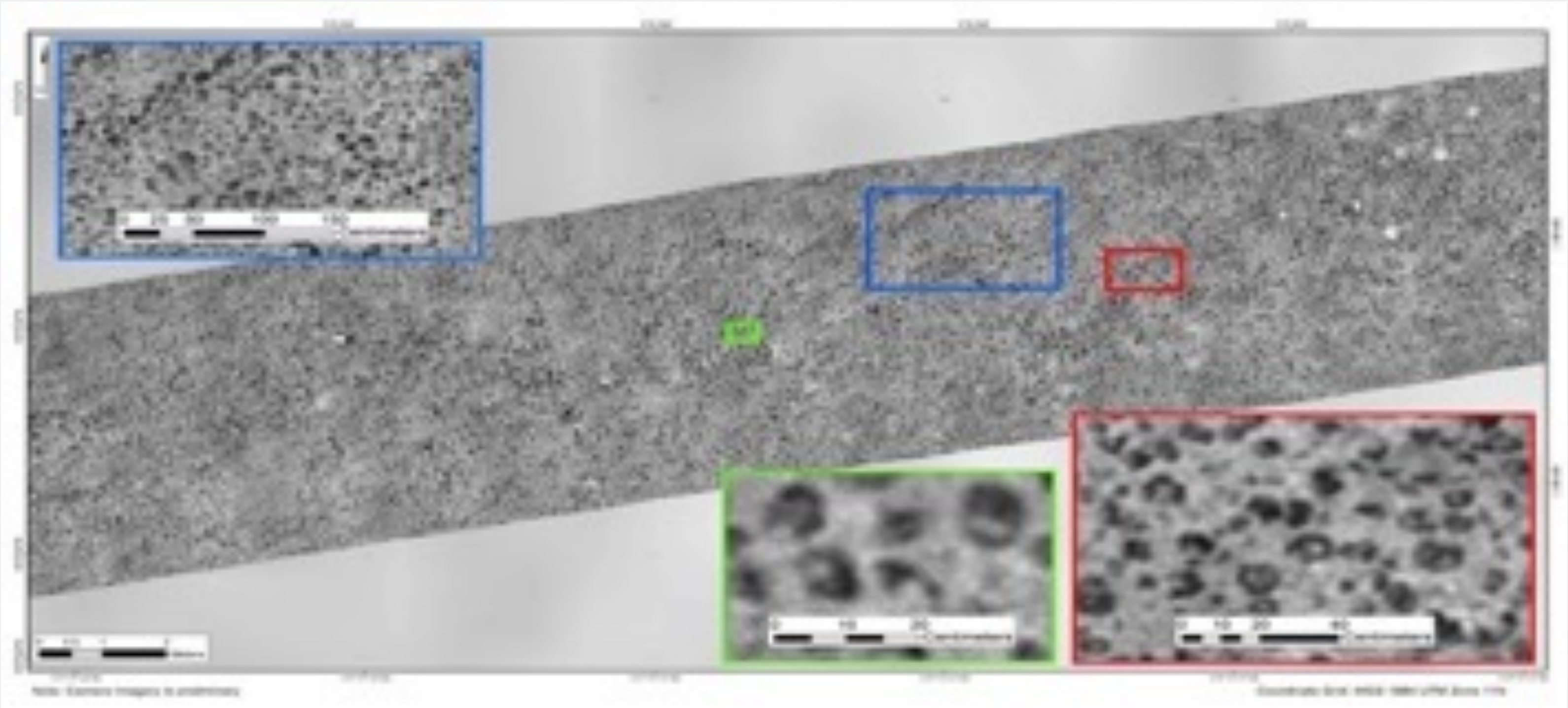
13,950
biological samples collected[2]

AUV CAMERA IMAGERY[1]

178,591
km² of high-res bathymetric survey[2]

5,439
km² detailed seafloor imagery[2]





[1] Images from DeepGreen's resource survey offshore campaigns in NORI contract area.
[2] Boxcores, nodules collected, high-res bathymetry, detailed bathymetry – compiled by DeepGreen from - Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021. Canadian NI 43-101 Compliant TOML Clarion Clipperton-Zone Project Mineral Resource Estimate, AMC, July 2016 and DeepOcean NORI – D Bulk Sampling Report, 2020. Erias Cruise 6a Biological and Physiochemical Co-Sampling Report NORI area D post cruise, 2019; Erias Cruise 6b Biological and Physiochemical Co-Sampling Report NORI area D post cruise report, 2019.

Video: https://vimeo.com/361863579

Project economics: technical report issued for a project in NORI-D in May 2019, with SEC compliant SK 1300 update in March 2021.

- Independently compiled by AMC in compliance with Canadian NI 43-101 standards
- Offshore collection system design and costing by DRT with inputs from Cellula Robotics and Herbert Marine Engineering
- Onshore metallurgical plant design and costing by Canadian Engineering Associates
- Metal product price projections from CRU
- Shipping rate projections from Pareto JGO Shipbrokers


AMC Consultants Pty Ltd
ABN 58 008 129 164

Level 21, 179 Turbot Street
Brisbane Qld 4000
Australia

T +61 7 3230 9000
E brisbane@amcconsultants.com
W amcconsultants.com

AMC consultants mine smarter

Technical Report

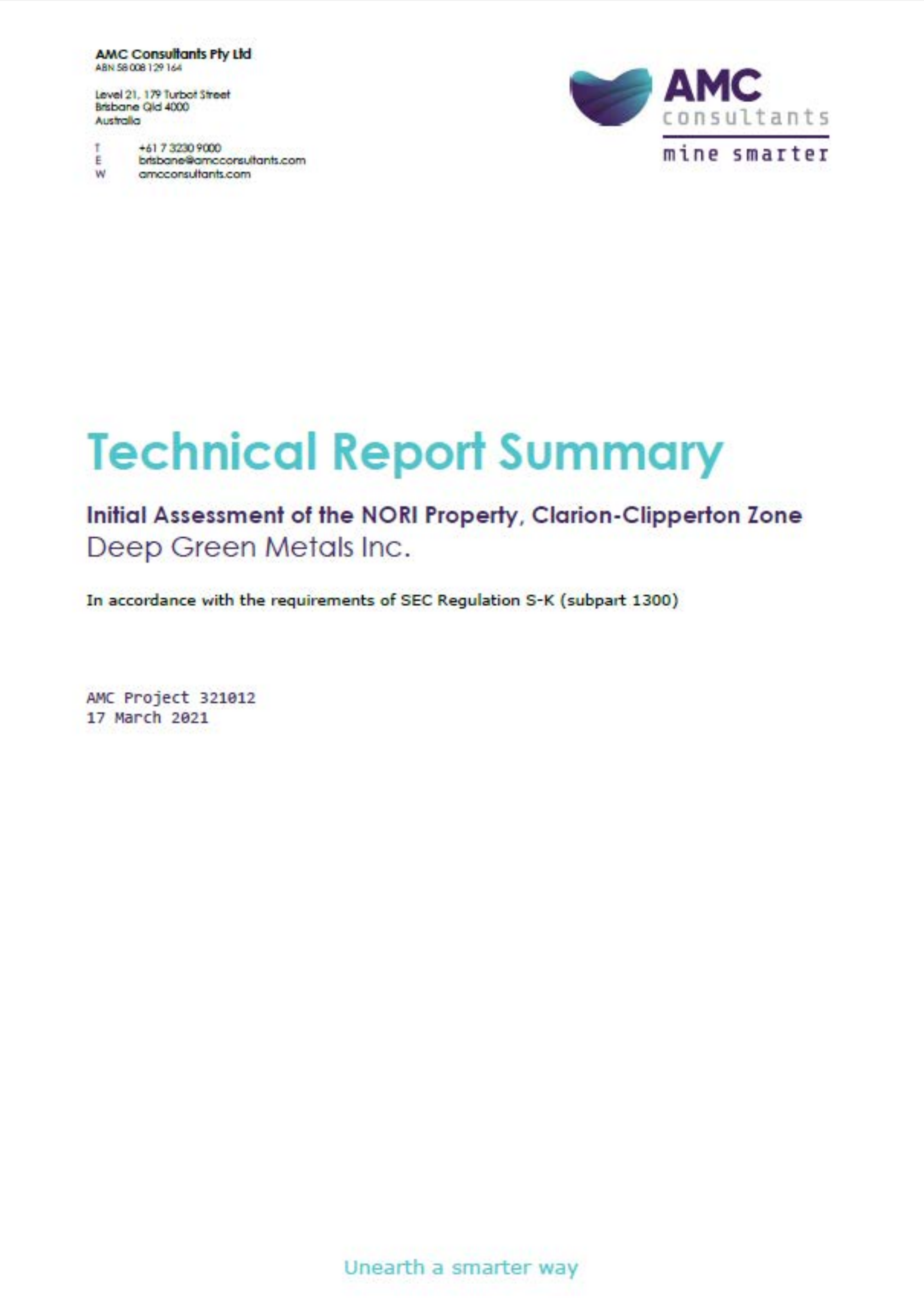
Preliminary Economic Assessment of the NORI Area D Project, Clarion-Clipperton Zone
DeepGreen Metals Inc.

In accordance with the requirements of National Instrument 43-101 "Standards of Disclosure for Mineral Projects" of the Canadian Securities Administrators

Qualified Persons:
I Lipton, FAusIMM, BSc(Hons) Geological Sciences
M Nimmo, MAIG, BSc(Hons) Geological Sciences
I Stevenson, FAusIMM, BSc(Hons) Geology, Ph.D. Geophysics
E Gleeson, MAusIMM (CP), BEng Mining
J Halkyard, P.Eng. (California), BSc Engineering Science, SM Engineering, ScD Ocean Engineering
M Kozlowski, P.Eng. (Ontario), BSc (Hons) Metallurgy, Ph.D.

AMC Project 319002
17 May 2019

Find here


AMC Consultants Pty Ltd
ABN 58 008 129 164

Level 21, 179 Turbot Street
Brisbane Qld 4000
Australia

T +61 7 3230 9000
E brisbane@amcconsultants.com
W amcconsultants.com

AMC consultants mine smarter

Technical Report Summary

Initial Assessment of the NORI Property, Clarion-Clipperton Zone
Deep Green Metals Inc.

In accordance with the requirements of SEC Regulation S-K (subpart 1300)

AMC Project 321012
17 March 2021

Unearth a smarter way

Download here

Project development: remaining milestones to get NORI-D into production.

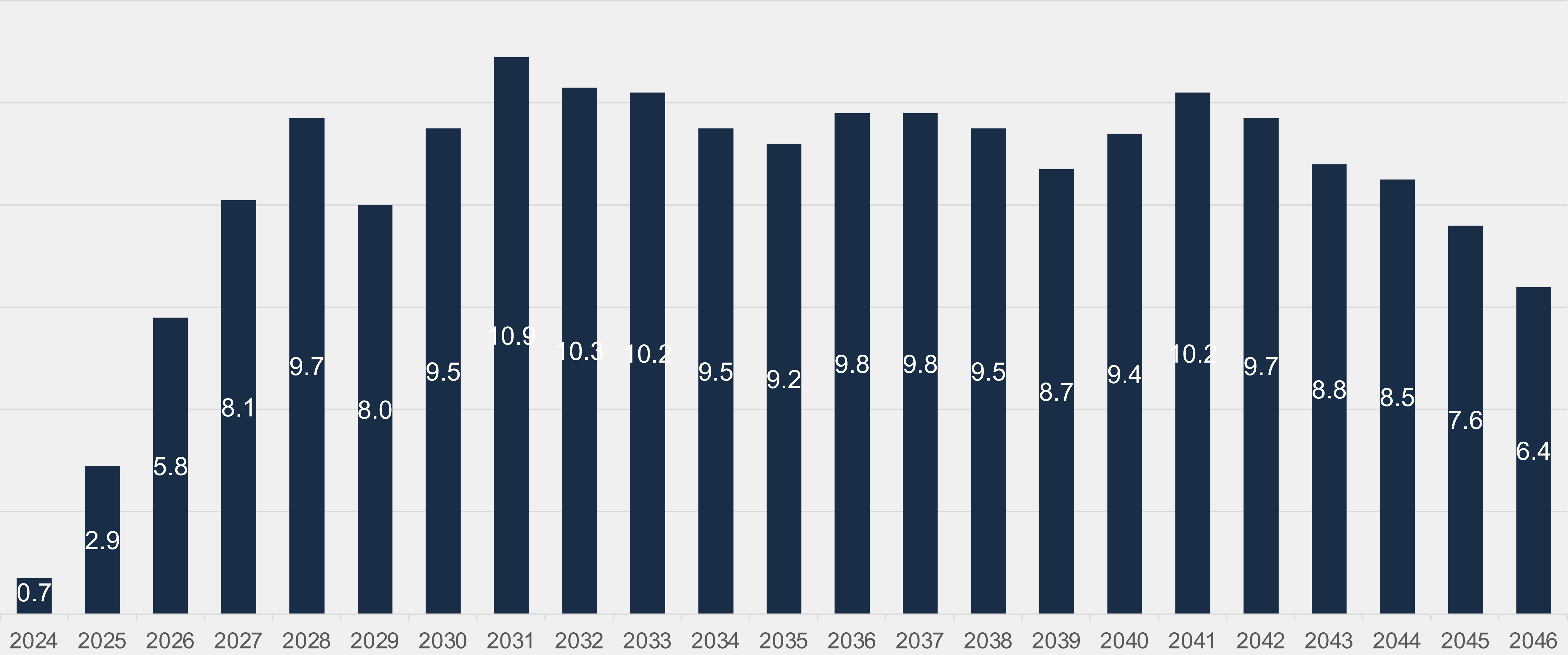
OFFSHORE		ONSHORE	PRODUCT
RESOURCE DEFINITION ✓ 5 years of Measured Resource	**COLLECTION SYSTEM** ✓ Wet test—Atlantic ✓ Pilot test—Pacific ✓ PFS & FS*** ✓ Project Zero: pilot system upgrade ✓ Project One: system commissioning	**PROCESSING SYSTEM** ✓ Pyromet pilot ✓ Hydromet pilot ✓ PFS & FS***	**NICKEL, COPPER, COBALT** ✓ Project Zero: offtake NiCuCo intermediate ✓ Project One: offtake for remaining Ni & Cu and Co
ENVIRONMENTAL PROGRAM ✓ 5 more campaigns ✓ EIS* for collector test ✓ EIS* for production ✓ AMS**	**REGULATIONS & CONTRACTS** ✓ 2- year notice ✓ Exploitation Contract application ✓ Exploitation Contract process & award	**PROCESSING PLANT** *Project Zero / Project One* ✓ Partner selection ✓ PFS*** ✓ Site selection ✓ FS*** ✓ Construction	**MN SILICATE PRODUCT** ✓ Independent value-in-use study ✓ Project Zero: offtake ✓ Project One: offtake

*EIS – Environmental Impact Statement
**AMS – Adaptive Management System
***PFS & FS – Pre-feasibility Study and Feasibility Study

Scaling up: from Project Zero to Project One.

Estimated nodules collected, processed & refined

Millions of dry tonnes, NORI-D



	PROJECT ZERO	PROJECT ONE
OFFSHORE	- Converted drillship & riser - Subsea collector	+ Converted drillship & riser + Purpose-build production vessel & riser + Support vessel
ONSHORE	- Tolling or 1x RKEF line collocated with Mn silicate offtaker	+ Tolling + 4x RKEF lines + 2x refineries

[1] Average estimated annual production and revenue 2030-2046.
Source: Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.

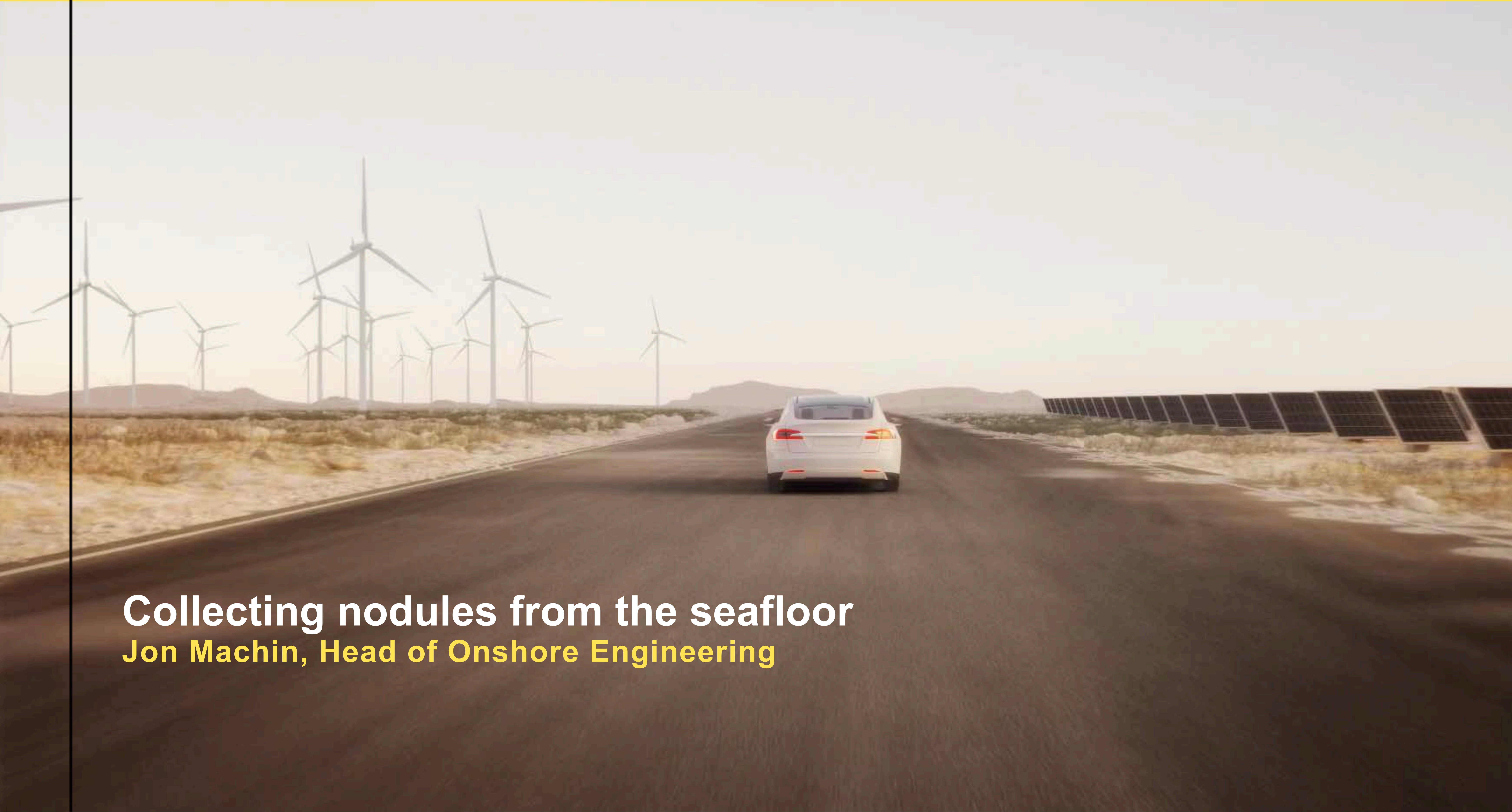
Greenfield vs. bluefield: delivering a nodule project on budget and on schedule is easier.

	Greenfield development **Land mining**	Bluefield development **Nodule collection**
Timeline from start PFS to production	**5-7 years**	**3 years**
Capital intensity construction capital	**~$60,000/t[1]** of nickel equivalent production capacity	**~$28,000/t[2]** of nickel equivalent production capacity
Land use	Indigenous rights, community displacement and rights (water, land, forests, pollution)	No land use / displacement
Mine infrastructure	Power, ports, rail, roads, water	No fixed infrastructure
Mine development	Open pit: Overburden, terraced access Underground: Shafts & tunnel networks	Commission equipment, deploy collector robots and riser - weeks
Plant infrastructure & development	Processing usually near the ore body, often requiring the construction of power, ports, rail, water, roads	Once nodules are on the vessel, we can go anywhere with existing power, ports, rail, roads and water
Waste management	Tailings dams, or expensive dry stacking that expands land use	No solid waste to manage

Source: Wood Mackenzie Reports. Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion Clipperton Zone Mineral Resource Estimate and associated financial model, AMC, March 2021.

[1] Approximate peer group median calculated using projections out to 2040. Assumes average price of $16,106 per tonne of nickel, $6,787 per tonne of copper, $46,416 per tonne of cobalt, $4.53 per dmtu of manganese, $1,823 per ounce of gold, $27 per ounce of silver and $1,224 per ounce of platinum. Nickel, copper, cobalt and manganese pricing is consistent with the pricing used in Canadian NI 43-101 and SEC Regulation S-K (Subpart 1300) Compliant NORI Area D Clarion ClippertonZone Mineral Resource Estimate and associated financial model, AMC, March 2021.

[2] Based on estimated production between 2027 (run-rate year) – 2042. Same pricing as used in peer calculation as well as the financial model, AMC, March 2021. Calculations include nickel tonnage related to tolling. Development capex excluding tolling is $33,500/T.



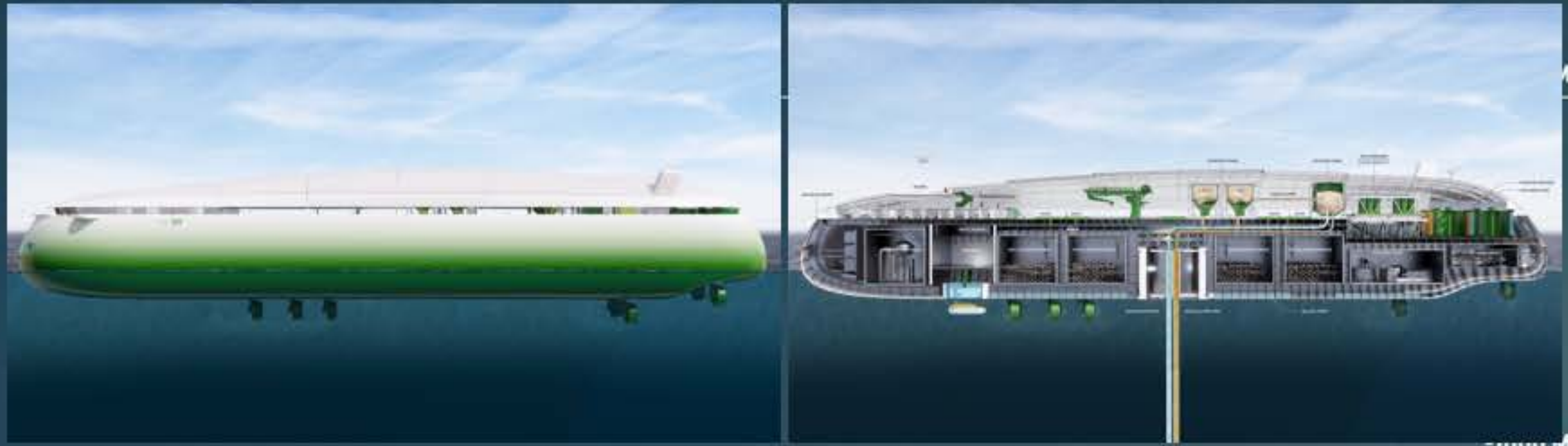
Collecting nodules from the seafloor

Jon Machin, Head of Onshore Engineering

Nodule collection system: requires several subsea & surface assets.

Bulk carrier

Production vessel & riser



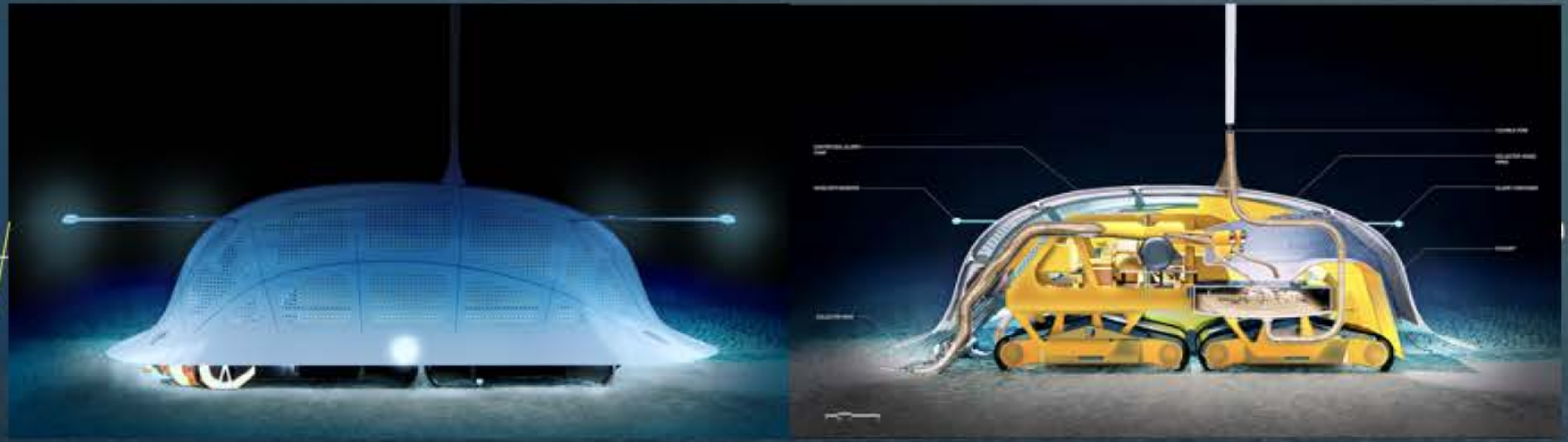
SUNLIGHT

TWILIGHT

Support vessel

MIDNIGHT

Collector robots



THE ABYSS

-6000 M
OCEAN FLOOR

Source: Technical design studies & lab testing (DRT, Allseas 2015-2020); Offshore production system design, BIG October 2020.

A sense of scale: deploying collector from the surface vessel.

Source: Offshore production system design, BIG October 2020.

Proven technology.

1970's pilot testing in CCZ

Kennecott Copper Corp
British Petroleum, Rio Tinto-Zinc Corp
Consolidated Gold Fields
Noranda Mines, Mitsubishi Corp

Deepsea Ventures Inc.
US Steel, Sun Oil, Union Miniere

Ocean Management Inc.
International Nickel Company
Metallgesellschaft AG
Sumitomo, Sedco

Lockheed
Amoco Minerals, Shell Petroleum

Present Day

Offshore Diamond Mining
De Beers, NAMCO, Samicor

Source: July 7,1977 The New York Times.

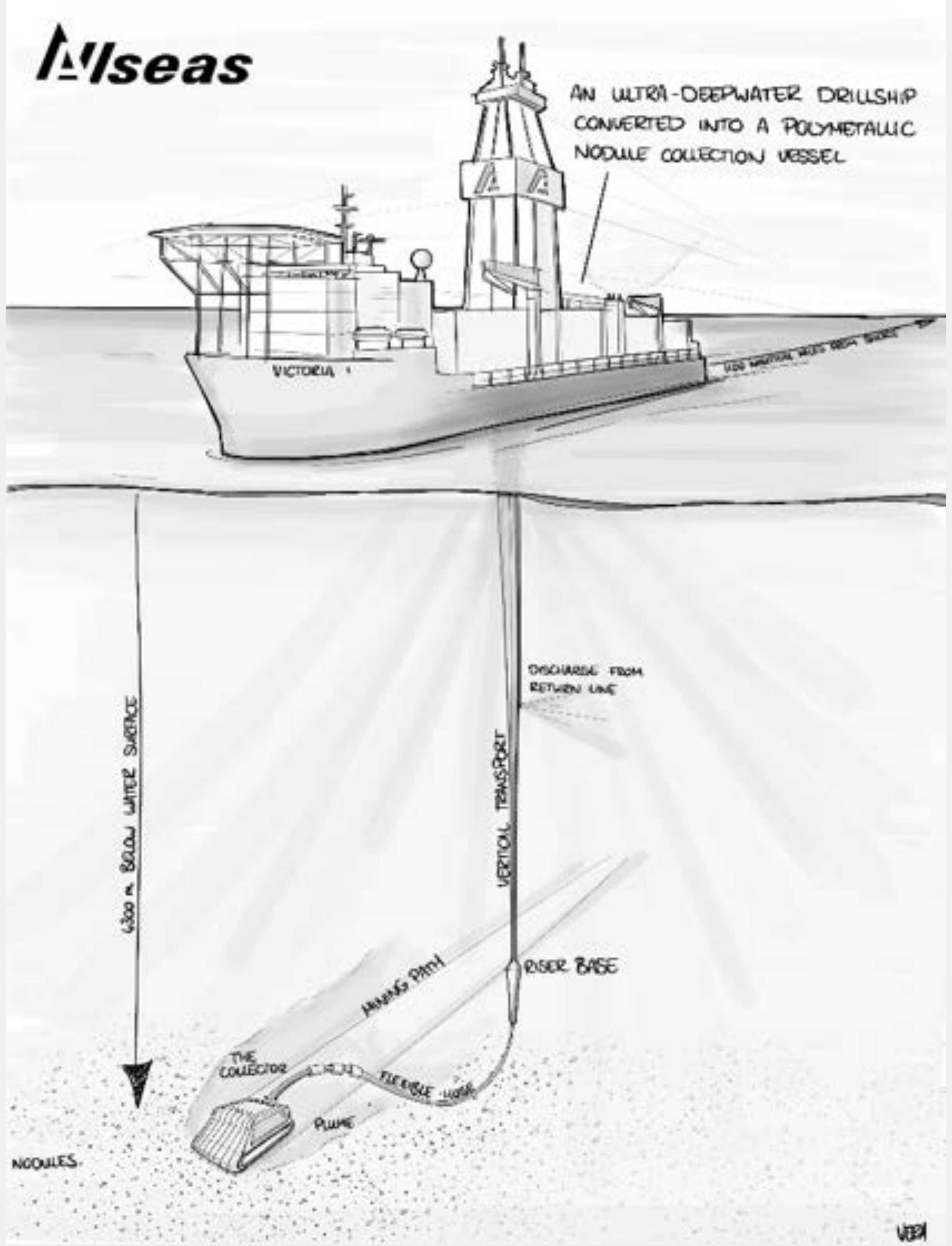
Our design philosophy.

1. Design using only mature proven solutions to get into production as soon as possible, improve from there.
2. Find offshore partners with existing skills & assets, share our IP to slash their learning curve.
3. Explore several competing and/or complementary solutions.

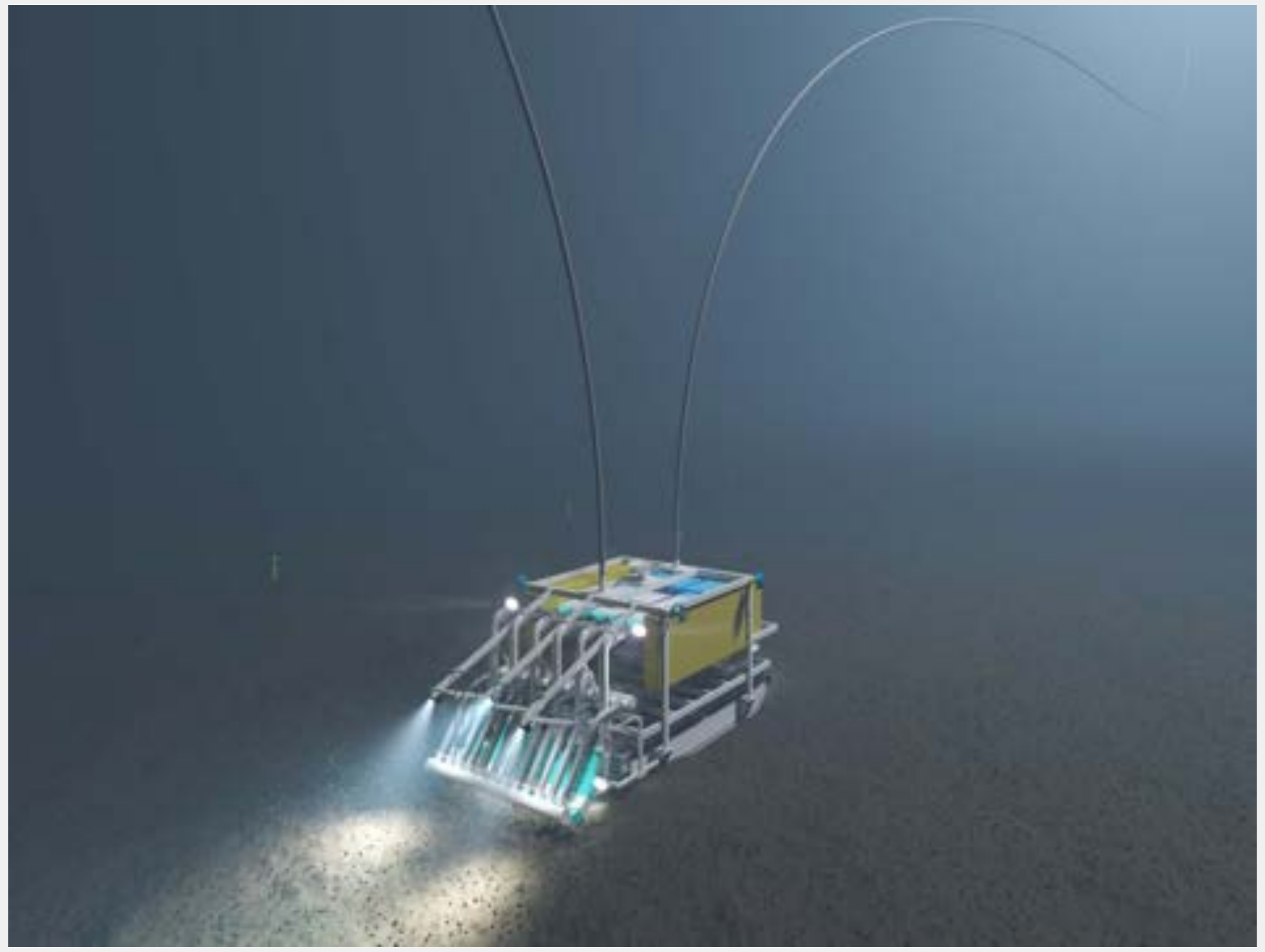
Collection system: the ultimate design.

- ✓ Plumeless
- ✓ Disturbs less than top 5 cm of sediment
- ✓ Lifts only nodules to the surface
- ✓ Generates zero CO_2e, SO_x & NO_x
- ✓ Does not release marine carbon sinks

Allseas progress: base case pilot system developed by our partner.



On a fast track to reality



Allseas progress: lab testing ongoing.

An extensive testing program is currently competing tests in Deltares, Delft, and Allseas facility, Rotterdam

Theoretic nodule pick-up efficiency of two alternative collector designs has been extensively validated (Hydraulic vs. Mechanical)

Note: before and after test track photos

Allseas progress: visualization of nodule collection at lab scale.

NODULE PICKUP

[Play video](https://www.dropbox.com/s/lox3i3n3e38s23f/Allseas_collector%20prototype%20trials.mp4?dl=0)

https://www.dropbox.com/s/lox3i3n3e38s23f/Allseas_collector%20prototype%20trials.mp4?dl=0

TRACKS

[Play video](https://www.dropbox.com/s/kelbc8fg5fwv49l/Allseas_collector%20track%20trials.mp4?dl=0)

https://www.dropbox.com/s/kelbc8fg5fwv49l/Allseas_collector%20track%20trials.mp4?dl=0

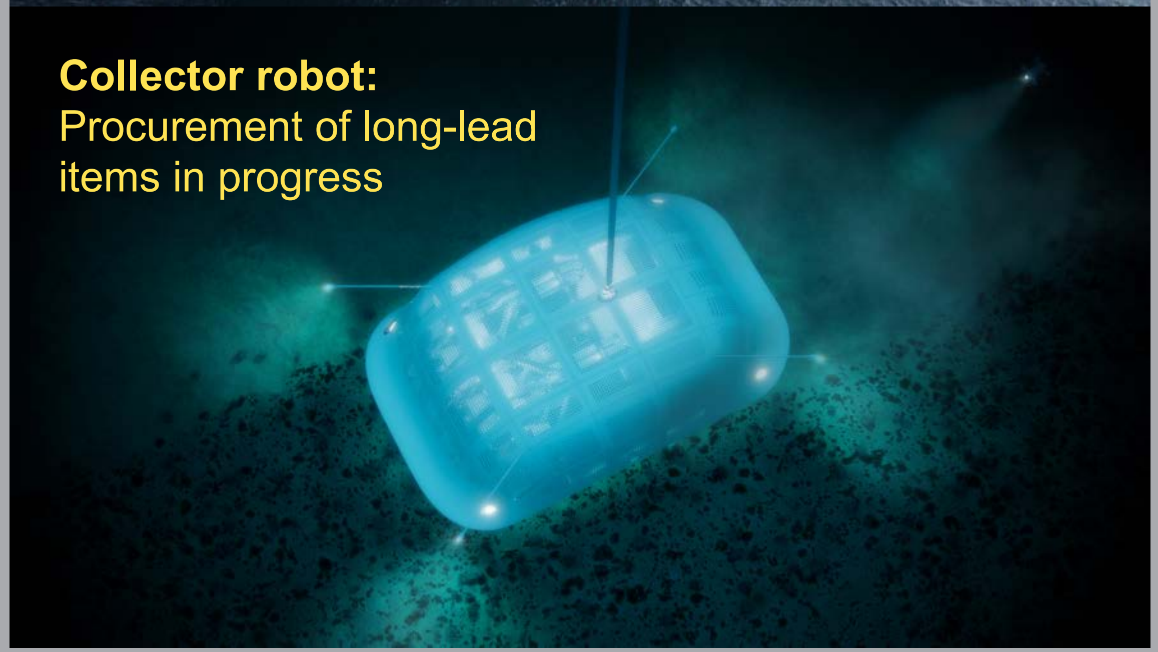
RISER

[Play video](https://www.dropbox.com/s/2p1ws8dqqh2mf29/Mission%20-%20Riser%20Trials.mp4?dl=0)

https://www.dropbox.com/s/2p1ws8dqqh2mf29/Mission%20-%20Riser%20Trials.mp4?dl=0

Source: Test footage from test facilities in Deltares, Netherlands.

Development milestones: Progressing on track.



2015-2019
In-depth technical scoping and design studies by DeepGreen

2019
Technology downselects for all systems and sub-systems for pilot /early production system

2020
Lab testing and final design of pilot / early production system

Jan 2022
Pilot system test in the Atlantic Ocean

2022
3,000t (wet) collected in the CCZ using pilot / early production system

2024
1.3Mtpa (wet) Project Zero assets operational

2025-2030
11.3-54.5Mt (wet)[1] Project One assets operational; adding further assets to scale

[1] 11.3Mpta (wet) for NORI-D and 54.5Mpta (wet) in full field development scenario for NORI+TOML.

From pilot to production: key risks & mitigation.

What might go wrong	What we are doing about it
Offshore system development cost / schedule overrun	Engaged Tier-1 international marine contractor based on a fixed-fee performance based contract
Offshore system breakdowns	Extensive production engineering, commissioning, testing, trials with a strong focus on equipment reliability
Missing production targets	Combining best-in-class engineering with extensive operating experience in offshore and deep-sea environments
Adverse weather impacts	Our operating model is based on 3 years of intensive site measurements and we continue weather monitoring
Safety / lost-time incident	Adopting best-practice safety process and culture

Marine environment: Baselining & mitigating impacts

Dr Michael Clarke, Environmental Program Manager

Life in the ocean: despite the large area of the ocean, most life is found on land.

3%

of biomass lives in the ocean

97%

of biomass lives on land

Note: Ocean life is defined as marine life and deep-subsurface life but excluding 1.5GtC of life inside oceanic crusts as that life will not be impacted by nodule collection operations.
Source: Bar-On et al, The Biomass Distribution on Earth, PNAS, June 2018, www.pnas.org/cgi/doi/10.1073/pnas.1711842115

Marine minerals: why we only focus on nodules.

3,800-5,500m depth

The Abyssal Plains

Polymetallic nodules

2-30 cm diameter discrete rocks formed by dissolved metal compounds precipitating around a nucleus
Growth: 10-100mm per million years

Unattached to the seafloor
Can be collected using gentle water jets directed at nodules in parallel with the seafloor

Low-food, low-energy environment

13 grams of biomass / m^2

800-2,500m depth

Seamounts

Cobalt crusts

2-26 cm thick, rock-hard, metallic layers that precipitate on the flanks of submarine volcanoes
Growth: 1-5mm per million years

Integral part of the seafloor that requires hard-rock cutting to break the ore from the substrate

Abundant food supply due to nutrient-rich water upwelling from near-bottom currents
High frequency destination for tuna and sharks

10-100x biomass vs. Abyssal Plain

1,000-4,000m depth

Hydrothermal vents

Seafloor massive sulfides

Tall chimney-like structures that form at hot vents where sulfide-enriched water flows out of the seabed, causing dissolved metals to bind into minute sulfide particles and sink as fine precipitants to the bottom

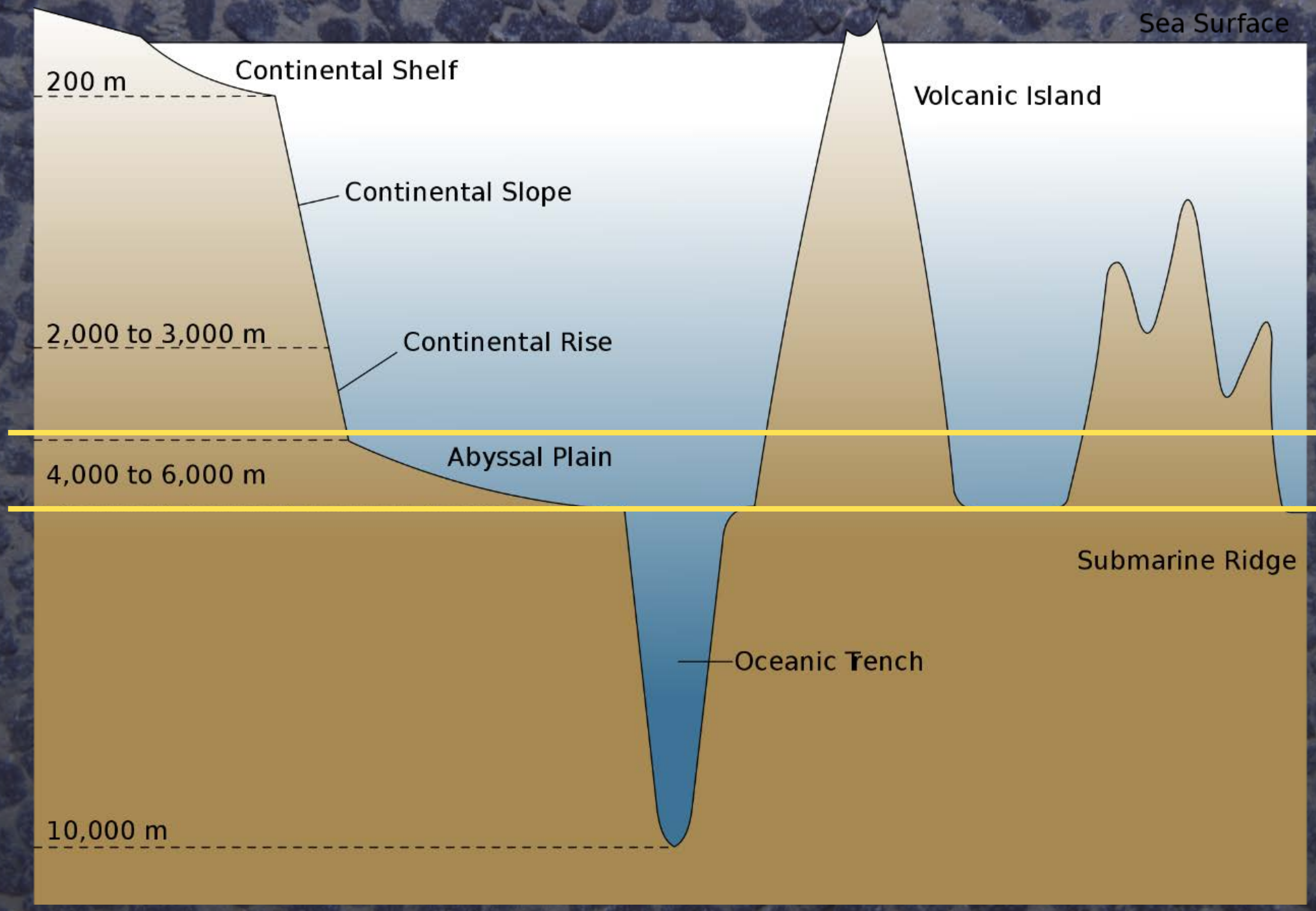
Integral part of the seafloor that requires hard-rock cutting to break the ore from the substrate

Abundant food supplied by chemoautotrophic bacteria which exploit energy-rich chemical compounds from the vents

100x biomass vs. Abyssal Plain

Source: World Ocean Review 2014; Bar-On et al, The Biomass Distribution on Earth, PNAS, June 2018, www.pnas.org/cgi/doi/10.1073/pnas.1711842115

The Abyssal Plain: the most common biogeographical area on the planet.

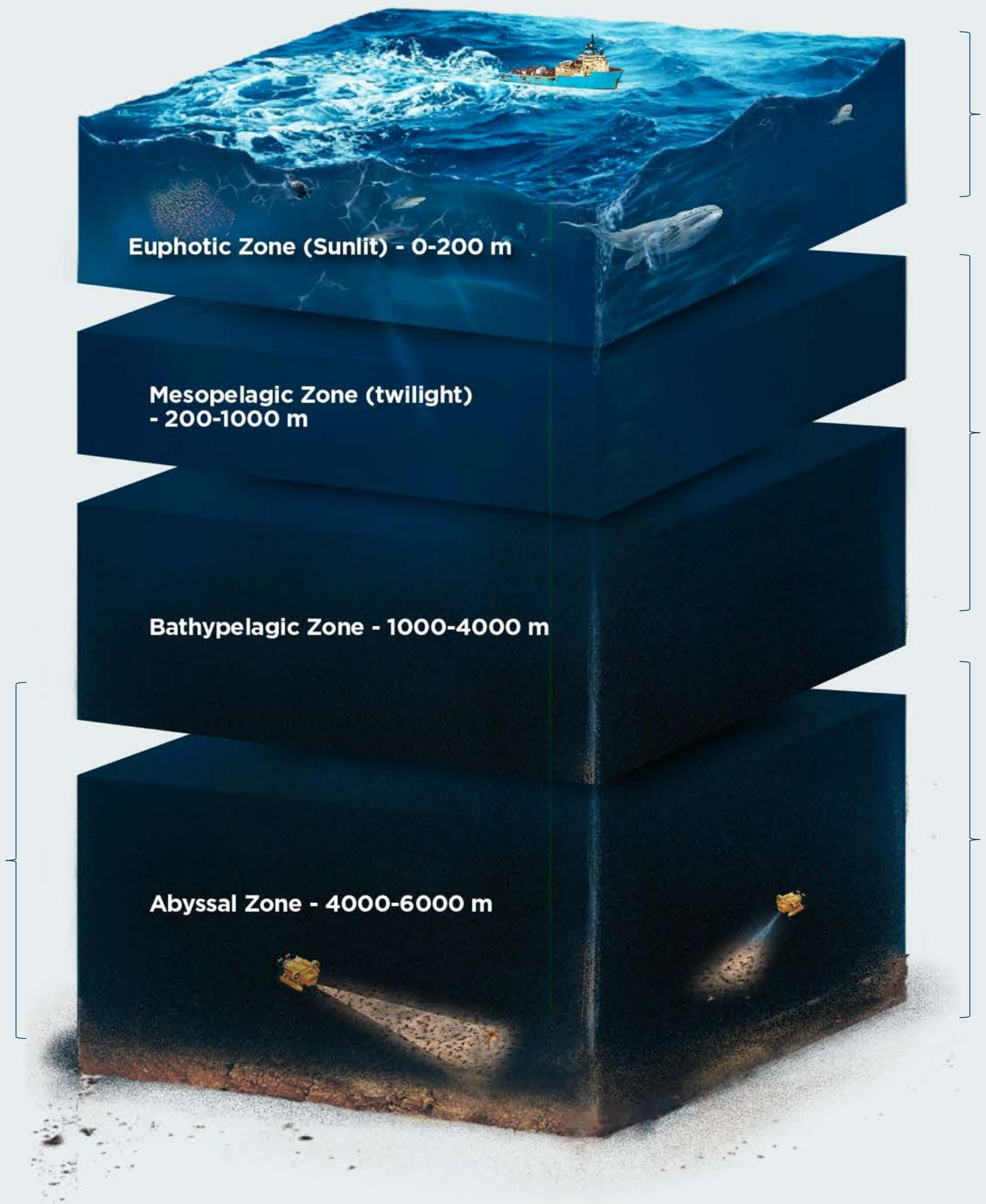


>50% of Earth's surface covered by Abyssal Plains

More area in the CCZ is already under protection than under exploration

Source: Craig R. Smith; Fabio C. De Leo; Angelo F. Bernardino; Andrew K. Sweetman; Pedro Martinez Arbizu (2008). "Abyssal food limitation, ecosystem structure and climate change" (PDF). *Trends in Ecology and Evolution*. **23** (9): 518–528. doi:10.1016/j.tree.2008.05.002. PMID 18584909.

The Abyssal Plain: home to less than 10% of ocean life.



28% of ocean life

65% of ocean life

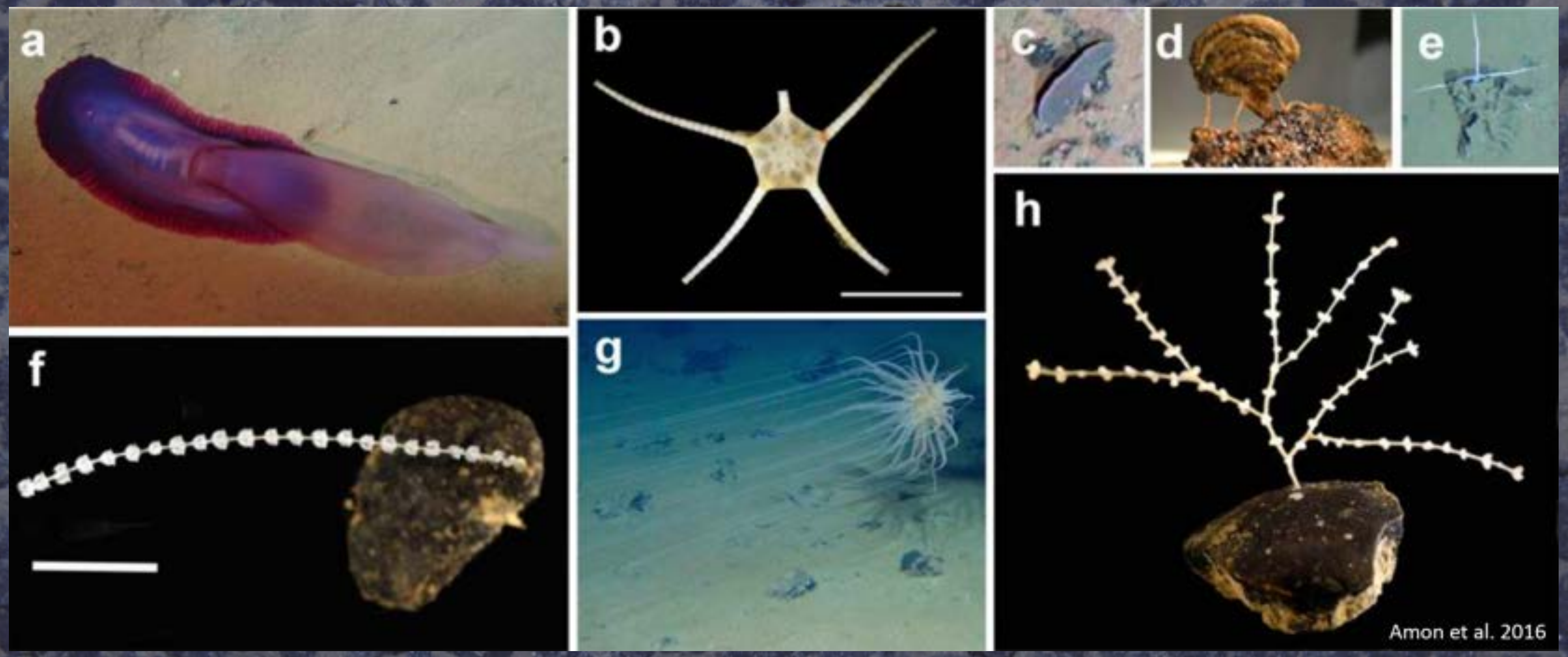
Abyssal plain is a vast sedimentary seabed, oxic to 2m. It has gentle depressions, troughs and ridges. There is intense pressure (5,700-8,500 psi) and no sound or light except the ones made by animals. This environment is food-poor and stable.

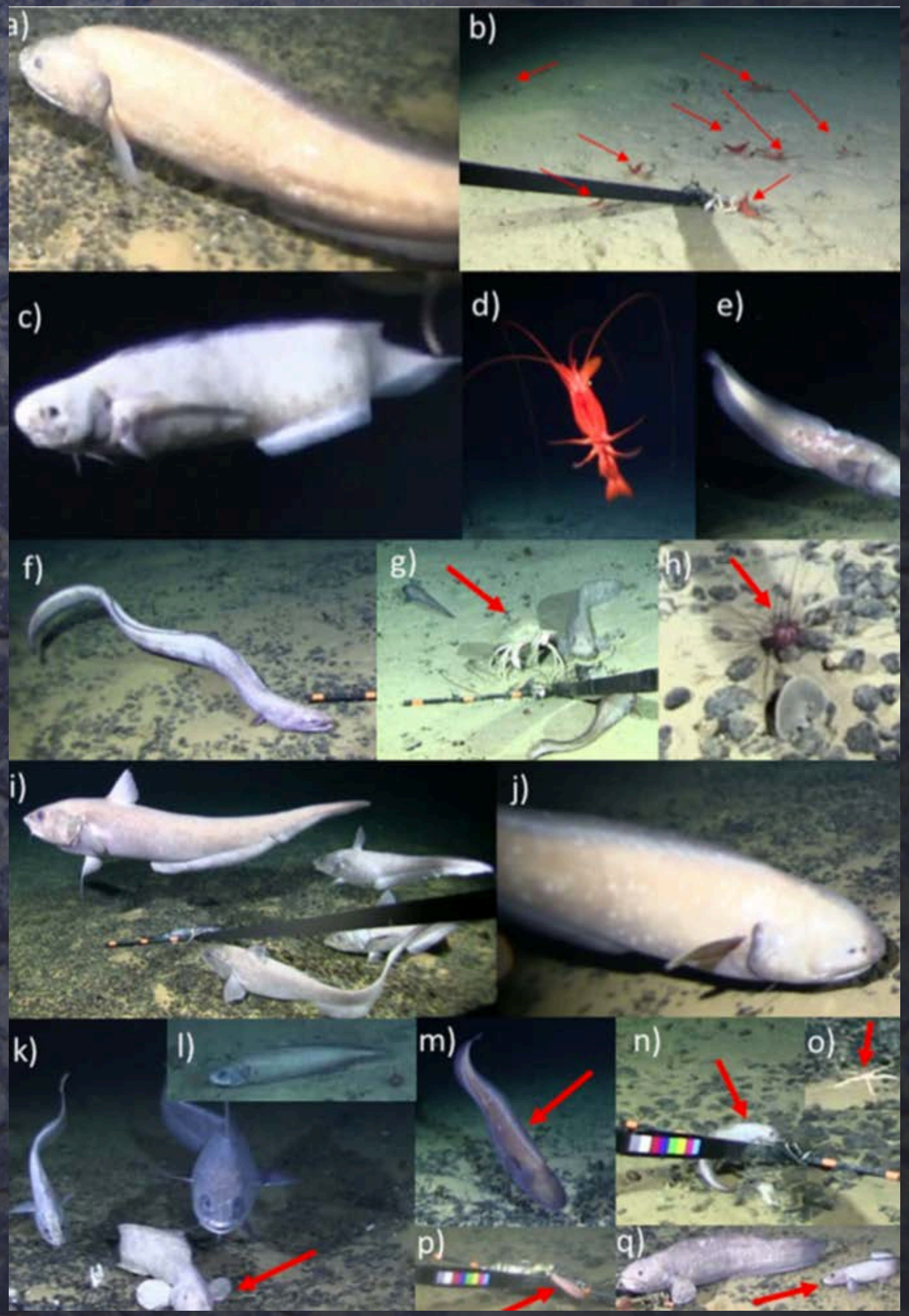
7% of ocean life

Most of impacts from nodule collection are expected to occur on the Abyssal Zone seafloor

Note: Ocean life is defined as marine life and deep-subsurface life but excluding 1.5GtC of life inside oceanic crusts as that life will not be impacted by nodule collection operations.
Source: Bar-On et al, The Biomass Distribution on Earth, PNAS, June 2018, www.pnas.org/cgi/doi/10.1073/pnas.1711842115

The Abyssal Plain: home to a handful of fascinating wildlife.





Megafauna photo credit: Amon et al. 21016
Meiofauna photo credit: C.R. McClain. 2010. An empire without food. Amer. Sci. 98(6)

Our impacts: what we worry about.

Support vessel

Production vessel

Bulk carrier

SUNLIGHT

-200 M

TWILIGHT

-1000 M

Riser using airlift

MIDNIGHT

1. Nodule removal

Some organisms need hard nodule surfaces for critical life function. To protect and enable repopulation:

- 34% of CCZ is set aside by the ISA into protected areas
- 10% additional “no-take zones” set aside by DeepGreen
- 15% of nodules planned to be left behind in DeepGreen operational areas to enable repopulation

2. Sediment disturbance

Our collector robots expected to entrain and discharge top 5 cm of sediment under the nodules. 95% of suspended particles expected to resettle within days within 100s-1,000m of the origin. Work in progress to reduce impacts: modeling, exploring reduction solutions with discharge & mining patterns, ways to accelerate particle flocculation[1]

3. Return water

Seawater used to transport nodules in the riser is expected to contain small amounts of sediment and fines from nodules breakage in transport. Modeling optimal re-injection points that will cause minimal disruption to marine wildlife.

-4000 M

THE ABYSS

Collector robots

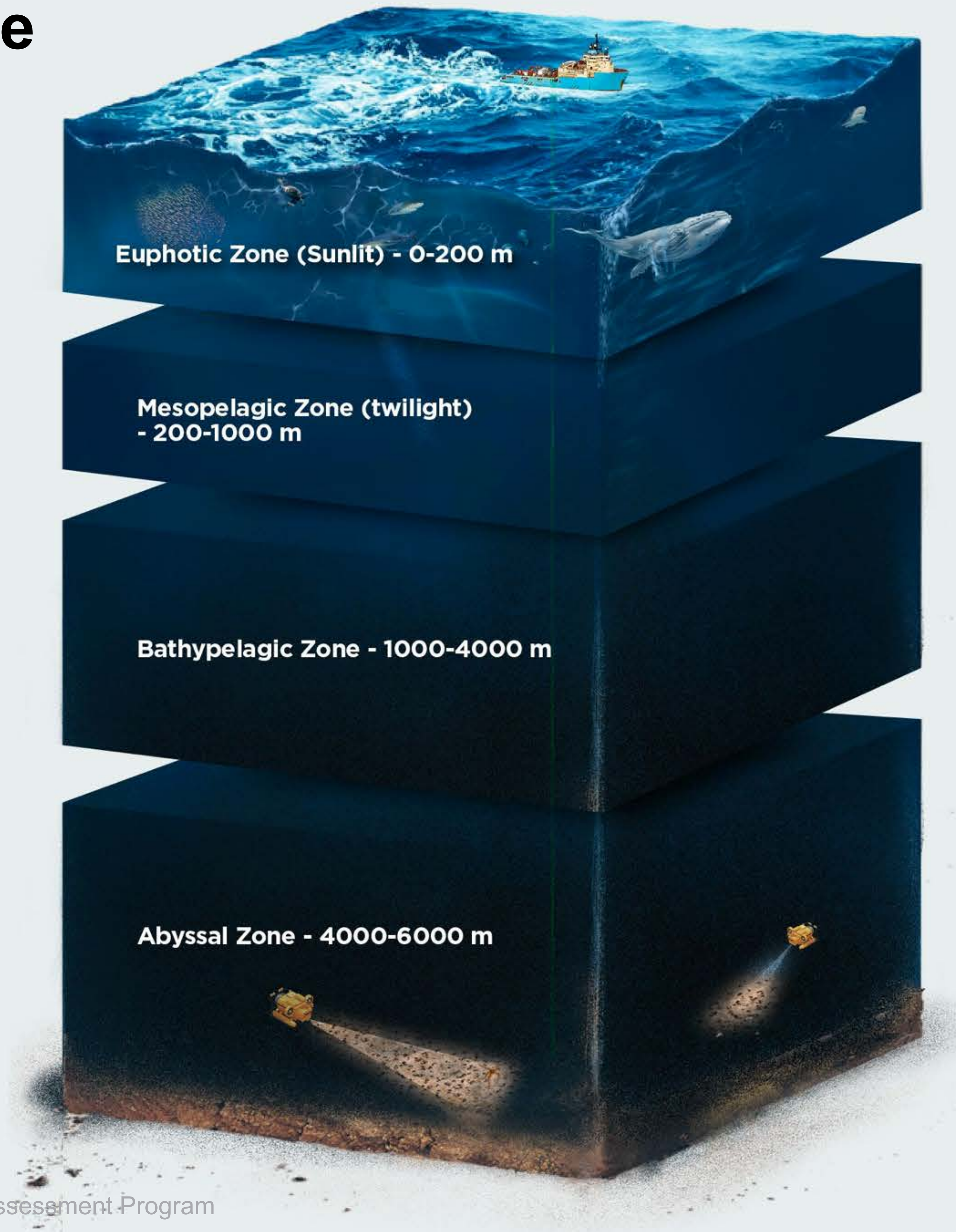
-6000 M

OCEAN FLOOR

[1] Modelling completed by DHI.

Source: Company’s ESIA program.

ESIA program: working with some of the best research institutions on the planet.



100+ studies

Seabed-to-surface ocean research program

Surface biology
Surface fauna logbook (PelagOS)
Remote Sensing, Hydrophone Acousitcs

Pelagic biology
Microbial Community Characterization
Phytoplankton Community Characterization
Zooplankton Community Characterization
Gelatinous Zooplankton Characterization
Micronekton Characterization
Trophic Analysis (Stable Isotopes)
Temporal Variability of Pelagic Communities
Trace Element Profiles In Water Column
Particulate Profiles in Water Column
Discharge Plume Characterization (Physical)
Discharge Plume Characterization (Biological)
Midwater Discharge (food webs particle composition)

Benthic biology
Megafauna Characterization (Photo transects)
Megafauna Characterization (Time Lapse)
Macro Fauna Characterization
Micro Fauna Characterization
Meso Fauna Characterization
Macro Fauna Characterization

Sediment analysis
Baited camera and traps
Benthic respiration and nutrient cycling
Seafloor metabolic activities
Bioturbation, sediment characteristics
Porewater sampling
Exposure toxicology studies
Metals determination by ICP analysis
Induction of gene transcripts (metals)

Collector impact studies
Met ocean studies
Bathymetry (seabed mapping)
Habitat mapping
Database development
Digital twin development
Collector test nearfield studies
Collector test far-field modeling
Plume modeling
Existing Resource Utilization Study
Noise & Light Study
Meteorology & Air Quality Study
Hazard & Risk Assessment
Emergency Response Planning
Cultural & Historical Resources
Waste Management
Cumulative Impacts

HERIOT WATT UNIVERSITY
National Oceanography Centre
NATURAL HISTORY MUSEUM
UNIVERSITY OF LEEDS
JAMSTEC

ESIA Environmental and Social Impact Assesement Program

ESIA program: studies completed to date.

Benthic campaign 5A

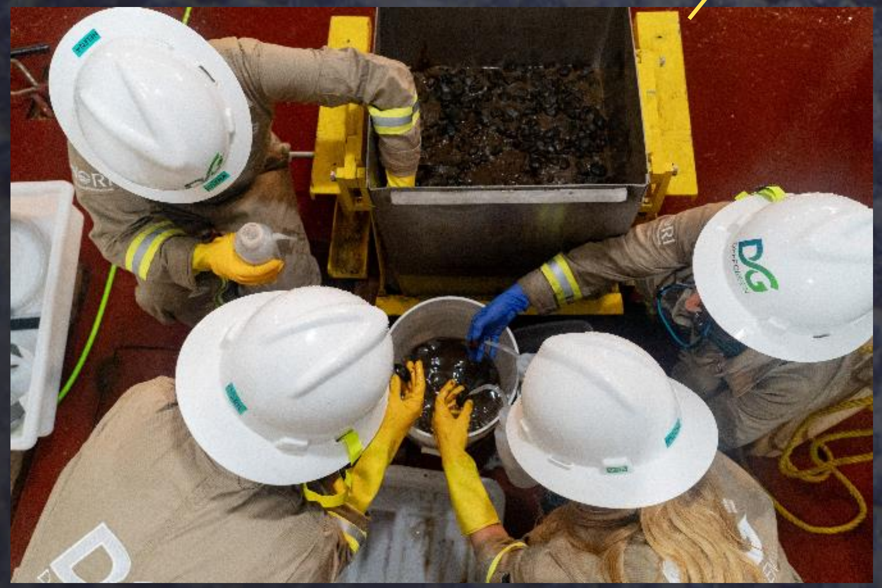
Benthic campaign 5D

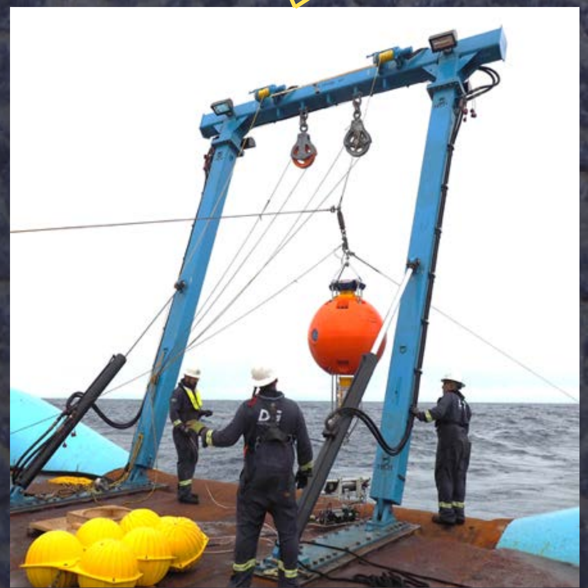
Collector test, CCZ

EIS submission to ISA

we are were

2012-2020 | 2020 | 2021 | 2022 | 2023

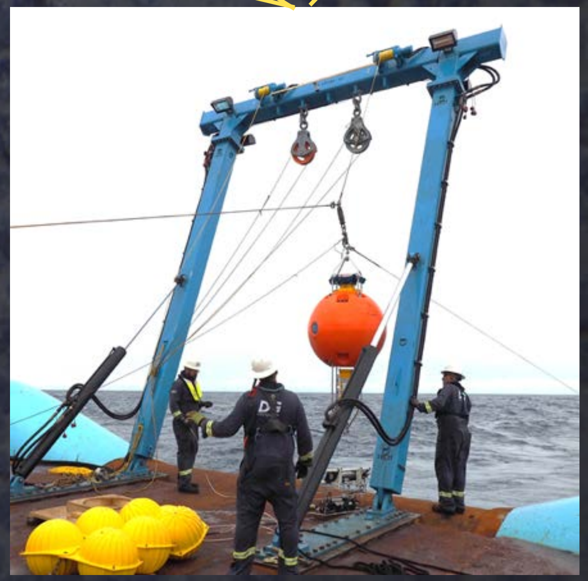




Met ocean moorings

Pelagic campaign 5B

Pelagic campaign 5C



Met ocean moorings

ESIA Environmental and Social Impact Assessment
EIS Environmental Impact Statement

Support vessel

Production vessel

Bulk carrier

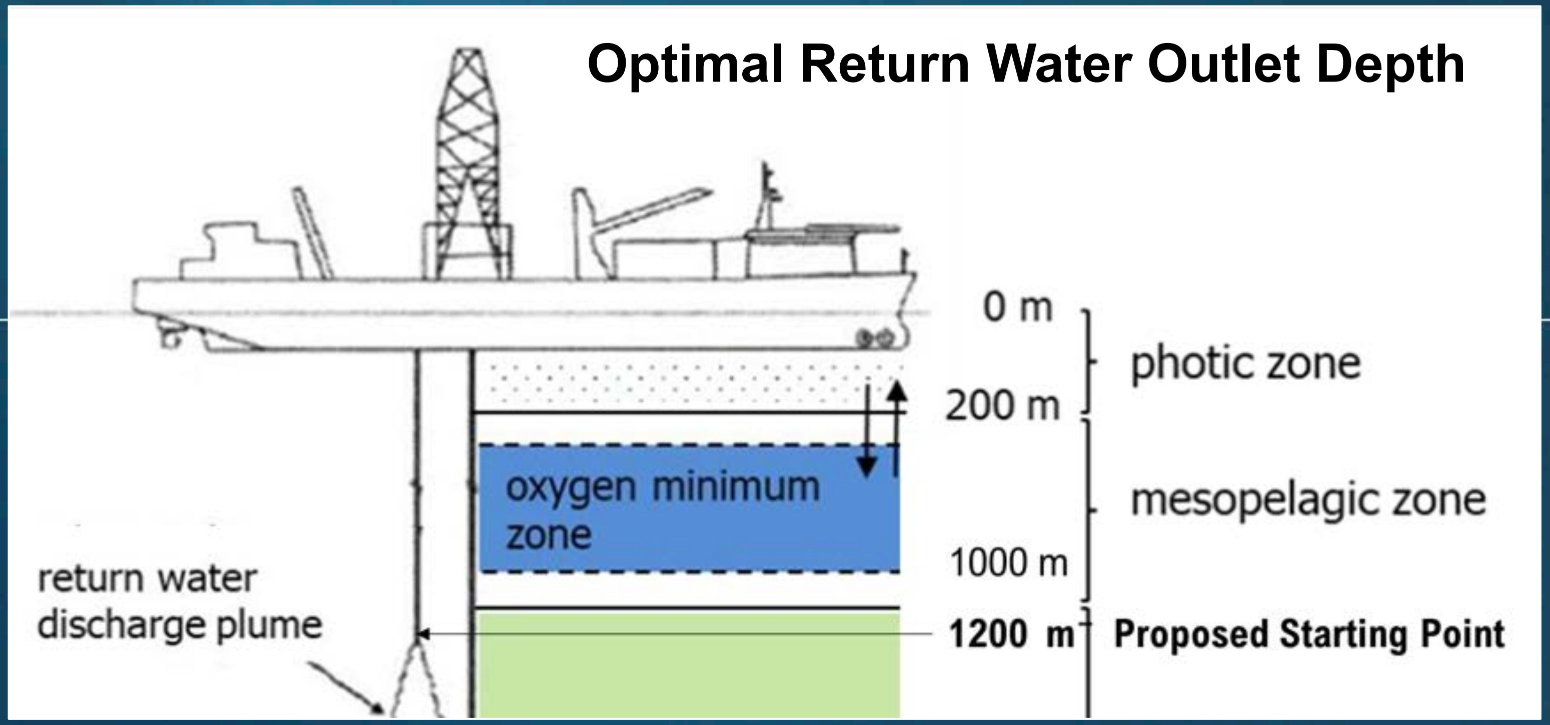
Before production: system design choices to reduce impacts.

SUNLIGHT

-200 M

TWILIGHT

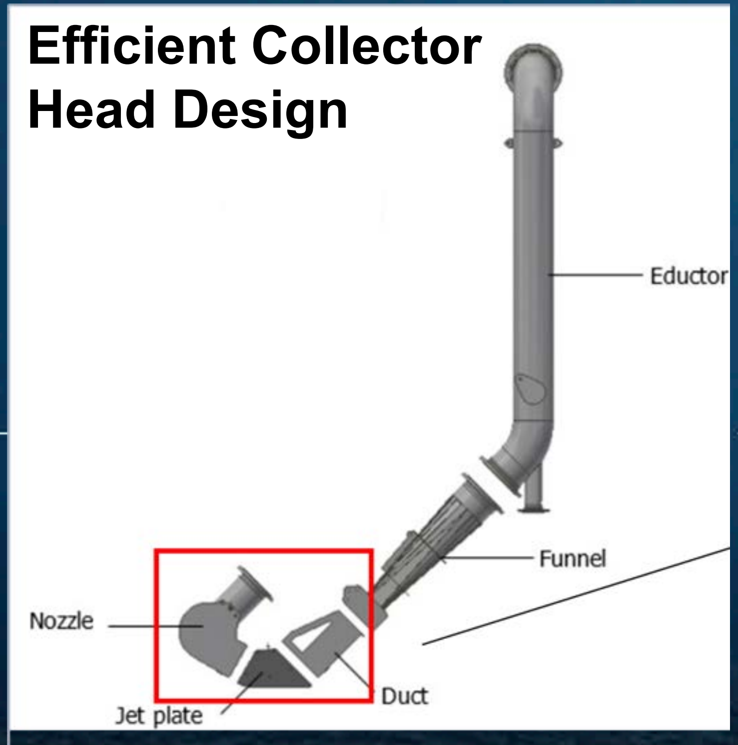
-1000 M

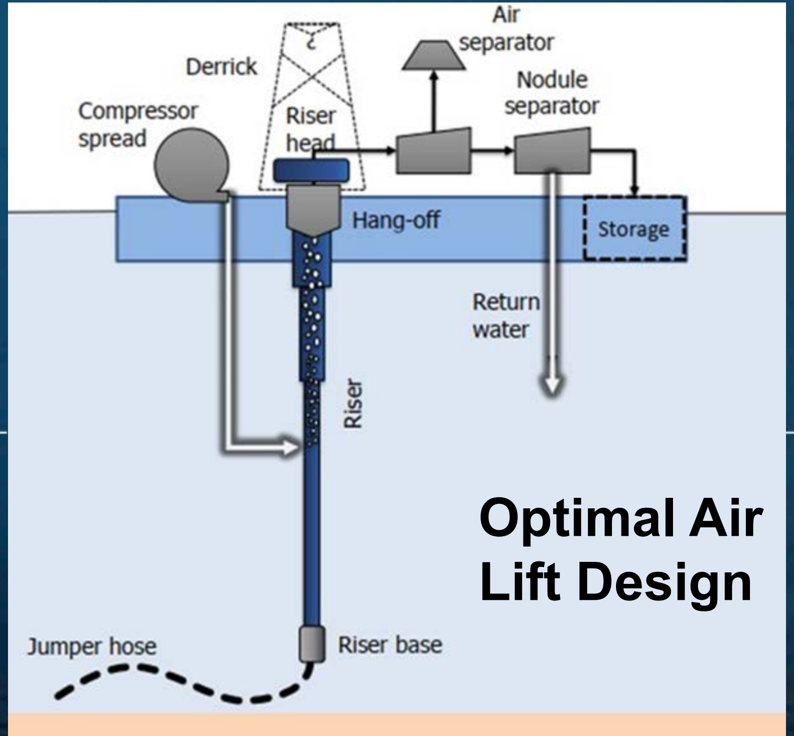


Riser using airlift

- ✓ Choose deposition depth based on least impact on life in water column
- ✓ Discharge outlet to maximize diffusion

MIDNIGHT





- ✓ Design collector head to minimize sediment entrainment
- ✓ Design discharge outlet to accelerate sediment flocculation and settling

-4000 M

THE ABYSS

Collector robots

-6000 M

OCEAN FLOOR

During production: we can adapt to mitigate impacts.

Mitigating actions:

- ✓ Avoid ecologically sensitive areas
- ✓ Slow down to reduce plume
- ✓ Track plume direction
- ✓ Select size of nodules collected
- ✓ Leave seed areas untouched

After production: what happens after we leave the area.

High variance in recovery rates among taxa, prevents predicting a general pattern of recovery or a sequence of successional stages at nodule fields (Gollner et al. 2017)

Following our one-time seafloor disturbance effort, the Abyss will be left to recover as there are no other competing human uses of the seafloor and few cumulative impacts this far from shore.

Anticipated recovery rates*

1-3 years:	deep-sea fish & other mobile fauna
25 years:	deposit feeders
50 years:	microbial populations
?:	nodule obligate suspension feeders

Long-term recovery studies will be conducted as part of our commitment to advancing scientific understanding

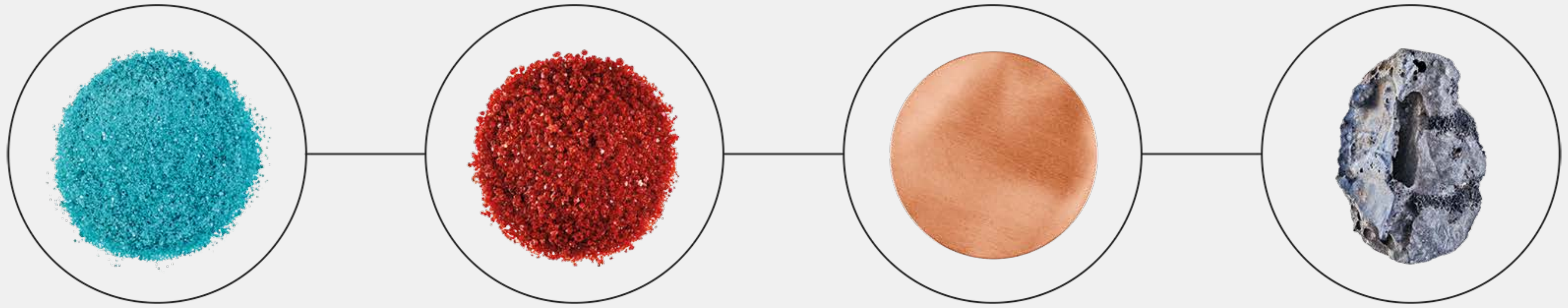
Source: *Simon-Lledó et al. 2019; Stratmann, Voorsmit, et al. 2018; Drazen et al. 2019

SUNLIGHT
-200 M
TWILIGHT
-1000 M
MIDNIGHT
-4000 M
THE ABYSS
-6000 M
OCEAN FLOOR

Processing nodules into metal products

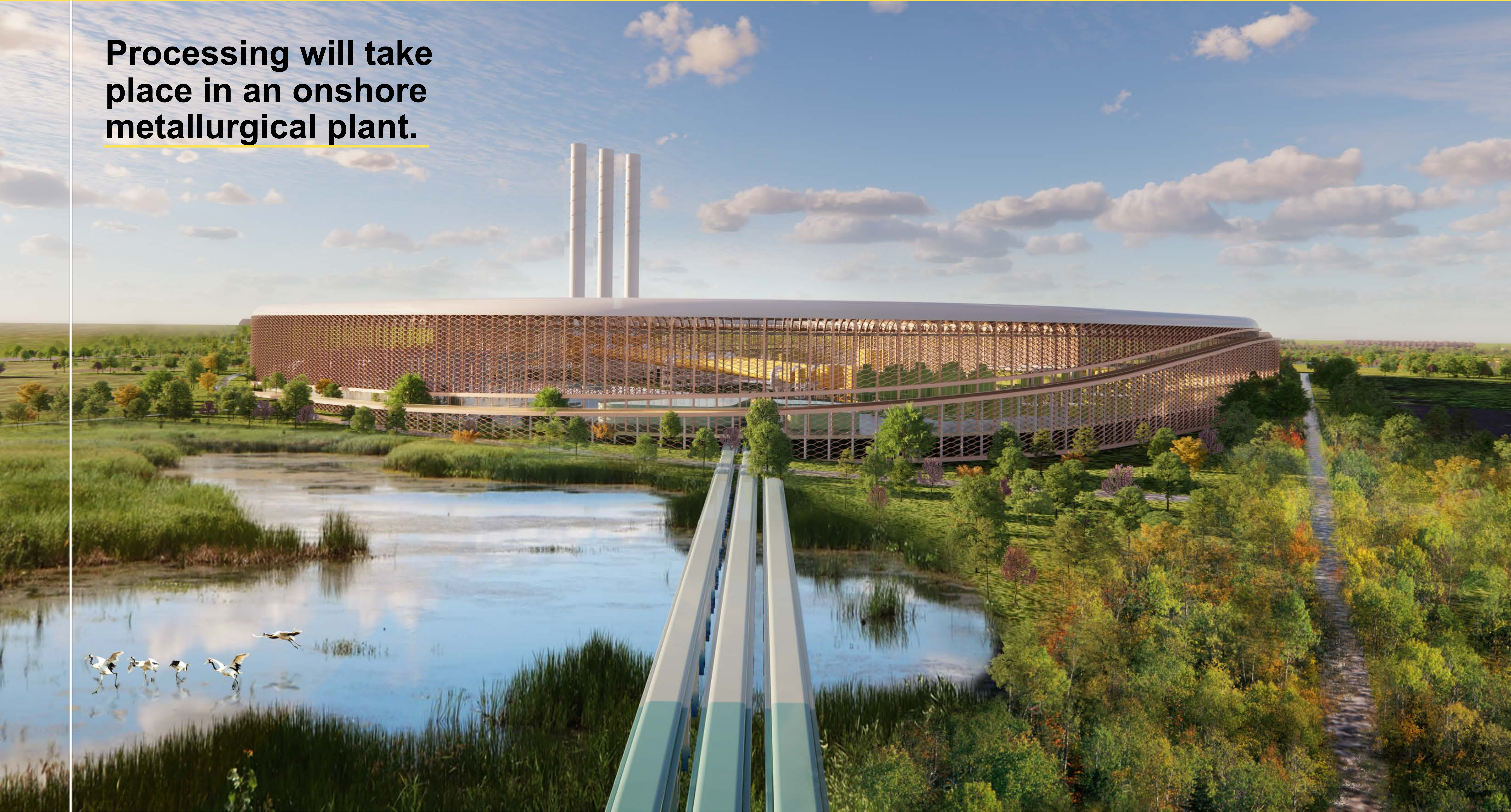
Dr Jeff Donald, Head of Onshore Processing

Our products: we plan to turn nodules into four high value, critical products.



28 **Ni** Nickel 58.693	27 **Co** Cobalt 58.933	29 **Cu** Copper 63.546	25 **Mn** Manganese 54.938
NICKEL SULFATE	COBALT SULFATE	COPPER	MANGANESE

Processing will take place in an onshore metallurgical plant.

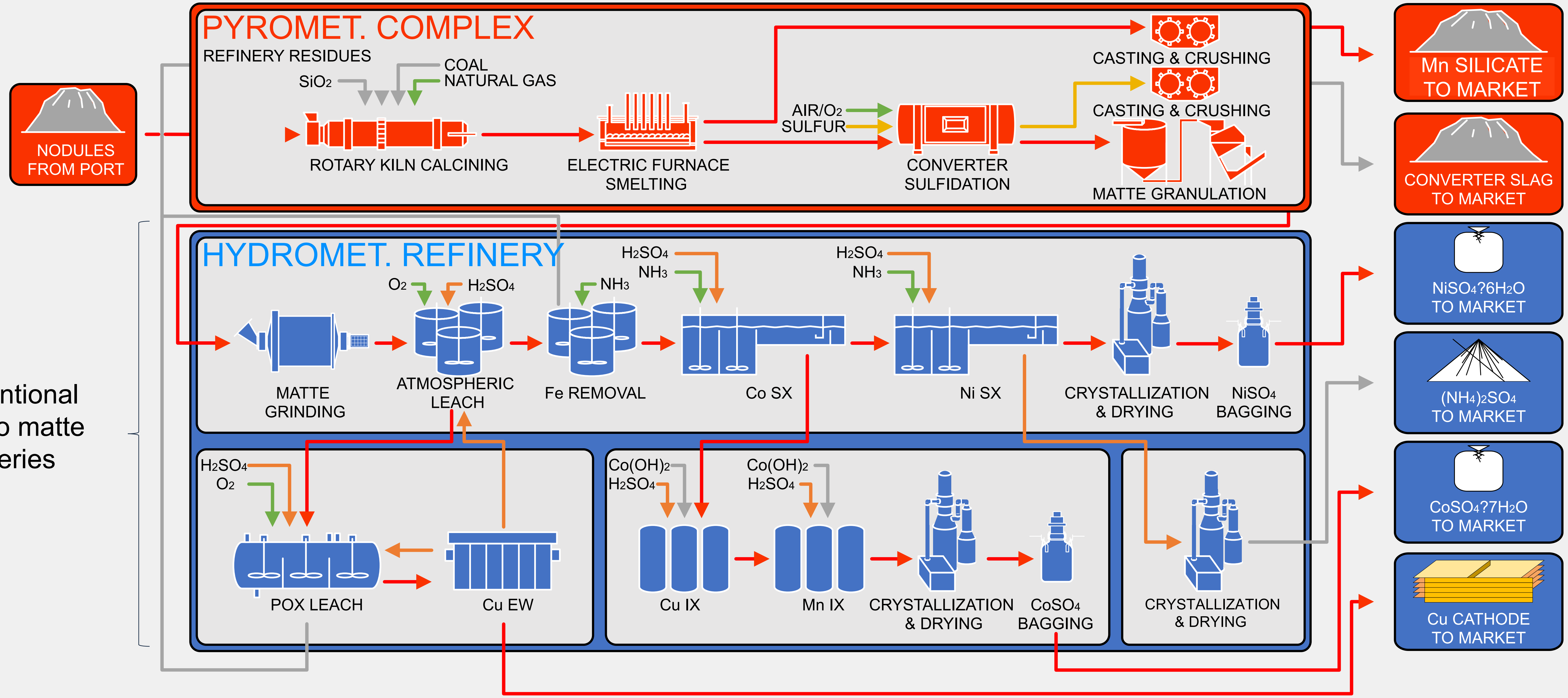


Low risk flowsheet: using conventional equipment and generating zero solid waste.

Dozens of Rotary Kiln - Electric Furnace (RKEF) plants processing nickel laterites in China, Indonesia, New Caledonia, South America

Converting is conventional in nickel & copper processing. Sulfidation step operated commercially by Société Le Nickel in New Caledonia

Conventional NiCuCo matte refineries



Zero solid waste: how we achieve it.

We start with nodules that have remarkably low levels of harmful elements

The alternative: deforestation and unmanaged production waste.

Flowsheet development: working with best-in-class service providers.

HATCH

Participation to ensure data for engineering deliverables is attained.

FLSmidth

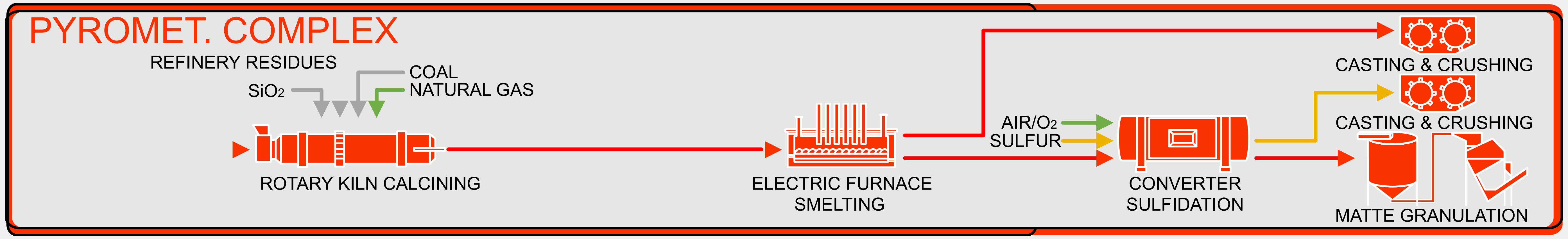
Calcining

Pilot Kiln & Ancillary Systems
Whitehall, PA, USA

XPS | EXPERT PROCESS SOLUTIONS

Smelting, converting & sulfidation

300kW DC Furnace & Ancillary Systems
Sudbury, ON, Canada



HYDROMET. REFINERY

Pilot status: Requests for proposal are being prepared.

Achievable timeline: Focus on systematic de-risking.

2011-2018
Hydromet flowsheet developed and lab-tested by DeepGreen

2019
20 kg
New lower cost & risk flowsheet developed (based on conventional nickel processing), modelled and lab- tested

2020-2021
75 tonnes
Pilot plant program with FLSmidth in Whitehall, PA and XPS (Glencore) in Sudbury, Canada

2024
1.3 Mtpa (wet)
Project Zero - small scale commercial production using existing or partner facilities

2025-2030
11.3-54.5Mt (wet)[1]
Tolling of existing facilities and constructing new RKEF plants & refineries

[1] 11.3Mpta (wet) for NORI-D and 54.5Mpta (wet) in full field development scenario for NORI+TOML.

From pilot plant to production: key risks & mitigation.

What might go wrong	What we are doing about it
Technology risk	Employ conventional equipment with analogous commercial precedence, project development according to established procedures (test work, pilot, engineering)
Metallurgical recoveries lower than estimated	Use conservative factors in development phases based on commercial precedence
Mn product marketability or valuation lower than estimated	Develop further downstream processing of Mn silicate into Mn alloy to capture value
CAPEX escalation	Identify all scope in development phases; develop project according to established Project Delivery System standards; be disciplined with respect to scope changes
Schedule delays	Plan with realistic timelines; leverage existing RKEF capacity for processing in event of delay

the metals company

Thank you.

Analyst and Investor Contact

craig@metals.co

Media Contact

media@metals.co

Follow us