### Revolutionizing the Mineral Supply Chain for Fast Growing EV Demand

the metals company

> The Metals Company September 2021

# Forward looking statements.

Certain statements made in this presentation are not historical facts but are forward-looking statements for purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. Forward-looking statements generally are accompanied by words such as "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "should," "vould," "plan," "predict," "potential," "seem," "seek," "future," "outlook" and similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, without limitation, TMC's expectations with respect to future performance, development of its estimated resources of battery metals, potential regulatory approvals, and anticipated financial impacts and other effects of the recently completed business combination, and the size and potential growth of current or future markets for TMC's supply of battery metals.

These forward-looking statements involve significant risks and uncertainties that could cause the actual results to differ materially from those discussed in the forward-looking statements. Most of these factors are outside TMC's control and are difficult to predict. Factors that may cause such differences include, but are not limited to: the inability to maintain the listing of TMC's shares on Nasdaq; the ability to recognize the anticipated benefits of the recently completed business combination, which may be affected by, among other things, the commercial and technical feasibility of seafloor polymetallic nodule mining and processing; the supply and demand for battery metals; the future prices of battery metals; the timing and content of ISA's exploitation regulations that will create the legal and technical framework for exploitation of polymetallic nodules in the Clarion Clipperton Zone; government regulation of deep seabed mining operations and changes in mining laws and regulations; environmental risks; the timing and amount of estimated future production, costs of production, capital expenditures and requirements for additional capital; cash flow provided by operating activities; TMC's ability to raise financing in the future; unanticipated reclamation expenses; claims and limitations on insurance coverage; the uncertainty in mineral resource estimates; the uncertainty in geological, hydrological, metallurgical and geotechnical studies and opinions; infrastructure risks; TMC's ability to enforce the obligations of non-performing investors under subscription agreements in connection with the business combination, potential litigation risks, and dependence on key management personnel and executive officers; and other risks and uncertainties indicated from time to time in the proxy statement/prospectus relating to the recently completed business combination, including those under "Risk Factors" therein, and in other filings with the SEC.

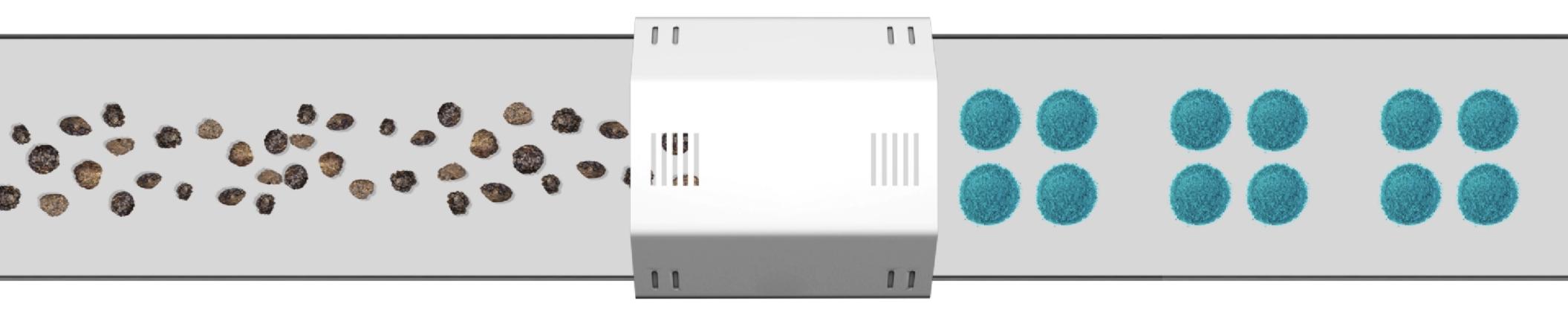
TMC cautions that the foregoing list of factors is not exclusive. TMC cautions readers not to place undue reliance upon any forward-looking statements, which speak only as of the date made. TMC does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements to reflect any change in its expectations or any change in events, conditions, or circumstances on which any such statement is based.

# DeepGreen Metals soac = the metals company

# 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<sup>8</sup>4s<sup>2</sup>

### Investment highlights.

#### The world's largest estimated source of battery metals

Enough nickel, copper, manganese and cobalt in situ to electrify 280 million EVs<sup>1</sup>

**Four battery metals in high concentrations in a single resource** 3.2% nickel equivalent<sup>2</sup> vs. 0.3-1.9% for the world's largest undeveloped nickel projects

#### Low-cost production

Expecting to be the 2<sup>nd</sup> lowest cost nickel producer on the planet<sup>3</sup>

#### 70-99% reduction of lifecycle ESG impacts

Including zero solid waste, 90% less CO<sub>2</sub> equivalent emissions<sup>4</sup>

#### Attractive valuation with significant upside

Equity value of approximately \$2.4 billion following closing of the business combination vs. NPV of \$31.3 billion<sup>3</sup> for the NORI + TOML areas

#### **Best-in-class strategic investors / partners**

GLENCORE



Offtakes Processing



Vessel operations

Offshore collection technology

[Iseas

HATCH Onshore processing technology

<sup>1</sup> 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.
<sup>2</sup> 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.

<sup>3</sup> Canadian NI 43-101 Compliant Preliminary Economic Assessment (PEA) for NORI-D Area, AMC, February 2021; Metals Cost Curve, Wood Mackenzie, August 2020. <sup>4</sup> "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.

<sup>5</sup> Canadian NI 43-101 Resource Statement for full field financial model (internal DeepGreen development scenario).



"EV battery in a rock"

### The business combination has closed: TMC to list on the Nasdaq on Sept 10, 2021.

- expected lifecycle ESG footprint on the planet and people.<sup>2</sup>

  - performing investors under the subscription agreements.
  - \$31.3 billion<sup>3</sup> for the NORI + TOML areas
    - battery metals

- Capital structure Cash at closing expected to fund operations through Q3 2023
  - commencement of commercial production

The business - Founded in 2011, DeepGreen Metals, now known as The Metals Company, is the developer of the world's largest estimated deposit of battery metals<sup>1</sup>—seafloor polymetallic nodules—with the lowest

Transaction details - TMC has received approximately \$137.5 million in cash prior to transaction fees, including approximately \$27.2 million from the SOAC trust account after accounting for redemptions. SOAC entered into subscription agreements for a \$330.3 million PIPE; however, only approximately \$110.3 million of proceeds from the private placement were received as of the date hereof. SOAC and TMC intend to continue to seek to enforce the funding obligations of the two non-

Valuation - Equity value of approximately \$2.4 billion following closing of the business combination vs. NPV of

- 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

- This is a sufficient level of cash to reach the previously stated key milestone of permitting to advance

<sup>&</sup>lt;sup>1</sup> Global Nickel Industry Cost Summary, Wood Mackenzie, August 2020.

<sup>&</sup>lt;sup>2</sup> "Where Should Metals for the Green Transition Come From?", Paulikas et al, LCA white paper, April 2020.

<sup>&</sup>lt;sup>3</sup> 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 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 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate and associated financial model, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant TOML Clarion-Clipperton Zone Project Mineral Resource Estimate, AMC, March 2016. Canadian NI 43-101 Compliant AMC, March 201 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

### **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

- **Pilot: onshore processing**
- **EIS: collection pilot, CCZ**
- MoU: pyromet toll processing, P0
- **Contract: collection, P0**
- Potential offtake: NiCuCo, **P0**
- Potential offtake: Mn silicate, P0

### 2022-Q3 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

Funded through current cash

TMC expects current cash to fund operations through the application for an ISA **Exploitation Contract for NORI in Q3 2023** 

Q4 2023-2024

**Commercial production:** 

PFS & FS, construction, P1

**Application: ISA-TOML** 

**Exploitation Contract** 

Contract: ISA-NORI

P0, 1Mtpa nodules

**EIS: TOML-F** 



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

CCZ	The	Clarion	Clipperton	Fracture	Zone

- **International Seabed Authority** ISA
- EIS **Environmental Impact Statement**
- Pre-feasibility Study PFS
- FS Feasibility Study
- Project Zero P0
- P1 Project One
- Millions of tonnes per annum Mpta

#### New funding required

TMC is positioned at the intersection of three megatrends in the green transition.

### **Electrification:** batteries for EVs and renewables



West/East decoupling: supply chain security and reshoring

<sup>1</sup> Dan Ives, Wedbush Securities. <sup>2</sup> Wood Mackenzie.



### ~\$5 trillion

Total addressable market for EVs over the next decade<sup>1</sup>



### **\$1.7 trillion**

Cumulative mining investment required to limited rise in global temperatures to 2°C<sup>2</sup>

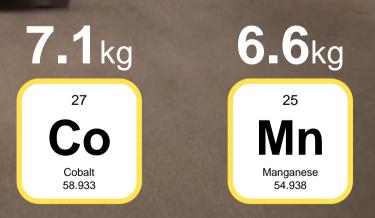
### ESG / Impact investing

# EV revolution is metal intensive.



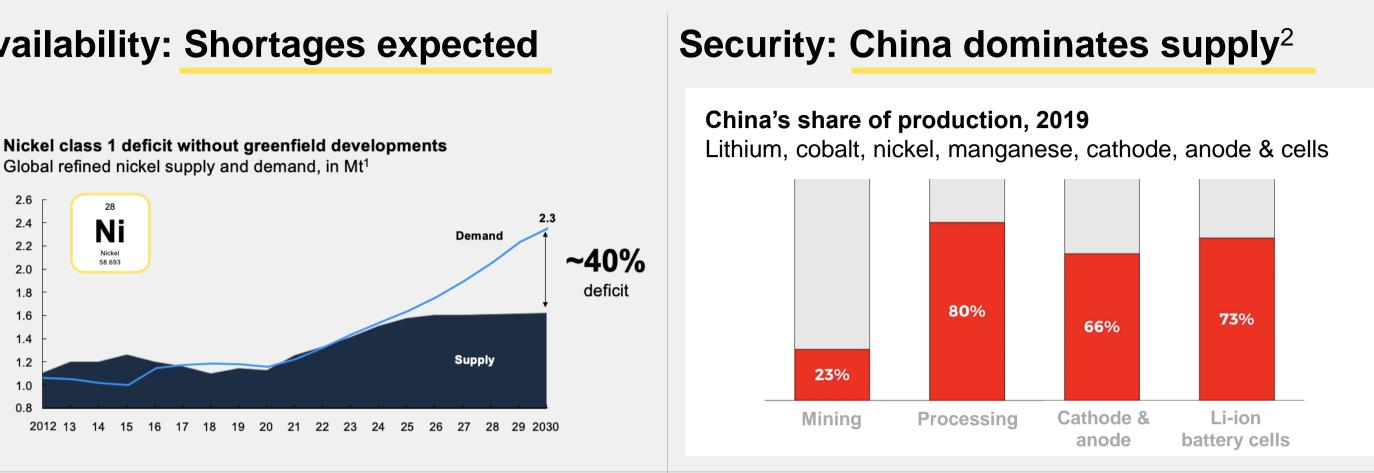
Metal requirements for a 75kWh battery with NMC cathode chemistry and average copper contents for electric harness and connectors. Different battery size and cathode chemistries would have different metal requirements.

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



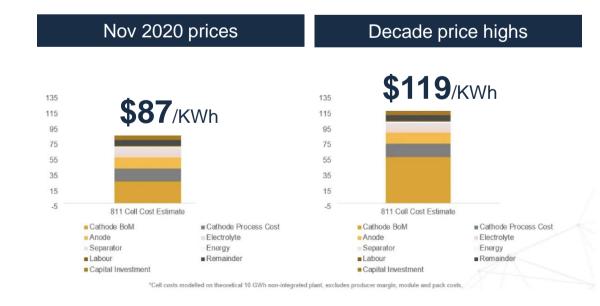
Four upstream challenges EV manufacturers should be worried about.

### **Availability: Shortages expected**



### **Price: EV/ICE price parity?**<sup>3</sup>

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



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

### **ESG:** The dirty secret



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

> Exploration contract area

**NORI**<sup>1</sup>

Sponsoring state

**Exploration** area

74,830 km<sup>2</sup>

Yes

Technical resource statement

Mn

Ni

Cu

Co

**Electric vehicles** 

in situ resource

sufficient for<sup>3</sup>

Polymetallic nodules Inferred resource

million tonnes (wet) 29.5% 1.3% 1.1% 0.2% 150

million EVs

<sup>1</sup> 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. <sup>2</sup> Canadian NI 43-101 Compliant TOML Clarion Clipperton Zone Project Mineral Resource Estimate, AMC, July 2016.

Metal grade

<sup>3</sup>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. <sup>4</sup> 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, 341 Mt 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<sup>2</sup>.



### TOML<sup>2</sup>

Republic of Nauru

Kingdom of Tonga 74,713 km<sup>2</sup>

Yes

8664

756 million tonnes (wet)

> 29.2% 1.3% 1.1%

0.2%

130 million EVs

### Marawa

Republic of Kiribati

74,990 km<sup>2</sup>

**Resource definition** work in progress

Solving availability: nickel for nickel-rich battery chemistries.

### 920,000 tonnes Expected nickel supply deficit, 2030<sup>1</sup>

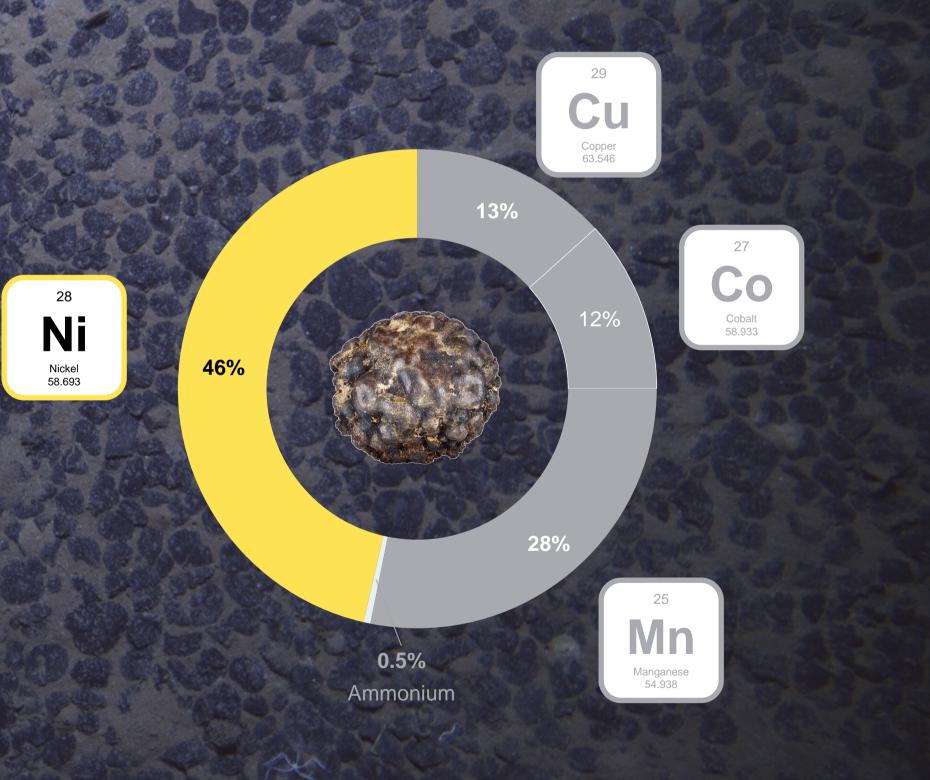
### 120,000 tonnes Expected production, NORI-D<sup>2</sup>

### ~500,000 tonnes Production potential, NORI+TOML<sup>3</sup>

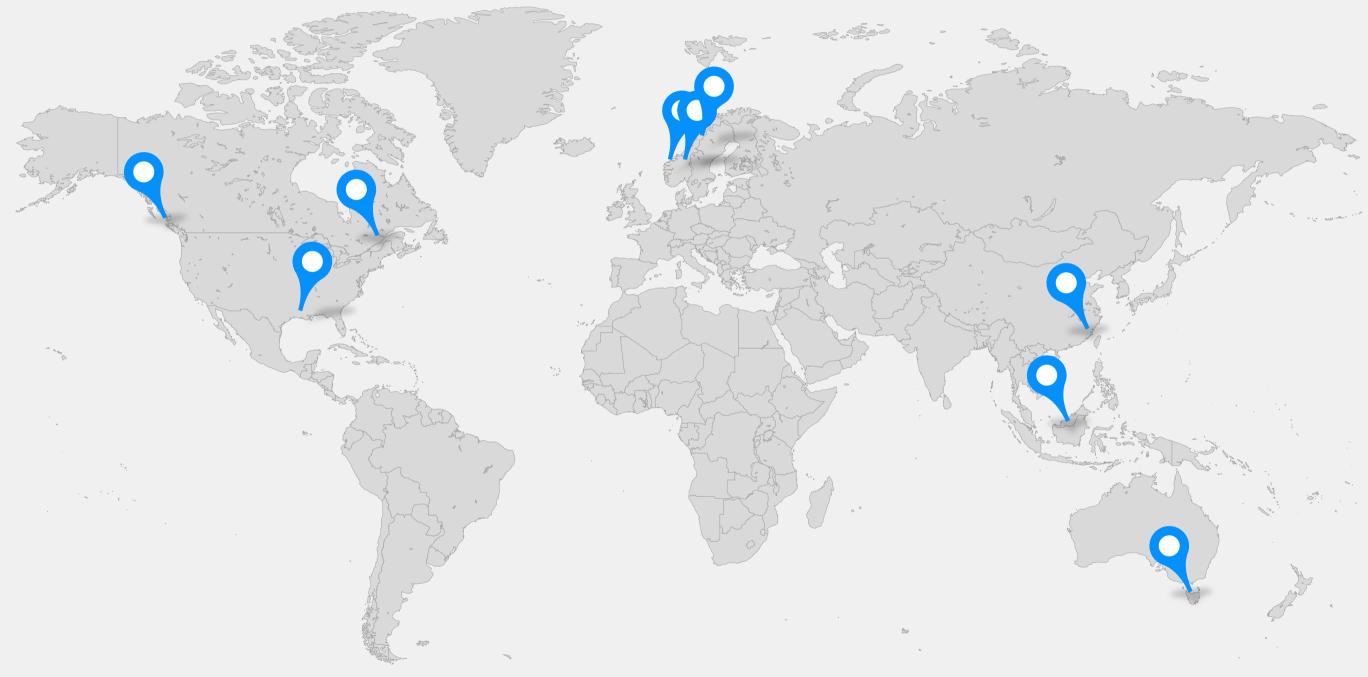
<sup>1</sup> "How clean can the nickel industry become?", McKinsey, September 2020.

<sup>2</sup> 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. <sup>3</sup> Canadian NI 43-101 Resource Statement for full field financial model (internal DeepGreen development scenario)

### **NORI-D** project revenue by product<sup>2</sup>



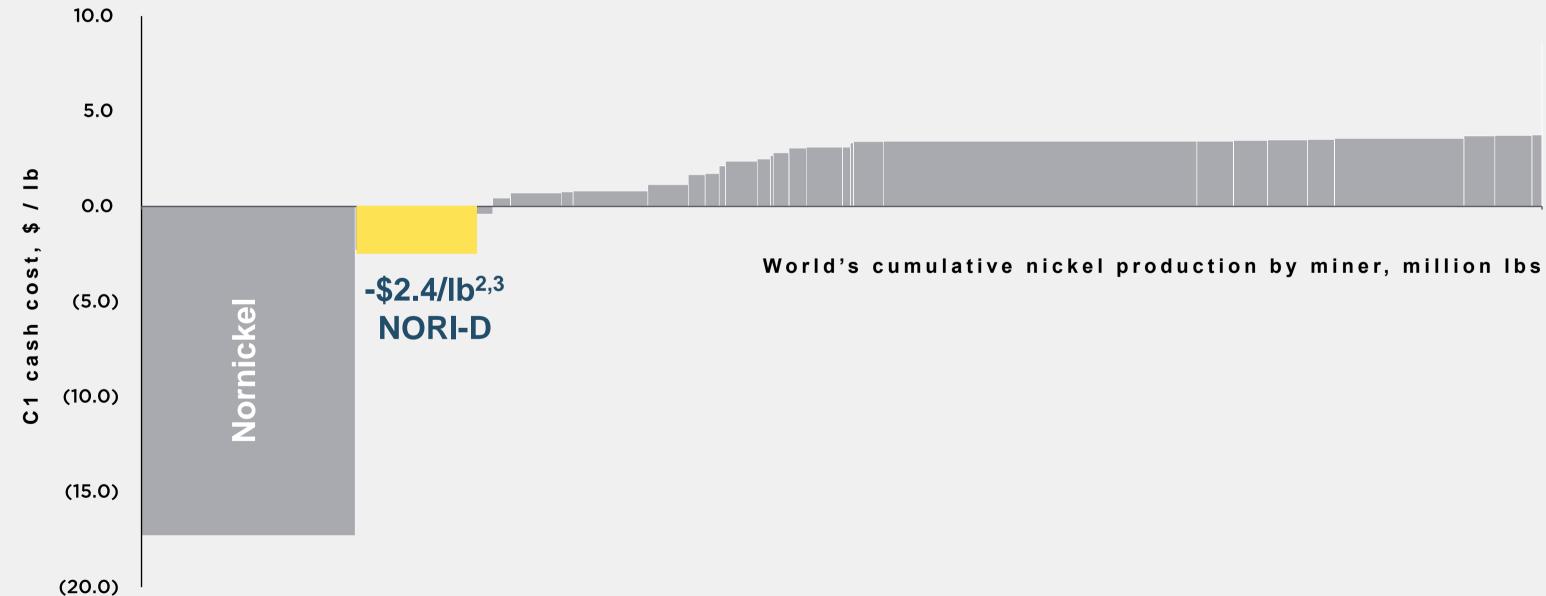
### **Solving security:** we can localize our onshore plants on any continent.<sup>1</sup>



<sup>1</sup>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<sup>1</sup>



<sup>1</sup> Nickel C1 Cost Curve, Wood Mackenzie, August 2020.

<sup>2</sup> Average for the steady state years 2030-45.

<sup>3</sup> 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** 



### **Climate change**

-70% <sub>CO2</sub>e

emissions

-94%

Stored carbon at risk

#### Humans

-99% Human toxicity

-97% Human lives at 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.



#### Habitat damage

### -100%

Solid processing waste

#### -98% Terrestrial ecotoxicity

### -99%

Freshwater ecotoxicity

### -99%

Eutrophication potential

### Wildlife

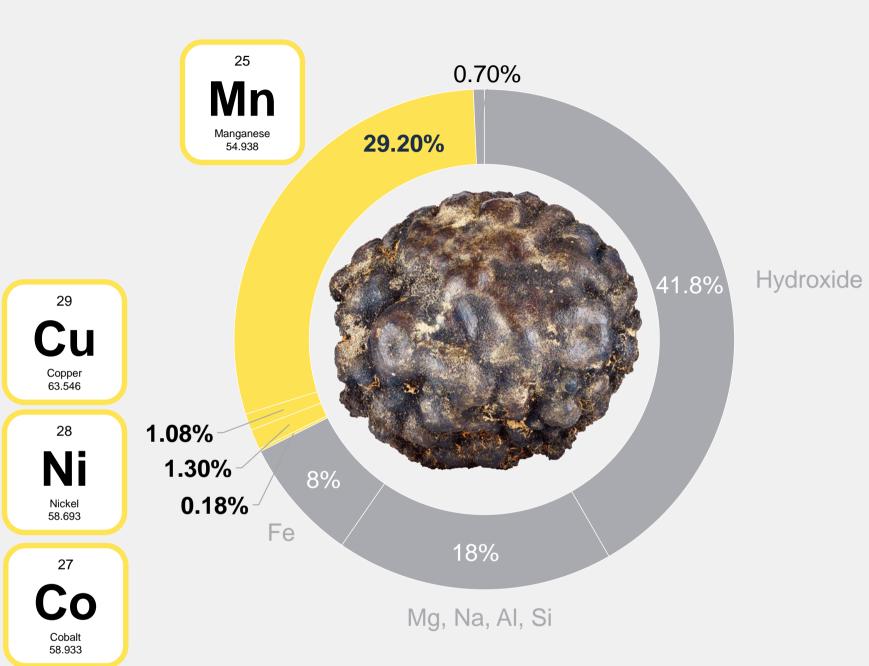
-100% Child labor risk -93% Biomass at risk

-93% Megafauna wildlife at risk

### remains

Biodiversity loss risk

### **World-class resource:** with several advantages.



Low head-grade variability – easier to process 2-10 cm diameter – easy to handle Microporous – easier to smelt

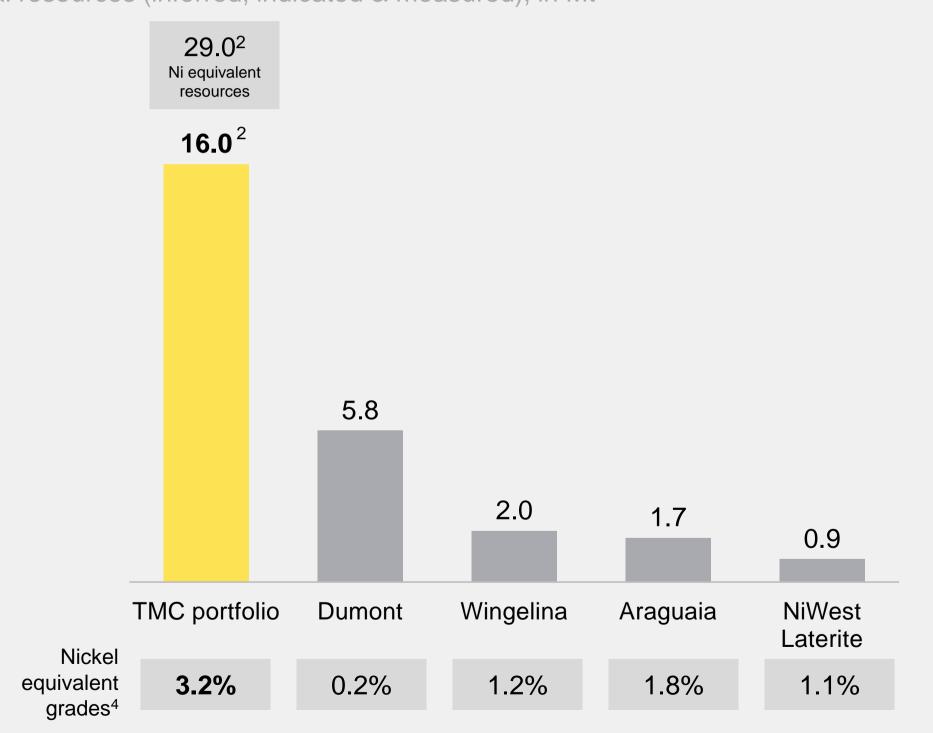
#### Unbound to the seafloor – **no need for drilling & blasting**

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

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

### 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<sup>1,3</sup>



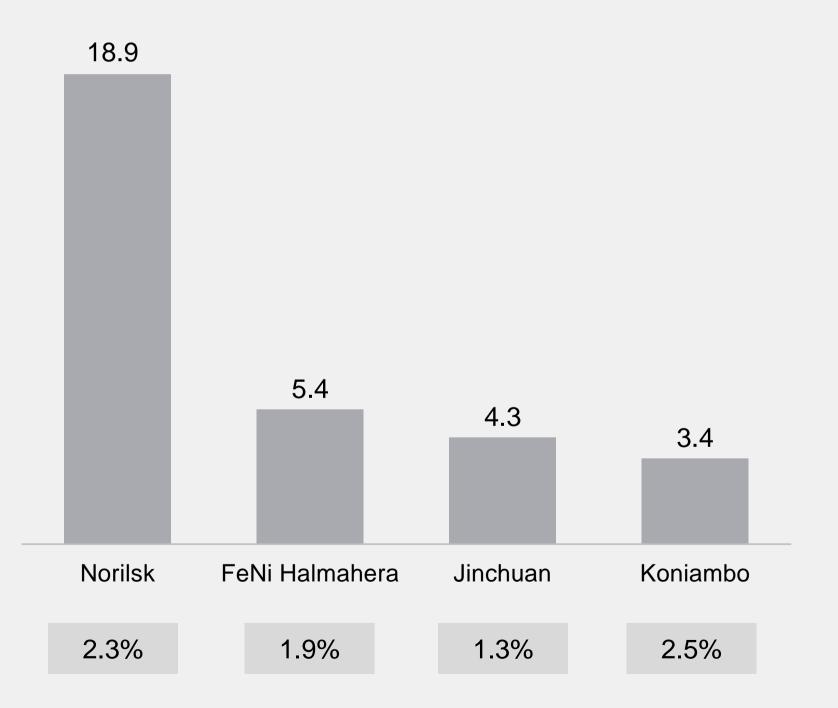
<sup>1</sup> Global Nickel Industry Cost Summary, Wood Mackenzie, August 2020; inclusive of reserves.

<sup>2</sup> Canadian NI 43-101 Resource Statement for full field financial model (internal DeepGreen development scenario). Metals and mining recoveries have not been considered. <sup>3</sup> Asset Reports for Dumont, Wingellina, Araguaia, NiWest Laterite, Norilsk, FeNi Halmahera, Jinchuan and Koniambo, Wood Mackenzie.

<sup>4</sup> 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's largest nickel producers

Total resources (inferred, indicated & measured), in Mt<sup>1,3</sup>



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

RESOURCE

COLLECT

OFFSHORE

#### **TECHNOLOGY DEVELOPMENT**



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

### DEFINITION MAERSK

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

#### 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.

#### ONSHORE

PROCESS

#### SHIP



### FLOWSHEET ΗΔΤCΗ

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

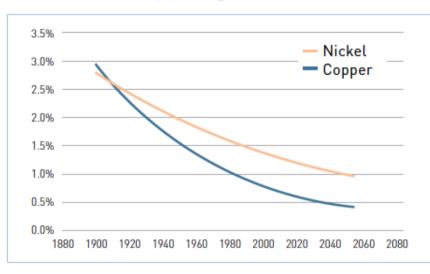
50% of production

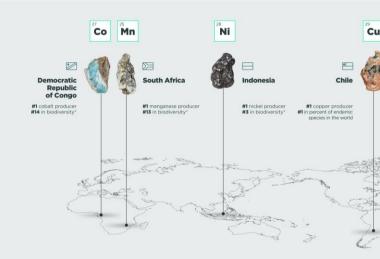
29 Cu

50% of production

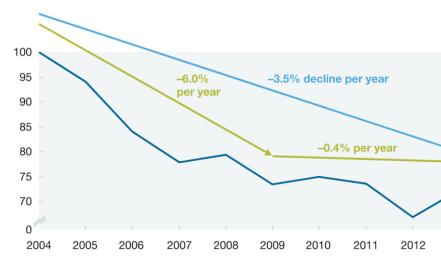
### The ESG case for nodules: **Structural challenges** of land-based producers.

Nickel & copper grades, fitted<sup>1</sup>





MineLens productivity index, 2004=100<sup>2</sup>



### **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

### The ESG case for nodules: **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 Project One processing plant with renewables

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

### Biomass

Contained carbon kg/m<sup>2</sup>

~300x

0.013

Abyssal seabed

-1.500

20

Rainforests (e.g., Indonesia) Land biomass average

**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.

3.64

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

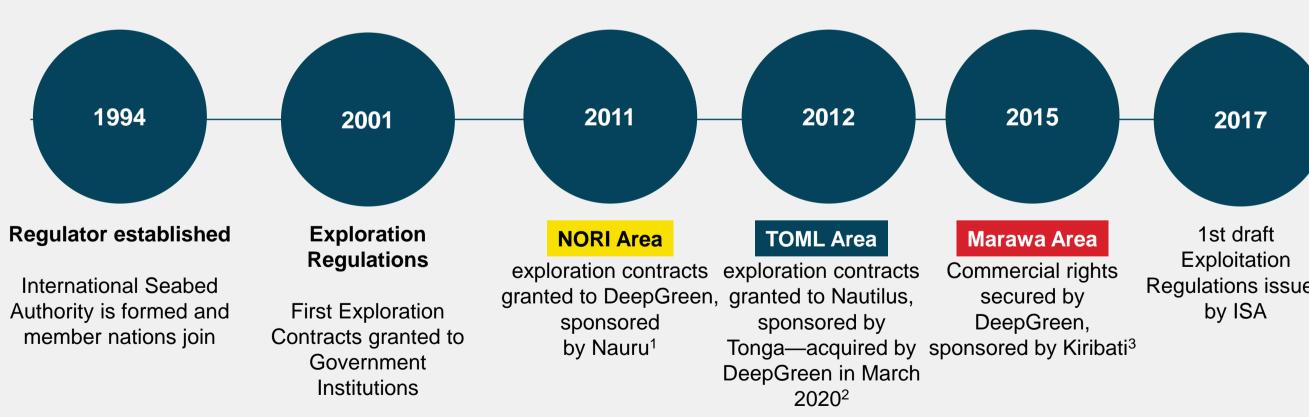
Very low biomass

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

### **Regulatory framework: Transparent regulatory** regime supported by international law.

#### Seabed resources in the high seas are governed by the International Seabed Authority (ISA)

- Autonomous international organization
- Modern regulatory regime
- Transparency & civil society engagement
- Less sovereign risk
- Royalty transparency
- Common heritage of mankind
- Focus on developing states & the environment



<sup>1</sup> NORI ISA exploration contract and NORI sponsorship agreement with Nauru.

<sup>2</sup> TOML ISA exploration contract and TOML sponsorship agreement with Tonga.

<sup>3</sup> Marawa ISA exploration contract and Marawa sponsorship agreement with Kiribati.



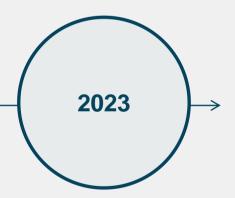
We have the required contracts to explore our resources and we are on track to secure our first production contract.

**Regulations issued** 

Final Exploitation Regulations were expected to be in place in 2020 but are delayed due to Covid-19...

2021

... The ISA has committed to completing and adopting the code on an expedited basis, with a target of July 2023 following the 2-year notice submitted by Nauru in June 2021



**Exploitation Regulations** to be adopted by the ISA

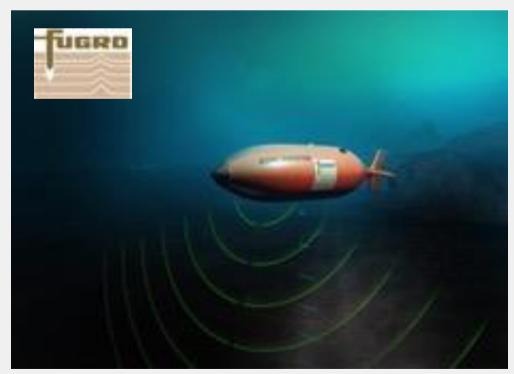
### Resource definition: easy and effective to define.

#### BOX CORE SAMPLING<sup>1</sup>



250 box cores collected<sup>2</sup> 82,000 kg (wet) nodules collected<sup>2</sup> 13,950 biological samples collected<sup>2</sup>

#### AUV CAMERA IMAGERY<sup>1</sup>

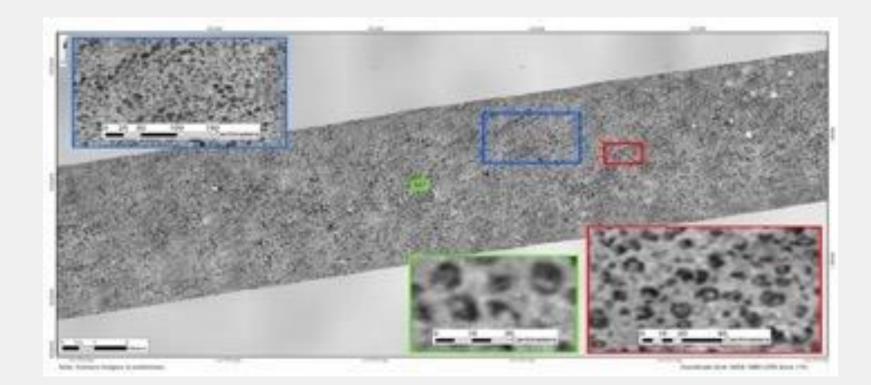


178,591 km<sup>2</sup> of high-res bathymetric survey<sup>2</sup> 5,439 km<sup>2</sup> detailed seafloor imagery<sup>2</sup>

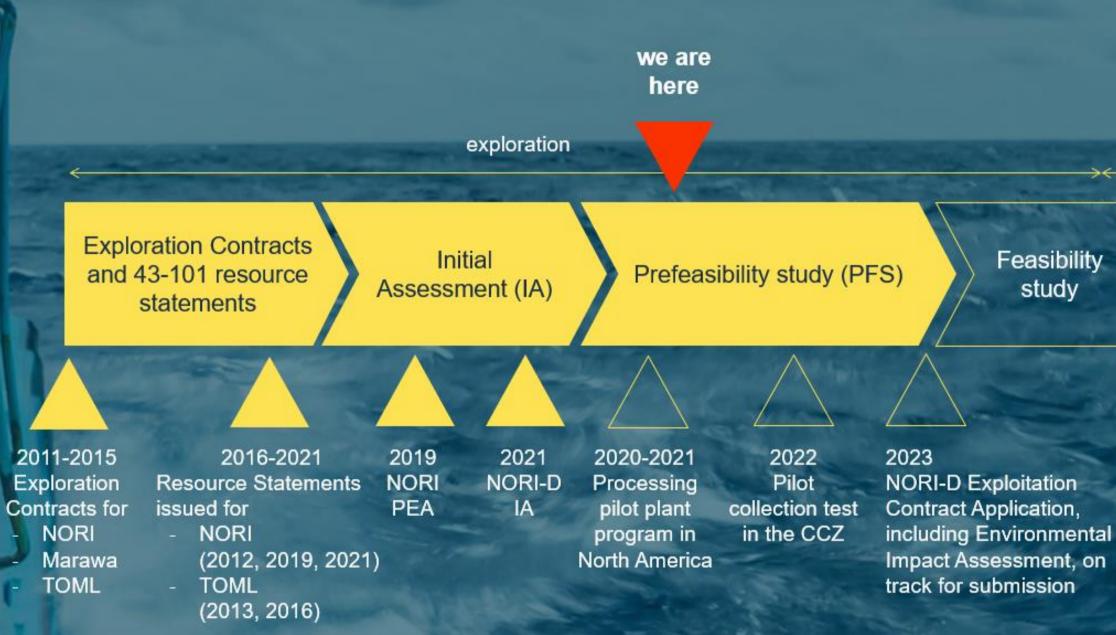
<sup>1</sup> Images from DeepGreen's resource survey offshore campaigns in NORI contract area.

<sup>2</sup> 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, 2019.



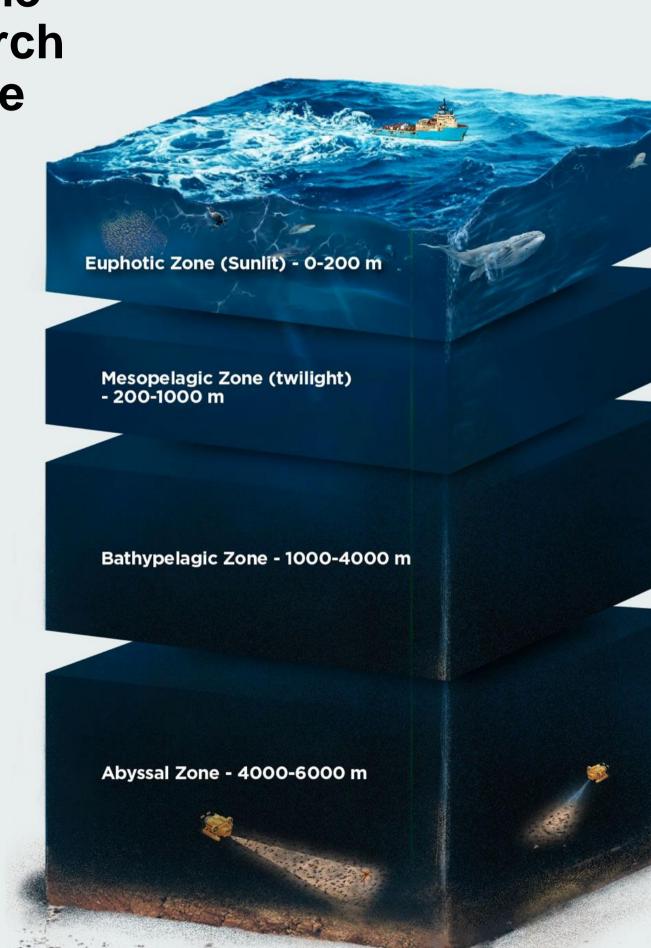


### Project development: NORI-D on track to permitting in 2023.



#### planned production

bility dy Project Zero 1.3Mt (wet) Project One: 11.3Mt (wet) 2024 2024 2030 Start small scale commercial production Steady state commercial production 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**

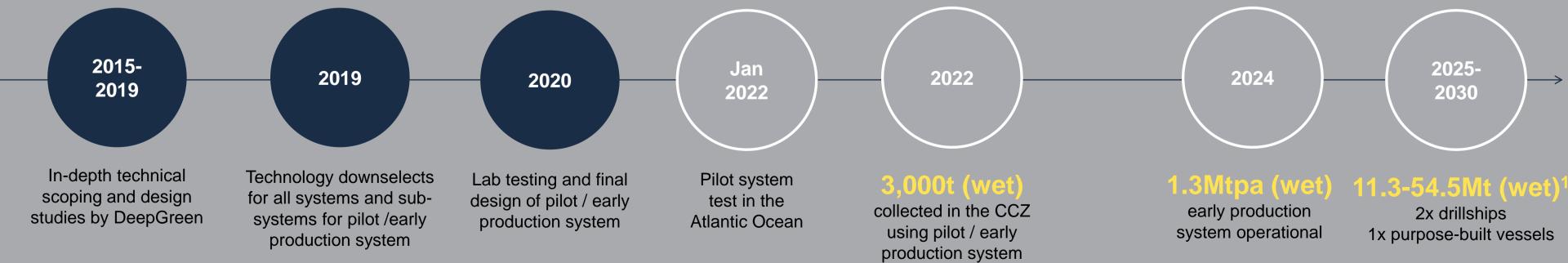
Met ocean studies Bathymetry (seabed mapping) Habitat mapping Database development Digital twin development Collector test nearfield studies Collector test far-field modeling Plume modeling Existing Resource Utilization Study Noise & Light Study Meteorology & Air Quality Study Hazard & Risk Assessment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

### **Offshore development: Progressing on track.**

Production vessel & riser: Drillship acquired by Allseas in Feb 2020 <\$50mm (\$700mm new build)

Conversion inprogress

#### **Collector robot:** Procurement of long-lead items in progress



<sup>1</sup> 11.3Mpta (wet) for NORI-D and 54.5Mpta (wet) in full field development scenario for NORI+TOML.



### 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

### Onshore development: Zero solid waste flowsheet.



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

Dual pyro / hydro process would allow for residues to be recycled to smelter

## We intend to select plant sites based on proximity to markets for by-products



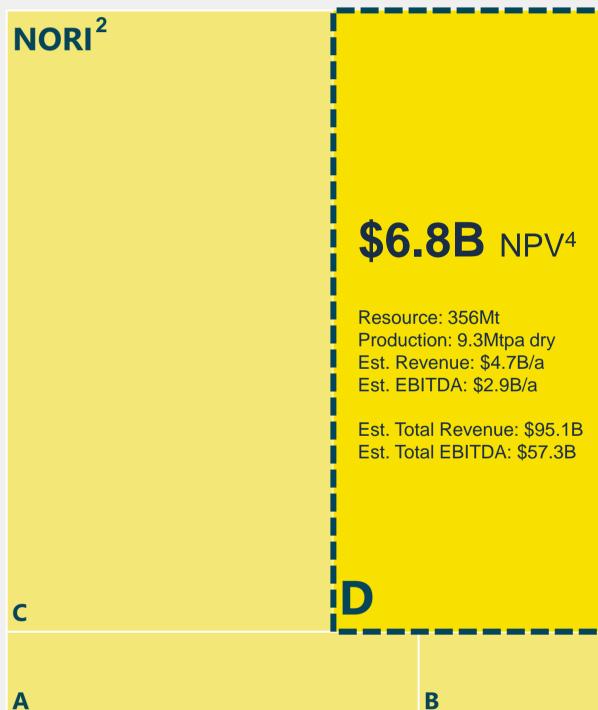
We select reagents that produce products instead of waste

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

Full portfolio<sup>1</sup> Estimated resource

### **\$31.3B** NPV<sup>4</sup>

Resource: 1.6Bt Production: 56Mtpa dry



<sup>1</sup> Canadian NI 43-101 Resource Statement for full field financial model (internal DeepGreen development scenario).

<sup>2</sup> 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.

<sup>3</sup> Canadian NI 43-101 Compliant TOML Clarion Clipperton Zone Project Mineral Resource Estimate, AMC, July 2016.

<sup>4</sup> January 1, 2021, assuming 9% discount rate.

#### **Estimated resource**

TOML <sup>3</sup>		
F		
B+E	D	С

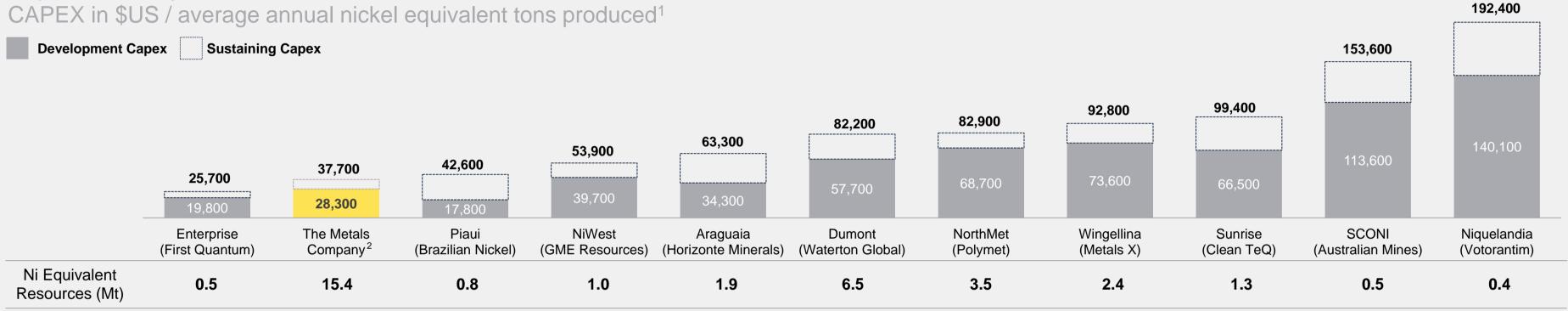
### + Additional upside

# Marawa Resource definition in progress

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

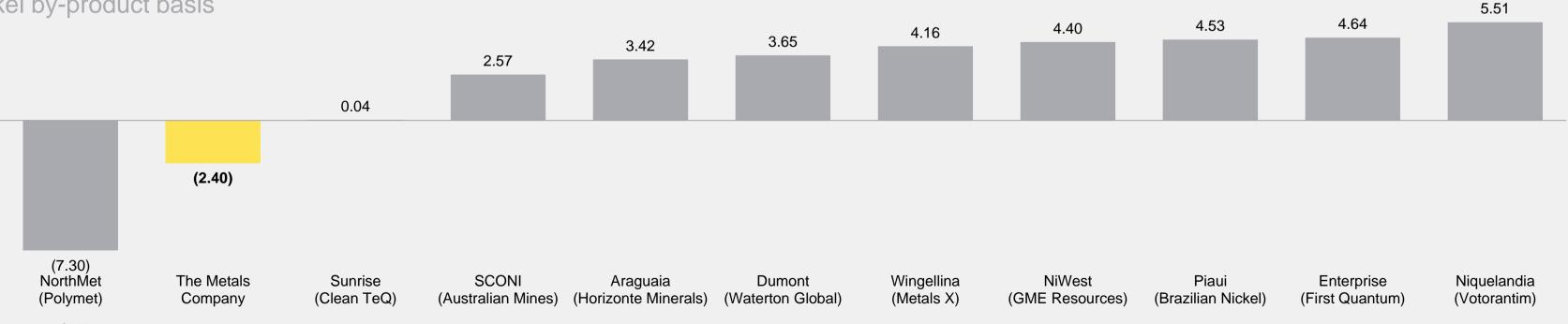
#### **Capital intensity**

CAPEX in \$US / average annual nickel equivalent tons produced<sup>1</sup>



### Unit cash costs

\$US / lb, nickel by-product basis

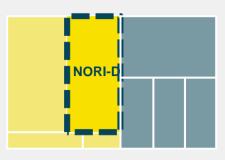


<sup>1</sup> Figures rounded to the nearest \$100.

<sup>2</sup> 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 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.



### **Greenfield vs. bluefield:** The advantages of nodule collection projects.

**Development timeline** 

from start PFS to production

#### **Capital intensity**

construction capital

Land use

Mine infrastructure

Mine development

Plant infrastructure & development

Waste management

Greenfield development Land mining

5-7 years

### ~\$60,000/t<sup>1</sup>

of nickel equivalent production capacity

Indigenous rights, community displacement and rights (water, land, forests, pollution)

Power, ports, rail, roads, water

Open pit: Overburden, terraced access Underground: Shafts & tunnel networks

Processing usually near the ore body, often requiring the construction of power, ports, rail, water, roads

### Tailings dams, or expensive dry stacking that expands land use

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. <sup>1</sup> Approximate peer group median calculated using projections out to 2040. Assumes average price of \$16,106 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.

<sup>2</sup> 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.

### **Bluefield development Nodule collection**

### **3** years

### ~\$28,000/t<sup>2</sup>

of nickel equivalent production capacity

No land use / displacement

### No fixed infrastructure

Commission equipment, deploy collector robots and riser - weeks

Once nodules are on the vessel, we can go anywhere with existing power, ports, rail, roads and water

### No solid waste to manage



the metals company

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