the metals company

annual report | 2023

Gerard Barron
Chairman & CEO

2023 Annual Report

Dear Fellow Shareholders,

Over the past 12 months, we have made a great deal of progress towards understanding the future impacts of our nodule projects, achieving several significant milestones.

The NORI-D project has seen considerable advancements this past year. Key environmental data gathered as part of our 2022 test mining campaign provided early insights into the absolute impacts of our operations on the seafloor including for sediment plumes, which are now known definitively to hug the seafloor without lofting into the water column where they could be transported great distances as had been claimed. We also began the process of publishing data from our 22 prior offshore campaigns, in what we believe is the most comprehensive dataset ever gathered in the deep-sea. This data, now stored in global repositories such as the ISA DeepData and UNESCO's OBIS database, underpins seven peer-reviewed research papers, with more expected to follow.

A comprehensive lifecycle assessment conducted by Benchmark Mineral Intelligence, underpinned by an independent third-party review, underscores our commitment to deliver a net-positive impact for the planet. This assessment detailed the comparative advantages of our NORI-D project, which was found to outperform land-based routes for producing nickel, copper and cobalt in almost every impact category analyzed versus conventional land-based metal sourcing methods. A supplementary study by Benchmark on the impacts of mining for nickel and cobalt on land-based carbon sinks further investigated the lifecycle carbon footprint of metal production by quantifying the impacts of removing forests, none of which are found on the abyssal seafloor.

Our collaboration with a consortium led by Australia's national science agency, CSIRO, to define environmental thresholds for operations is setting new standards for the industry. These efforts, coupled with our active participation in creating an ESG Handbook for Marine Minerals, reinforce our leadership in advocating for responsible environmental management practices within the marine minerals sector.

We expect NORI's exploitation application to the ISA to be the world's first application of its kind. In the year ahead, we will harness the data we have gathered over more than a decade to advance our Environmental Impact Statement (EIS), Environmental Management and Monitoring Plan (EMMP), and Social Impact Statement as we look to deliver the highest-quality application possible.

We are also encouraged by the pace of U.S. initiatives aimed at supporting domestic processing and refining of polymetallic nodules, as well as re-invigorated calls for the U.S. to ratify the Law of the Sea treaty and take advantage of Member State rights that come with the ratification. Meanwhile, two new applications for deep-sea mineral exploration have recently been submitted to the ISA by the government of India.

Finally, I would like to thank our dedicated partners and team members for their extraordinary efforts in helping us advance this important mission.

Sincerely,

Gerard Barron
Chairman & CEO

April 18, 2024

Company Highlights

Update on Application Timeline and Costs, Increased Production Capacity

In August 2023, we provided a corporate update on our expected project development timeline, production capacity and application costs for our NORI Area D Nodule Project following the recent ISA Council decisions on a roadmap to deliver final rules, regulations and procedures, also known as the Mining Code. Our wholly-owned subsidiary NORI intends to submit an application to the ISA for an exploitation contract for NORI Area D following the July 2024 meeting of the ISA. Assuming an approximate one-year review process, NORI now expects to enter commercial production near the end of the first quarter of 2026 if the application is approved. NORI and strategic partner Allseas plan for an increased production capacity for the Project Zero Offshore Nodule Collection System, using the Hidden Gem vessel, from an estimated 1.3 million wet tonnes to up to an estimated 3.0 million wet tonnes per annum, a potential increase of 130%.

TMC Subsidiary NORI Concludes Key Offshore Research Campaign, Evaluating Seafloor Ecosystem Function a Year Post Nodule Collection Test

In December 2023, we announced the completion of one of the two offshore scientific research campaigns to assess seafloor impacts and recovery rates twelve months after the pilot nodule collection system test conducted by NORI. NORI's December offshore scientific research campaign successfully gathered crucial environmental data on ecosystem recovery and functioning to further support our application for a commercial exploitation contract, and the preliminary qualitative assessments are encouraging.

NORI Shares Preliminary Findings on Environmental Impacts of Pilot Nodule Collection System Test

In November 2023, we began sharing emerging data on the impacts of seafloor sediment plumes, which show that the plume forms a gravity-driven turbidity current that hugs the contours of the seafloor and does not loft up into the water column where it could possibly be transported longer distances by ocean currents. A key component to understanding our environmental impacts, the data builds upon earlier laboratory predictions and in-field verifications from prior collector tests.

Extensive Deep-sea Environmental Data Submission to the ISA

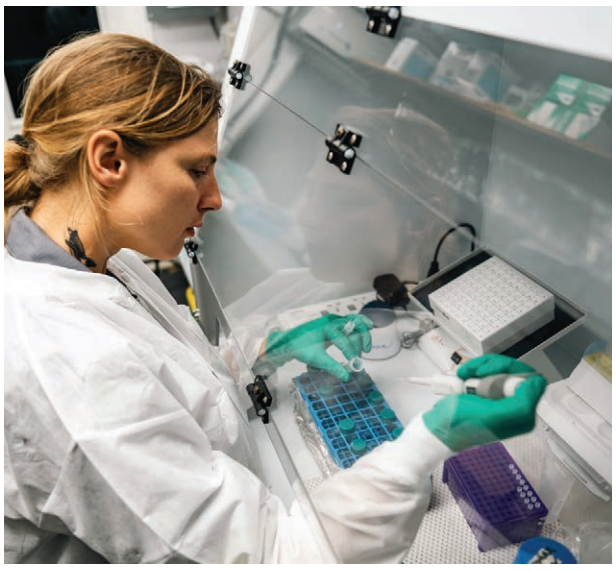
In March 2023, we announced that NORI had begun the process of submitting data collected during 17 offshore resource definition and environmental baseline campaigns in NORI Area D to the DeepData platform, an open database of contractor data managed by the ISA. Collected using a suite of high-tech equipment, the dataset submitted to the ISA includes over 1,400 biological samples from extensive boxcore and multicore sampling, and over 8,000 images analysed for benthic megafauna captured by remotely operated vehicles from two offshore campaigns. This first submission of benthic data, which includes over 270,000 occurrences, will provide a significant expansion to the biological holdings contained within the DeepData platform.

Publication of NORI Area D Data to Ocean Biodiversity Information System

In July 2023, we announced that data from two offshore environmental research campaigns conducted by NORI had been published by the ISA to the Ocean Biodiversity Information System (OBIS), the world's largest scientific knowledge base on the diversity, distribution and abundance of marine organisms. NORI is now the single largest contributor of biological occurrence data to the OBIS ISA-node, providing approximately 60% of all records. With much more data to be submitted, we expect NORI Area D will be one of the most highly characterized deep-sea areas in the region that hosts approximately 90% of all nodule exploration.

Next Phase of Adaptive Management System Development Announced

Following the delivery of a prototype Digital Twin from Kongsberg Digital in 2022 and its deployment during the collector tests in 2022, we announced in September 2023 that we had entered into the next phase of our relationship with Kongsberg Digital to further develop the Digital Twin which will integrate multiple data streams from our future production system and is designed to enable 3D visualization of our deep-sea operating environment, providing 'eyes and ears' to the regulator and stakeholders. The Digital Twin is a core component of our broader Adaptive Management System (AMS) which is designed to utilise AI and hybrid machine learning capabilities of the Digital Twin with expert analysis to ensure operations remain within environmental impact thresholds, a system with potential applications for resource operations at sea and on land.



Research

Benchmark LCA of NORI-D Project

In March 2023, we announced that leading lithium-ion battery supply chain research firm, Benchmark Mineral Intelligence ("Benchmark"), had completed an independent third-party lifecycle assessment ("LCA") of the environmental impacts of our NORI Area D project, comparing the production of key energy transition metals (nickel, cobalt and copper) from the NORI Area D project to key land-based production routes for the same metals. Benchmark's LCA shows the NORI Area D project model performed better in almost every impact category analysed than all the land-based routes chosen by Benchmark for comparison.

Benchmark Carbon Sinks Study

Forest ecosystems play a critical role in the carbon cycle, yet mining's impacts on their carbon sequestration services often goes unaccounted for in studies. In 2023, we commissioned Benchmark to address some of these gaps in information in a follow-up study by looking at mining in the top nickel and cobalt producing regions of Sulawesi, Indonesia and Katanga, DRC. When accounting for forest removal, the lifecycle global warming potential (GWP) per kilogram of nickel mined in Indonesia, Benchmark's earlier LCA would increase by between 7-49% per kilogram of Indonesian nickel (depending on production routes) and by 35% per kilogram of cobalt mined in DRC.

Industry Updates

MoUs with PAMCO to Evaluate Nodule Processing at Existing Facility

In March 2023, we announced that we had entered into a non-binding MoU with PAMCO of Japan, to evaluate the toll treatment and conversion of polymetallic nodules into battery metal feedstock at PAMCO's Hachinohe, Japan smelting facility. This announcement was followed with the signing of a binding MoU with PAMCO in November 2023 for a feasibility study to process 1.3 million tonnes of wet polymetallic nodules per year at their existing smelting facility in Hachinohe, Japan. The agreement underscores our stated capital-light strategy to get into initial commercial production swiftly and with lower upfront capital by re-using existing onshore production assets.

Sponsoring States

TMC and its subsidiaries, NORI and TOML, are supporting a range of educational and community-led initiatives in the Republic of Nauru and the Kingdom of Tonga. Some of the highlights from 2023 are shared below.

Education Programs

In 2023, NORI supported the undergraduate studies of five students through scholarships at the University of the South Pacific's Laucala Campus in Suva, Fiji. In addition to its support for Nauruan students, NORI supported a further five developing state students in their studies at USP as part of its obligations as an ISA contractor, as well as one offshore traineeship.

In Tonga, TOML supported the undergraduate studies of seven Tongan students through scholarships at the University of the South Pacific's Laucala Campus in Suva, Fiji. In addition to its support for Tongan students, TOML supported a further four developing state students in their studies at USP as part of its obligations as an ISA contractor, as well as one offshore traineeship. TOML also provides secondary school scholarships in Tonga, supporting 16 students in 2023.

News & Reports

Thirty-One Members of the U.S. Congress Call Upon Pentagon to Develop Plan for Processing Deep-Sea Polymetallic Nodules

In December 2023, we welcomed a letter by thirty-one Members of the U.S. House of Representatives calling upon the U.S. Department of Defense to address the national security implications of deep-sea nodule collection as part of its mandate to ensure the stability and strength of critical minerals used for defense and clean energy technologies like batteries and renewable energy infrastructure.

Mining.com – NORI and TOML Ranked as World's Two Largest Nickel Projects For Second Year Running.

In May 2023, Mining.com ranked the NORI and TOML projects as the world's two largest nickel projects, with more contained nickel than any other nickel development project on the planet.

The Economist – Deep-sea mining may soon ease the world's battery-metal shortage

In a new analysis of the nodule industry, The Economist compared the environmental impacts of sourcing nickel from the rainforests of Indonesia to those of collecting polymetallic nodules from the abyssal zone of the Clarion Clipperton Zone in the Pacific Ocean. As the paper's subhead reads: "taking nickel from rainforests destroys 30 times more life than getting it from the depths."

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2023

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from_____to

Commission file number: 001-39281

TMC THE METALS COMPANY INC.

(Exact name of registrant as specified in its charter)

British Columbia, Canada	**Not Applicable**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
595 Howe Street, 10th Floor Vancouver, British Columbia	**V6C 2T5**
(Address of principal executive offices)	*(Zip Code)*

(574) 252-9333
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Exchange Act:

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Common Shares, without par value	TMC	The Nasdaq Stock Market LLC
Redeemable warrants, each whole warrant exercisable for one Common Share, each at an exercise price of $11.50 per share	TMCWW	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Exchange Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer ☒	Smaller reporting company ☒
	Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☒

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the registrant's voting and non-voting common stock held by non-affiliates of the registrant (without admitting that any person whose shares are not included in such calculation is an affiliate) computed by reference to the price at which the common shares were last sold as of the last business day of the registrant's most recently completed second fiscal quarter was $274,979,313.

As of March 22, 2024, the registrant had 318,249,878 common shares outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement in connection with the registrant's annual meeting of shareholders, scheduled to be held on May 30, 2024, are incorporated by reference in Part III of this report. Except as expressly incorporated by reference, such proxy statement shall not be deemed to be part of this report.

TABLE OF CONTENTS

In this Annual Report on form 10-K ("Annual Report"), the terms "we," "us," "our," "Company" and "TMC" mean TMC the metals company Inc. (formerly Sustainable Opportunities Acquisition Corp.) and our subsidiaries. On September 9, 2021 (the "Closing Date"), Sustainable Opportunities Acquisition Corp. ("SOAC" and after the Business Combination described herein, the "Company") consummated a business combination (the "Business Combination") pursuant to the terms of the business combination agreement dated as of March 4, 2021 (the "Business Combination Agreement") by and among SOAC, 1291924 B.C. Unlimited Liability Company, an unlimited liability company existing under the laws of British Columbia, Canada ("NewCo Sub"), and DeepGreen Metals Inc., a company existing under the laws of British Columbia, Canada ("DeepGreen") under which SOAC acquired DeepGreen and its business. In connection with the Business Combination, SOAC changed its name to "TMC the metals company Inc." ("TMC"). The combined company's common shares and warrants to purchase common shares commenced trading on the Nasdaq Global Select Market ("Nasdaq") on September 10, 2021, under the symbols "TMC" and "TMCWW," respectively.

As used in this Annual Report, "Mtpa" refers to millions of tonnes per year, "ktpa" refers to thousands of tonnes per year, "dmtu" refers to dry metric tonne unit, TWh" refers to trillion-watt hours, "CO_2e" refers to metric tonnes of carbon dioxide emissions and "w/w" refers to weight for weight.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that relate to future events, our future operations or financial performance, or our plans, strategies and prospects. These statements are based on the beliefs and assumptions of our management team. Although we believe that our plans, intentions and expectations reflected in or suggested by these forward-looking statements are reasonable, we cannot assure that we will achieve or realize these plans, intentions or expectations. Forward-looking statements are inherently subject to risks, uncertainties and assumptions. Generally, statements that are not historical facts, including statements concerning possible or assumed future actions, business strategies, events or performance, are forward-looking statements. These statements may be preceded by, followed by or include the words "believes," "estimates," "expects," "projects," "forecasts," "may," "will," "should," "seeks," "plans," "scheduled," "anticipates" or "intends" or the negative of these terms, or other comparable terminology intended to identify statements about the future, although not all forward-looking statements contain these identifying words. The forward-looking statements are based on projections prepared by, and are the responsibility of, the Company's management. Forward-looking statements contained in this Annual Report include, but are not limited to, statements about:

- the commercial and technical feasibility of seafloor polymetallic nodule collection and processing;
- our and our partners' development and operational plans, including with respect to the planned uses of polymetallic nodules, where and how nodules will be obtained and processed, the expected environmental, social and governance impacts thereof and our plans to assess these impacts and the timing and scope of these plans, including the timing and expectations with respect to our receipt of exploitation contracts and our commercialization plans;
- the supply and demand for battery metals and battery cathode feedstocks, copper cathode and manganese ores;
- the future prices of battery metals and battery cathode feedstocks, copper cathode and manganese ores;
- the timing and content of International Seabed Authority's ("ISA") final exploitation regulations that will create the legal and technical framework for exploitation of polymetallic nodules in the Clarion Clipperton Zone of the Pacific Ocean ("CCZ");
- government regulation of mineral extraction from the deep seafloor and changes in mining laws and regulations;
- technical, operational, environmental, social and governance risks of developing and deploying equipment to collect and ship polymetallic nodules at sea, and to process such nodules on land;
- the sources and timing of potential revenue as well as the timing and amount of estimated future production, costs of production, other expenses, capital expenditures and requirements for additional capital;

- cash flow provided by operating activities;
- the expected activities of our partners under our key strategic relationships;
- the sufficiency of our cash on hand to meet our working capital and capital expenditure requirements, the need for additional financing and our ability to continue as a going concern;
- our ability to raise financing in the future, the nature of any such financing and our plans with respect thereto;
- any litigation to which we are a party;
- claims and limitations on insurance coverage;
- our plans to mitigate our material weaknesses in our internal control over financial reporting;
- geological, metallurgical and geotechnical studies and opinions;
- mineral resource estimates, and our ability to define and declare reserve estimates;
- our status as an emerging growth company, non-reporting Canadian issuer and passive foreign investment company ("PFIC");
- the impact of pandemics on our business; and
- our financial performance.

These forward-looking statements are based on information available as of the date of this Annual Report, and current expectations, forecasts and assumptions, and involve a number of judgments, risks and uncertainties. Important factors could cause actual results, performance or achievements to differ materially from those indicated or implied by forward-looking statements such as those described under the caption "Risk Factors" in Item 1A of Part I of this Annual Report and in other filings that we make with the Securities and Exchange Commission ("SEC"). The risks described under the heading "Risk Factors" are not exhaustive. New risk factors emerge from time to time, and it is not possible to predict all such risk factors, nor can we assess the impact of all such risk factors on our business or the extent to which any factor or combination of factors may cause actual results to differ materially from those contained in any forward-looking statements. Forward-looking statements are not guarantees of performance. You should not put undue reliance on these statements, which speak only as of the date hereof. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the foregoing cautionary statements. We undertake no obligations to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

PART I

Item 1. BUSINESS

Overview

We are a deep-sea minerals exploration company focused on the collection, processing and refining of polymetallic nodules found on the seafloor in international waters of the Clarion Clipperton Zone ("CCZ"), about 1,300 nautical miles (1,500 miles or 2,400 kilometers) south-west of San Diego, California. The CCZ is a geological submarine fracture zone of abyssal plains and other formations in the Eastern Pacific Ocean, with a length of around 7,240 kilometers (4,500 miles) that spans approximately 4,500,000 square kilometers (1,700,000 square miles). Polymetallic nodules are discrete rocks that sit unattached to the seafloor, occur in significant quantities in the CCZ and have high concentrations of nickel, manganese, cobalt and copper in a single rock.

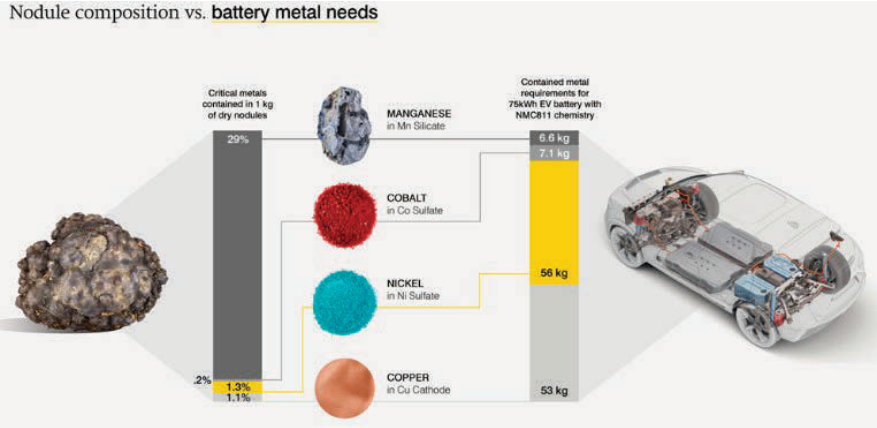
These four metals contained in the polymetallic nodules are critical for the transition to low carbon energy. Our resource definition work to date shows that nodules in our contract areas represent the world's largest estimated undeveloped source of critical battery metals. If we are able to collect polymetallic nodules from the seafloor on a commercial scale, we plan to use such nodules to produce three types of metal products: (i) feedstock for battery cathode precursors (nickel and cobalt sulfates, or intermediary nickel-copper-cobalt matte, or nickel-copper-cobalt alloy) for electric vehicles ("EV") and renewable energy storage markets, (ii) copper cathode for EV wiring, energy transmission and other applications, and (iii) manganese silicate for manganese alloy production required for steel production. Our mission is to build a carefully managed, shared stock of metal (a "metal commons") that can be used, recovered and reused for generations to come. Significant quantities of newly mined metal are required because existing metal stocks are insufficient to meet rapidly rising demand.

Exploration and exploitation of seabed minerals in international waters is regulated by the International Seabed Authority ("ISA"), an intergovernmental organization established pursuant to the 1994 Agreement Relating to the Implementation of the United Nations Convention on the Law of the Sea ("UNCLOS"). The ISA grants contracts to sovereign states or to private contractors who are sponsored by a sovereign state. The ISA requires that a contractor obtain and maintain sponsorship by a host nation that is a member of the ISA and signatory to UNCLOS, and that such nation maintains effective supervision and regulatory control over such sponsored contractor. The ISA has issued a total of 19 polymetallic nodule exploration contracts covering approximately 1.28 million square kilometers, or 0.4% of the global seafloor, 17 of which are in the CCZ. We hold exclusive exploration and commercial rights to three of the 17 polymetallic nodule contract areas in the CCZ through our subsidiaries Nauru Ocean Resources Inc. ("NORI") and Tonga Offshore Mining Limited ("TOML"), sponsored by the Republic of Nauru ("Nauru") and the Kingdom of Tonga ("Tonga"), respectively, and exclusive commercial rights through our wholly-owned subsidiary, DeepGreen Engineering Pte. Ltd.'s ("DGE"), arrangement with Marawa Research and Exploration Limited ("Marawa"), a company owned and sponsored by the Republic of Kiribati ("Kiribati").

We are still in the exploration phase and have not yet obtained any exploitation contracts from the ISA to commence commercial scale polymetallic nodule collection in the CCZ. Additionally, we do not have the applicable environmental and/or other permits required to build and operate commercial-scale polymetallic nodule processing and refining plants on land.

Polymetallic Nodules

Deep-sea polymetallic nodules form on and just below the sediment-covered seafloor of the abyssal plains. These nodules contain significant amounts of metals, and their unique characteristic compared to terrestrial deposits is the presence of the four critical metals, nickel, copper, cobalt and manganese, in one deposit.



Source: TMC inaugural Impact Report 2021, filed May 2022

Additionally, polymetallic nodules in the CCZ possess the following characteristics:

Characteristic	What it means
Far removed from human communities	No need for social displacement
No vegetation or other obstructions covering access to nodules	No need to remove overburden, no rock cutting or blasting
Unbound to the seafloor, 90% of nodule mass in the top 5 cm of seafloor	No need for destructive rock cutting and excavation
High grades of four critical metals in a single ore	Less mass to process compared to land ores
Low head-grade variability	Potentially easy to process
2-10 cm diameter	Potentially easy to handle
Microporous	Potentially easy to smelt
Very low concentrations of certain hazardous elements like arsenic, antimony and mercury	Potential to productize almost 100% of nodule mass and design a metallurgical flowsheet that generates no tailings and leaves almost no solid waste streams behind

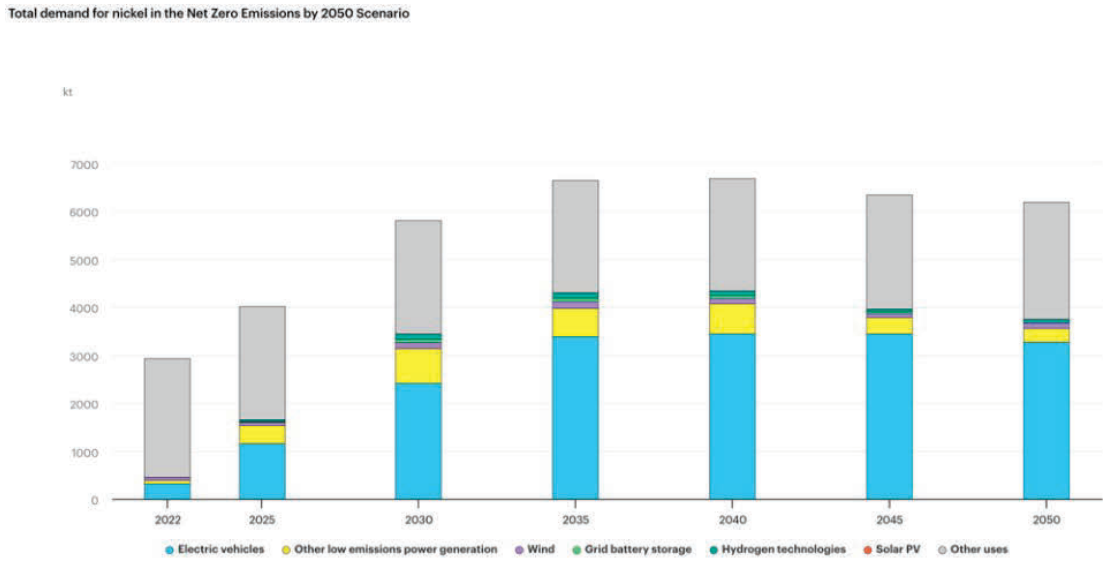
The above characteristics of polymetallic nodules may provide an opportunity to compress lifecycle environmental and social impacts of producing critical metals as compared to land ores. In order to extract nickel, copper, cobalt and manganese from land ores, at least three different types of ores would need to be excavated. Mine development often involves social displacement and impacts on Indigenous people as well as deforestation, destruction of carbon sinks and biodiversity loss. In addition, several times more mass would need to be processed, often requiring significant amounts of local water resources; mining and processing tailings which can be toxic and need to be managed indefinitely in tailings dams, using dry-stacking or a practice known as deep-sea tailings placement (DSTP). Furthermore, metal production from land ores can release several toxic streams into the surrounding environment which can negatively impact the health of local communities and ecosystems. We believe using nodules to produce critical metals can help reduce several of these impacts associated with mining land ores. If our nodules are to be processed and refined in the United States ("U.S."), we can also compress the current supply chain that some materials need to travel before reaching the U.S. of 50,000 miles down to 1,500 miles, while reducing dependency on China which dominates refining for battery metals such as nickel, cobalt and manganese.

Market Opportunity

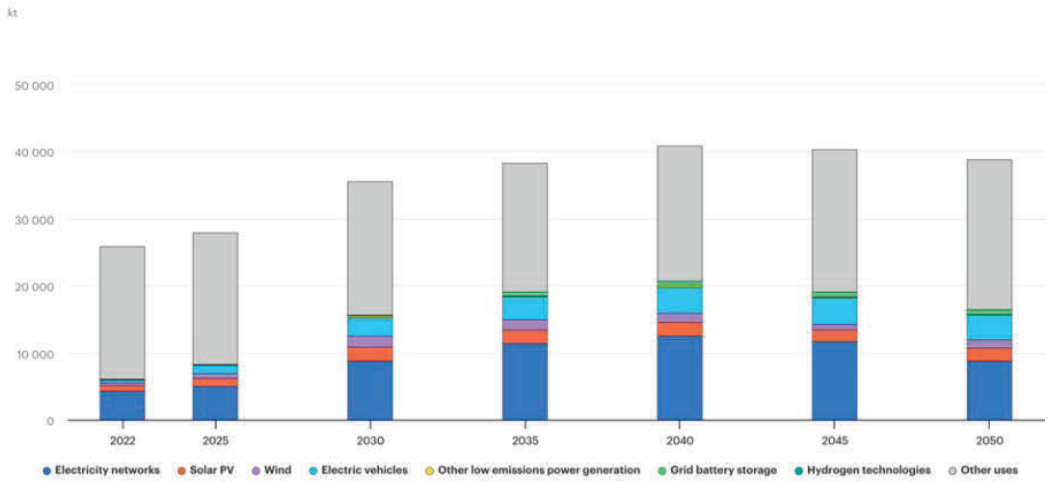
A 2021 study by the International Energy Agency shows that the production of energy transition minerals could increase by 600% by 2040 to meet the growing demand for low-carbon energy technologies required to keep global warming at 1.5°C. Given the wide range of environmental and social impacts associated with conventional land-based mining, we believe it is important to ensure that these large amounts of critical metals are sourced with the lowest environmental, social, and economic impacts possible. As the global supply of high-grade ore remains limited and metal demand increases, we can expect a larger environmental and social footprint, potential supply shortages and volatility in metal prices should land-based ores remain the only viable source of critical metals.

Industries which represent an end-use segment that may require all four critical metals contained in nodules (e.g. EVs) are of particular interest to us and represent potential market opportunities. Nodules contain metals that can be employed as: (i) feedstock for battery cathode precursors (nickel, cobalt and manganese sulfates) for EV and renewable energy storage markets, (ii) copper cathode for EV wiring, energy transmission and other applications, and (iii) manganese silicate for manganese alloy production required for steel production. See Section – *Competitive Strengths*. While end-uses driven by the energy transition represent a small fraction of the total use of the four metals contained in polymetallic nodules today, we believe that the relative use of these four metals by EV's and other energy transition is set to increase significantly over the next decades.

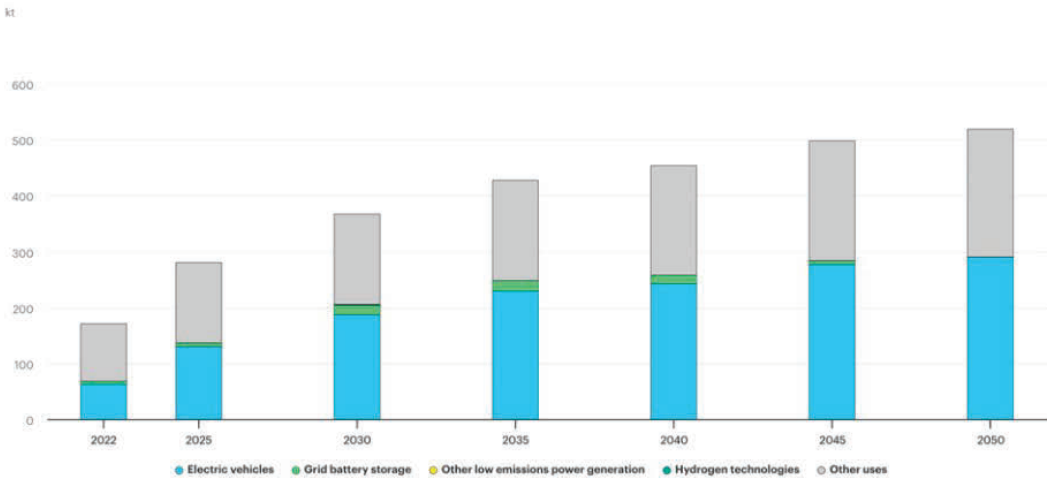
The below charts published by the International Energy Agency show increasing global demand by end-use application for nickel, cobalt, copper and manganese, under the scenario that net zero emissions is achieved by 2050. The International Energy Agency provides global demand projections for 37 critical minerals needed for clean energy transitions across various target and technology scenarios.

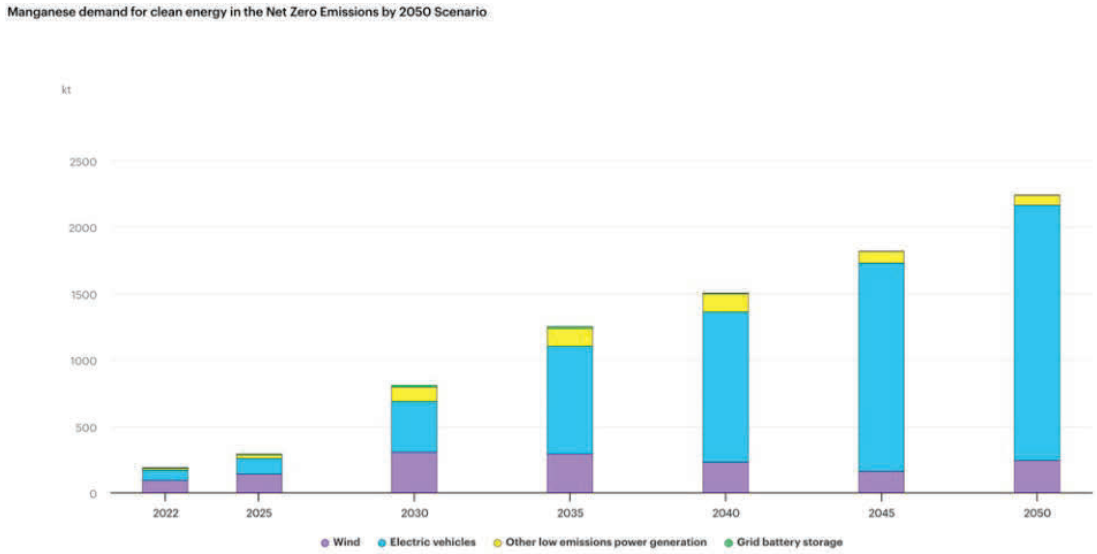


Total demand for copper in the Net Zero Emissions by 2050 Scenario



Total demand for cobalt in the Net Zero Emissions by 2050 Scenario

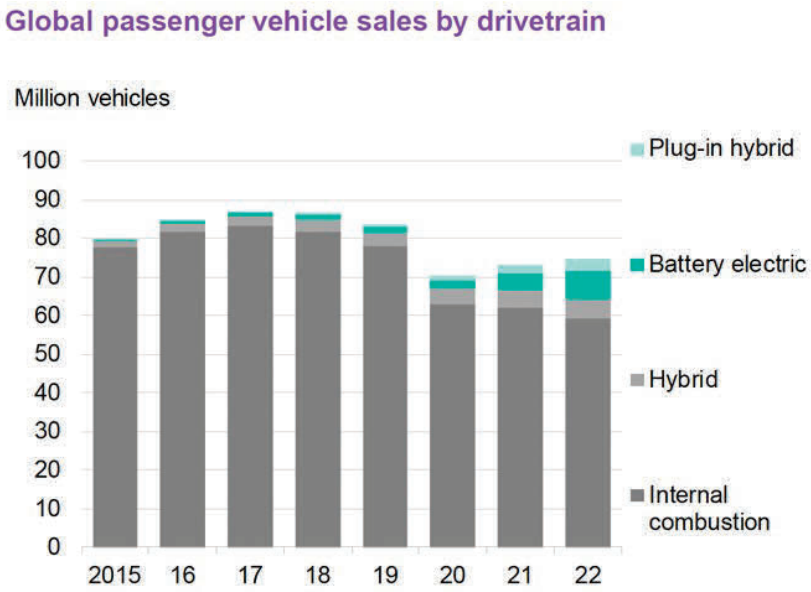




Source: IEA Critical Minerals Market Review 2023

Battery Metals and EV Market Opportunity Global

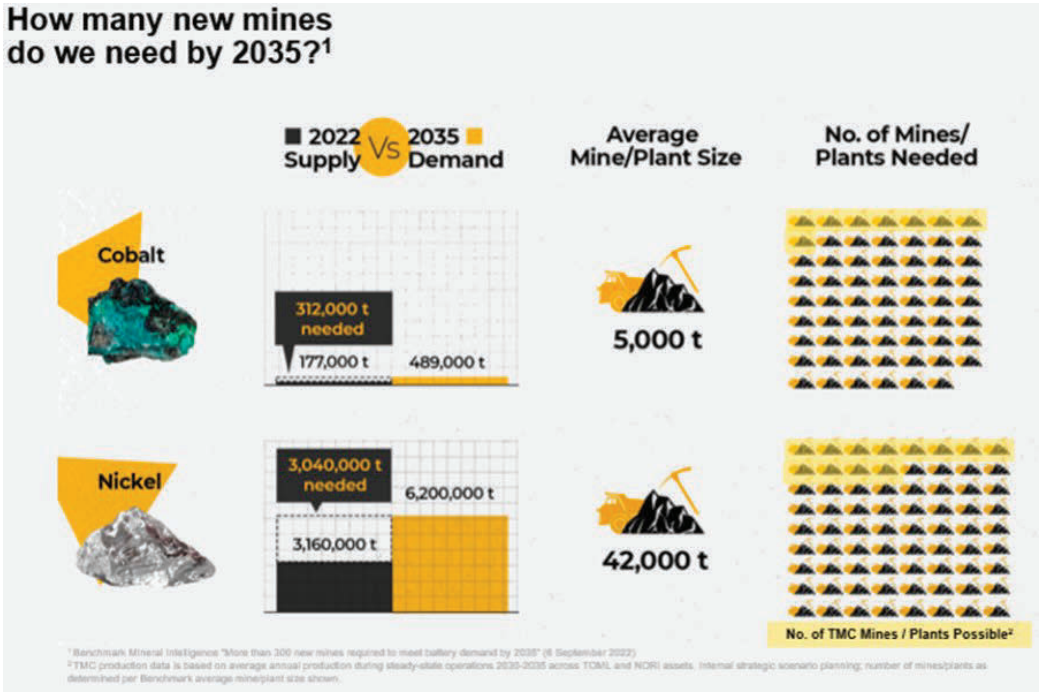
We believe the world is at the very beginning of a multi-decade electrification of road transportation. According to Bloomberg New Energy Finance (BNEF), at the end of 2023, the global fleet of four-wheeled vehicles including cars, vans, trucks, and buses numbered 1.57 billion (up 2.1% from 2022) and only 41 million passenger cars, or less than 3%, were electric. However, the new sales of internal combustion cars have decreased since 2017 as sales of battery electric and plug-in hybrids vehicles have increased and accounted for over 15% of global passenger vehicle sales in 2023. By 2030, automakers have collectively committed to sell 47 million EVs a year, a commitment that represents more than tripling of current sales levels.

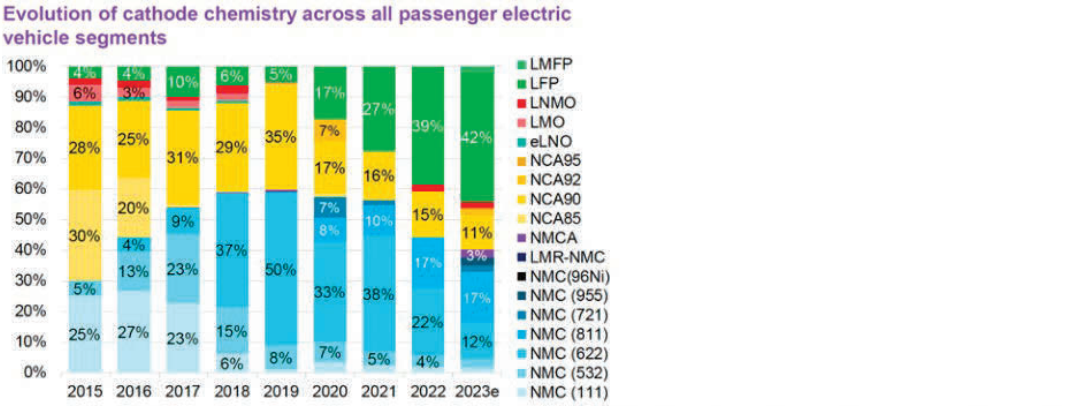


Source: BloombergNEF

The electrification of global road transportation is underpinned by the rapid expansion of the battery manufacturing capacity, which started accelerating since 2020 and is expected to reach 8TWh by 2040.

Battery chemistries that require metals contained in CCZ polymetallic nodules, nickel, cobalt and manganese, deliver high energy densities and are typically deployed in vehicles requiring long range (e.g., luxury and upmarket passenger cars) and power (trucks). In 2023, these battery chemistries accounted for 58% of overall battery manufacturing, which represented only a small portion of the overall use of nickel (~12% of nickel demand) and manganese (<1% of manganese demand). In addition, the use of batteries with different chemistries has changed over time, and we expect demand for the four metals found in polymetallic nodules to increase as the demand for batteries with certain chemistries increases.





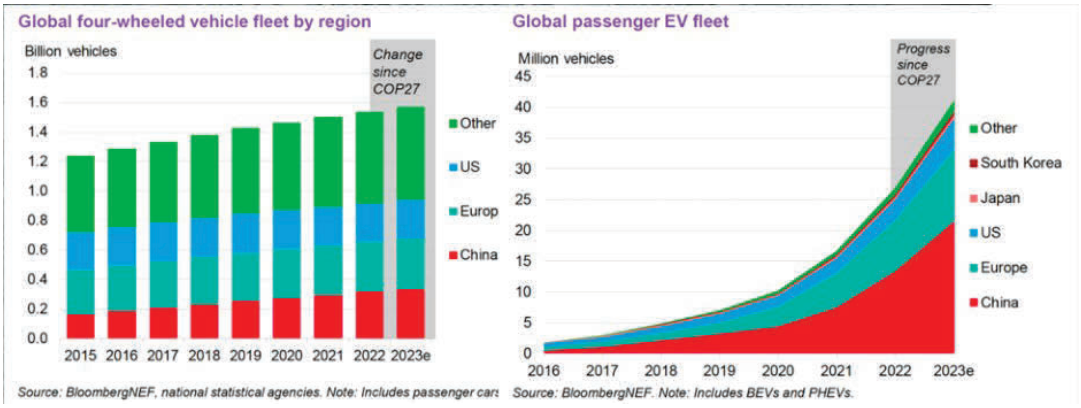
Source: BloombergNEF. Note: LMFP = lithium manganese iron phosphate; LFP = lithium iron phosphate; LNMO = lithium nickel manganese oxide; LMO = lithium manganese oxide; LNO = lithium nickel oxide; NCA = nickel cobalt aluminum oxide; NMCA = nickel manganese cobalt aluminum oxide; LMR = lithium- and manganese- rich; NMC = nickel manganese cobalt oxide.

We believe there will be continued growth in EV demand, with many countries committing to phasing out cars that burn fossil fuels and many original equipment manufacturers ("OEMs") devoting significant resources to the electrification of their vehicle offerings. In 2023, the number of signatories to the Zero Emission Vehicle declaration announced at the UN Climate Change Conference (COP28) increased to 228; the declaration is aimed at accelerating the transition to zero emission vehicles with a goal to reach 100% new EV car and van sales by 2040, and by 2035 in leading markets. In the U.S., 23 states, plus the District of Columbia and Puerto Rico, have set 100% decarbonized energy goals by 2050 or sooner, with the Biden administration seeking to make half of all new vehicles sold in the U.S. zero-emissions vehicles by 2030. We believe the transition to low carbon energy and EVs will test the limits of the current supply of certain metals, as EVs require several times more of these metals (such as nickel, cobalt and copper) than cars with internal combustion engines. Following price surges in 2022 in anticipation of a period of increased demand, an oversupply of nickel largely produced in

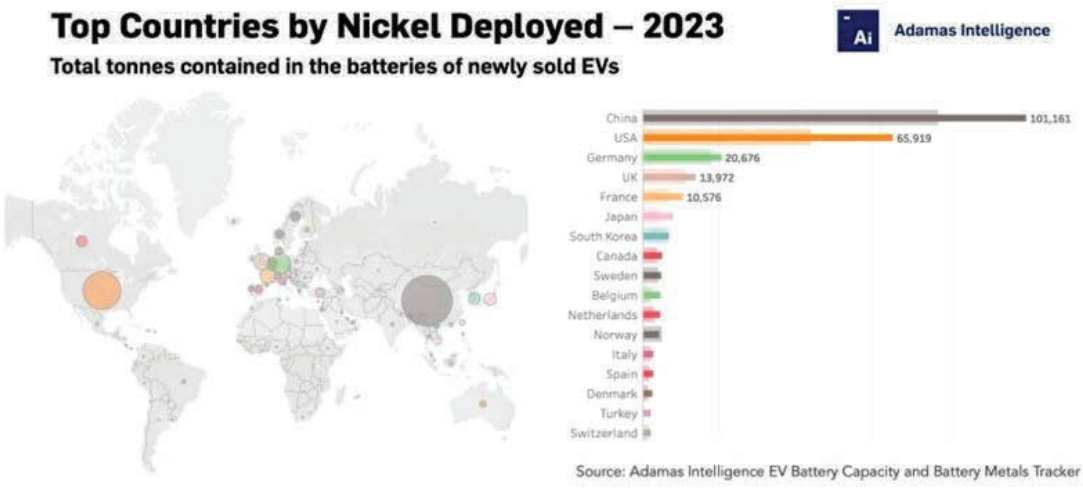
Indonesia has driven down prices of the metals. These surpluses, however, could be temporary and we believe potential shortages in nickel and cobalt supply could return in the 2027/2028 timeframe, subject to developments in Indonesia and responses by the U.S. and the European Union where regulators could impose measures to differentiate between sources of metal based on the environmental and social impacts of these sources. Since prices of these metals have declined, investments by Western countries have declined and some of these interests have stopped mining/production of these metals altogether. It should be noted that current metal prices as of the date of this report are similar to projections used in the initial assessment from March 2021 for the NORI Area D project.

Battery Metals and EV Market Opportunity in the U.S.

Although the total fleet of four-wheeled vehicles in the U.S. (267 million or 17% of global) is roughly comparable in size to that of China (361 million or 23% of global), the U.S. EV fleet is three times smaller in relative terms than that of China (5.1 million EVs or 2% of national fleet vs. 22 million EVs in China or 6% of national fleet).

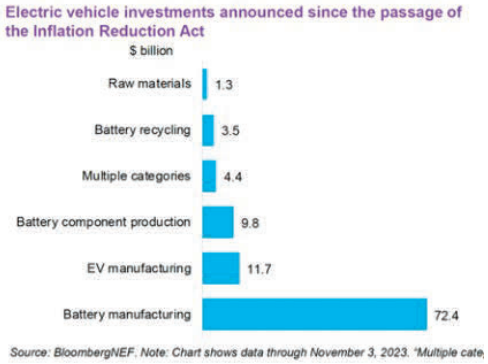


Based on 2023 data, the U.S. is the second largest consumer of battery nickel based on EV end-use. We expect this use to grow significantly in the coming years.



In August 2021, the U.S. government announced a target of 50% EV sales by 2030 and in August of 2022, the U.S. Congress enacted the Inflation Reduction Act of 2022 (“IRA”) which included incentivizing EV adoption and domestic production of clean vehicle

critical mineral and battery components. These announcements resulted in industry commitments to build battery cell manufacturing gigafactories, which would represent approximately 1.3TWh of aggregate capacity across North America, according to Benchmark Minerals Intelligence ("Benchmark"). While the IRA has helped attract over US$100 billion in EV value chain investments, less than 1.3% of the total is being invested in the sourcing of raw materials.



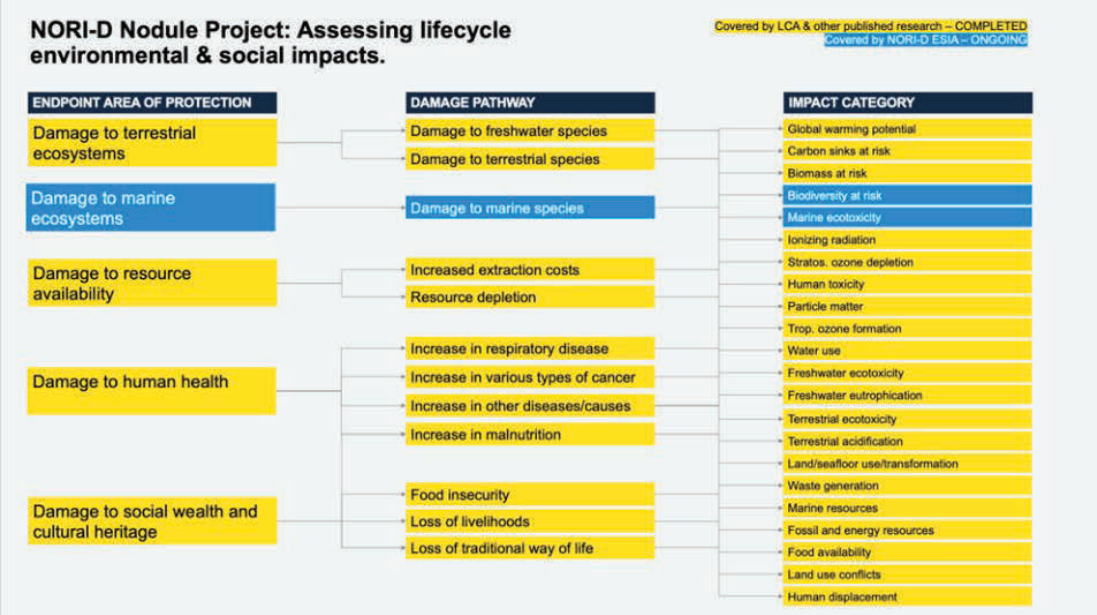
In June 2021, the Biden administration's 100-Day Review of Critical Minerals Supply Chains estimated that fully electrifying U.S. car sales would require 1,273ktpa of Class 1 nickel, 160ktpa of cobalt and 148ktpa of manganese, compared with existing U.S. primary production of 18ktpa of nickel, 0.6ktpa of cobalt, and zero primary production of manganese. Across our NORI and TOML contract areas, we have estimated resources of 15.9Mt of nickel, 2.2Mt of cobalt and 355Mt of manganese plus 13.3Mt of copper, with the potential to take the U.S. from zero or de minimis production of those metals, which comprise the metals used in the most prominent battery cathode (NMC) in 2023 to near self-sufficiency or potentially a net export position in each. In September 2023, nine U.S. House of Representatives members wrote to the Secretary of Defense, Lloyd Austin, noting that the United States has "an opportunity to evaluate domestic processing and refining of seafloor resources from contracts held by allied parties in international waters," and urging the Department of Defense to "assess polymetallic nodules as a viable resource to secure critical minerals and close national security vulnerabilities." In December 2023, 31 U.S. House of Representatives members wrote to the Secretary of Defense, Lloyd Austin, emphasizing "the importance of evaluating and planning for seabed mining as a new vector of competition with China for resource superiority and security." Additional letters from five members of the Texas House delegation as well as Senator Cornyn were written to the Department of Defense in support of our U.S. subsidiary DeepGreen Resources' application to the Defense Production Act Title III program for support with a site-specific feasibility study for its planned full-scale processing plant.

Also in December of 2023, the U.S. National Defense Authorization Act (NDAA) was signed into law for fiscal year 2024 including a provision on 'Critical and Strategic Minerals and Materials Sourcing from Seafloor Resources.' In this provision, the House Armed Services Committee (HASC) directed the Assistant Secretary of Defense for Industrial Base Policy to, by March 2024, submit a report to the HASC assessing the processing of seabed resources of polymetallic nodules domestically. Although not yet submitted, the report shall include, at a minimum, the following: (1) a review of current resources and controlling parties in securing seabed resources of polymetallic nodules; (2) an assessment of current domestic deep-sea mining and material processing capabilities; and (3) a roadmap recommending how the U.S. can have the ability to source and/or process critical minerals in innovative arenas, such as deep-sea mining, to decrease reliance on sources from foreign adversaries and bolster domestic competencies. We believe the continued focus by the U.S. government may increase our opportunities to develop operations in the U.S.

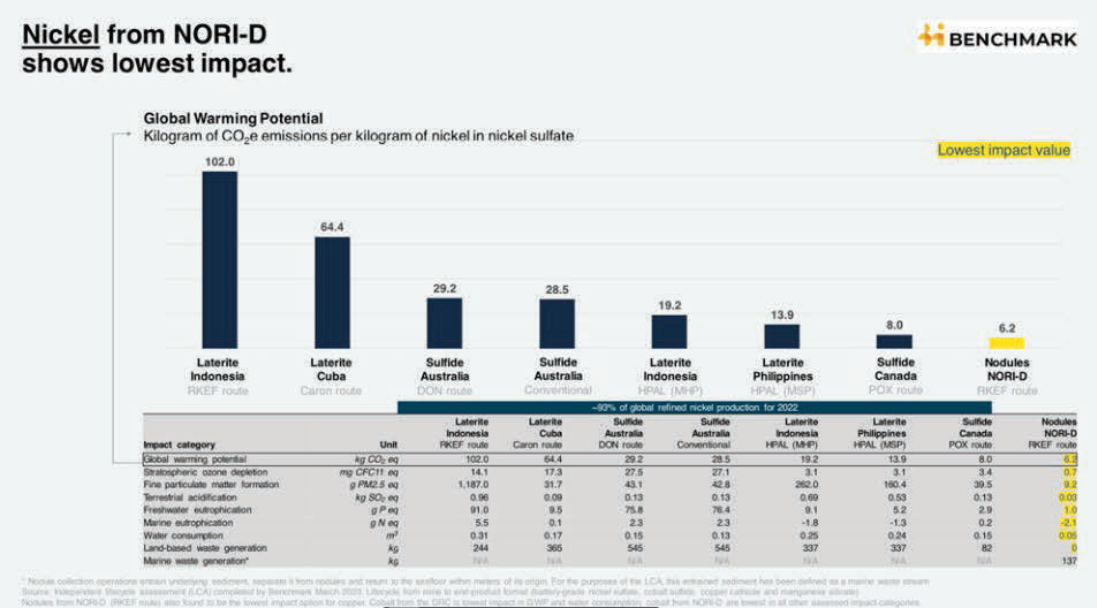
Environmental Market Opportunity

All nickel, cobalt, copper and manganese going into EVs today are produced from land-based ores or recycled metal stock. Existing metal stocks available for recycling are insufficient to meet current demand. Even with high end-of-life product recycling rates, most of the new demand over the coming decades will have to be met by new mining. We believe the land mining sector is fundamentally challenged: ore grades are falling, production is moving to some of the more biodiverse and conflict-laden regions in the world (such as the Democratic Republic of the Congo, Indonesia, Philippines and South Africa), accessing ore bodies often requires a complete removal of ecosystems situated on and above such orebodies, and removing, breaking or tunneling through significant tonnage of waste rock. Toxic levels of heavy elements often found in land orebodies typically need to be removed, stored, and maintained indefinitely; a real challenge on seismically active and wet tropical islands in countries like Indonesia that accounts for most of the growth in nickel supply.

As a result of a vigorous campaign by several non-governmental organizations, some participants in the EV supply chain have called for a general moratorium on all forms of deep seabed mining until there is more knowledge about marine impacts of nodule collection operations. While our Environmental & Social Impact Assessment (ESIA) for offshore nodule collection segment of the NORI Area D Nodule Project is still ongoing, based on already completed research into lifecycle impacts of battery metal production specifically from deep-sea polymetallic nodules, we identified how nodules can potentially provide an opportunity to significantly compress most lifecycle environmental, social and governance (ESG) impacts associated with conventional metal production from land-based ores.



To quantify environmental footprints of metal production from nodules as compared to conventional land ores, we commissioned several lifecycle assessments ("LCAs") looking at the cradle-to-gate impacts of producing nickel, copper, cobalt and manganese products from polymetallic nodules and how it compares to land-based routes. An LCA white paper examining a comprehensive set of impacts was commissioned by us and co-authored by certain of our executive officers in 2018 and reviewed by subject matter specialists and published on our website in April 2020; an LCA research paper focusing on climate change impacts was peer-reviewed and published in the Elsevier Journal of Cleaner Production in December 2020, an LCA research paper focusing on solid waste streams was peer-reviewed and published in the Yale Journal of Industrial Ecology in January 2022 and an independent LCA compliant with the International Organization for Standardization Standard 14040 on our NORI Area D project was conducted by Benchmark and released in March 2023. Based on these LCA assessments that we commissioned, we believe that we are positioned to become one of the lowest ESG footprint metal companies in the industry. The March 2023 LCA by Benchmark shows that the NORI Area D project model performed better in each impact category analyzed than all the land-based processing routes chosen for comparison, except for the global warming potential ("GWP") and water consumption of producing cobalt sulfate, in which one land-based route performed better. While most of these reductions are attributable to the unique characteristics of the polymetallic nodule resource as described above, the elimination of solid processing waste streams onshore is due to our investment in a near-zero-waste flowsheet design and part of the low carbon emissions are due to our commitment to locate onshore processing facilities in places with access to low carbon power.



Impact category	Unit	Laterite Indonesia RKEF route	Laterite Cuba Caron route	Sulfide Australia DON route	Sulfide Australia Conventional	Laterite Indonesia HPAL (MHP)	Laterite Philippines HPAL (MSP)	Sulfide Canada POX route	Nodules NORI-D RKEF route
Global warming potential	kg CO_2 eq	102.0	64.4	29.2	28.5	19.2	13.9	8.0	6.2
Stratospheric ozone depletion	mg CFC11 eq	14.1	17.3	27.5	27.1	3.1	3.1	3.4	0.7
Fine particulate matter formation	g PM2.5 eq	1,187.0	31.7	43.1	42.8	262.0	160.4	39.5	9.2
Terrestrial acidification	kg SO_2 eq	0.96	0.09	0.13	0.13	0.69	0.53	0.13	0.03
Freshwater eutrophication	g P eq	91.0	9.5	75.8	76.4	9.1	5.2	2.9	1.0
Marine eutrophication	g N eq	5.5	0.1	2.3	2.3	-1.8	-1.3	0.2	-2.1
Water consumption	m^3	0.31	0.17	0.15	0.13	0.25	0.24	0.15	0.05
Land-based waste generation	kg	244	365	545	545	337	337	82	0
Marine waste generation*	kg	NA	NA	NA	NA	NA	NA	NA	137

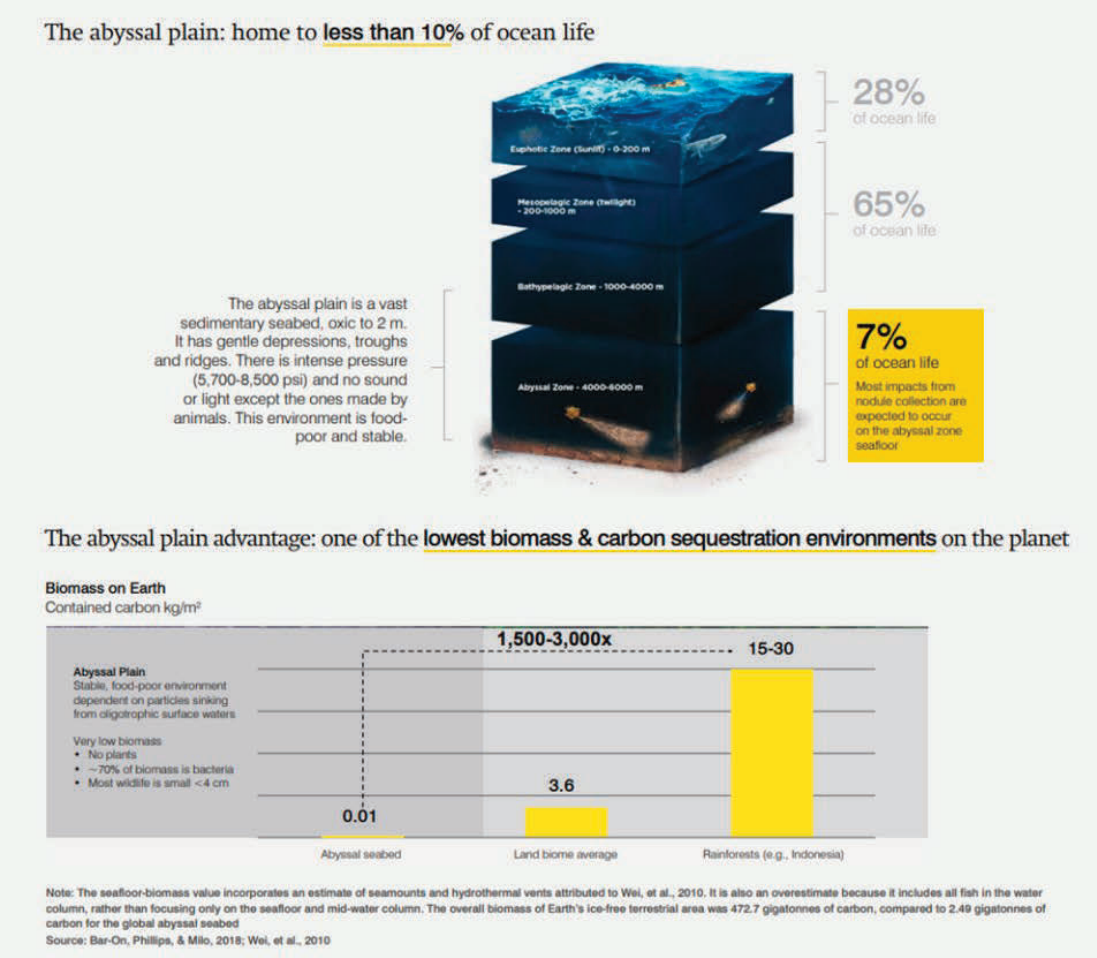
* Nodule collection operations entrain underlying sediment, separate it from nodules and return to the seafloor within meters of its origin. For the purposes of the LCA, this entrained sediment has been defined as a marine waste stream.
Source: Independent lifecycle assessment (LCA) completed by Benchmark March 2023. Lifecycle from mine to end-product formed (battery-grade nickel sulfate, cobalt sulfate, copper cathode and manganese silicate).
Nodules from NORI-D (RKEF route) also found to be the lowest impact option for copper. Cobalt from the DRC is lowest impact in GWP and water consumption; cobalt from NORI-D are lowest in all other assessed impact categories.

Benchmark modeled the land-based processing routes with background ecoinvent data and foreground data from two expert chemical engineers in the nickel and cobalt industry. The NORI Area D Project data is based on the NORI Technical Report Summary, dated March 2021, which included an initial assessment and an economic analysis of NORI Area D prepared in accordance with the SEC's Modernization of Property Disclosures for Mining Registrants set forth in subpart 1300 of Regulation S-K (the "SEC Mining Rules"). The NORI Technical Report Summary is filed as Exhibit 96.1 to this Annual Report.

As part of the ESIA conducted by NORI in partnership with world leading deep-sea research institutions and contractors, we are currently assessing the impacts of the NORI Area D Project on marine biodiversity and ecosystem function. The CCZ abyssal plains are one of the most common and least populated habitats on the planet, akin to deserts on land. The CCZ abyssal seafloor is plant-free, food-poor and dominated by bacterial life forms. It has been studied extensively since the 1960s with over 150,000 papers published on polymetallic nodules in general and over 40,000 on CCZ nodules in particular.

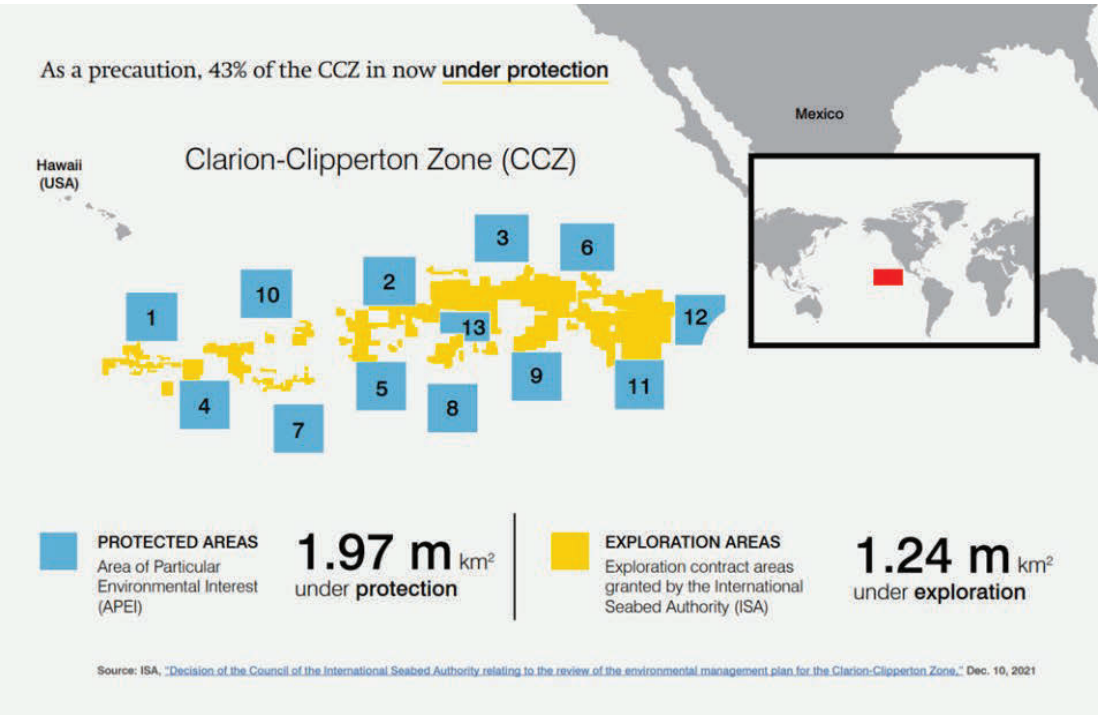
The largest driver of uncertainty in assessing the potential future impact of nodule collection operations on marine biodiversity is our ability to measure biodiversity itself. Unlike biodiversity, biomass, measured as carbon contained in live organisms per m^2 of habitat, is easier to measure and compare. Based on available data we have reviewed, we believe that the CCZ is one of lowest biomass places on the planet. Metal production from nodules will reduce biomass at risk by over 90% compared to producing the same amount of metals from conventional land ores.

In contrast, land-based mining for nickel and cobalt occurs in diverse countries as identified by Benchmark in a study commissioned by us and published in November 2023. In both Indonesia and the Democratic Republic of the Congo (the "DRC"), which are the world's largest producers of nickel and cobalt respectively, the extraction of metal ores through open pit mines requires the complete removal of overlying ecosystems and contained carbon sinks, in turn eliminating the carbon sequestration. The study found that 1 kilogram of nickel mined from saprolite and limonite ore in Sulawesi, Indonesia removes forests containing carbon stock equivalent to 7.0 and 9.4 kilograms of CO_2e, and 3.6 kilograms of CO_2e in the case of cobalt mined in Katanga, DRC. Due to the resulting vegetation change, mining activities cause carbon sequestration services loss of 4.8 grams and 6.5 grams of CO_2e respectively for nickel, and 9.3 grams of CO_2e for cobalt per year.



As a precautionary environmental management and protection measure, the ISA has already set aside 43% of the CCZ as protected areas or 1.97 million square kilometers, or Areas of Particular Environmental Interest (APEIs) aiming to ensure that all types of habitats that could be impacted by exploitation are represented within APEIs. For comparison, only approximately 8.2% of global oceans are protected today and the global target agreed in the High Seas Treaty in March 2023 is to protect 30% of the oceans by 2030. Additional marine impact mitigation measures such as setting aside more no-take areas inside our contract areas and leaving partial nodule cover inside collection areas to aid natural recovery of bacterial and other communities are also being evaluated. We are collaborating with some of the world's leading researchers to conduct environmental baseline and collection impact studies to design plans that could mitigate marine impacts of nodule collection through collection system design and adaptive management systems.

If the entire CCZ area currently under exploration (1.28 million square kilometers) were to be exploited over a 30-year period, these nodule collection operations would impact 42,500 square kilometers of the abyssal seafloor per year in one of the least productive areas of the ocean (with respect to the abundance of marine life). This is less than 1% of the estimated 4,900,000 square kilometers of the seafloor currently impacted every year by trawling operations that take place primarily in highly productive coastal waters.



Potential future commercial-scale nodule collection operations in the CCZ are likely to disturb marine wildlife in the operating area. The nature and severity of these impacts on CCZ wildlife are expected to vary by species and are currently subject to uncertainty. We have completed studies baselining wildlife and ecosystem function, piloting the nodule collection system and assessing impacts arising from the use of this system immediately following the collector test and 12 months after the collector test, processing and assessment of collected data are currently in progress. Given the significant volume of deep water and the difficulty of sampling or retrieving biological specimens in the CCZ, a complete biological inventory might never be established. Accordingly, impacts on CCZ biodiversity may never be completely and definitively known. Given that similar challenges remain on land, with an estimated 70-80% of species still undescribed, it may also not be possible to definitively establish whether the impact of nodule collection on global biodiversity will be less significant than those estimated for land-based mining for a similar amount of produced metal.

It is also currently not definitively known how effectively the risk of biodiversity loss in the CCZ could be eliminated or reduced through mitigation strategies or how long it will take for disturbed seabed areas to recover naturally. Prior research indicates that the density, diversity and function of fauna representing most of the resident biomass (including mobile, pelagic and microbial life) are expected to recover naturally over years to decades. However, a high level of uncertainty exists around recovery of fauna that requires the hard substrate of nodules for critical life function. The extent to which planned measures such as leaving behind partial nodule cover and setting aside no-take areas would aid recruitment and recovery of nodule-dependent species in impacted areas will depend on factors like habitat connectivity, which is an area that is still under study.

We are still in the exploration phase of the project and do not have the exploitation contracts necessary to commence commercial-scale nodule collection operations in the CCZ nor have we obtained the applicable environmental and other permits required to build and operate commercial scale polymetallic nodule processing and refining plants on land.

All extractive industries result in impacts to the receiving environment. Nodule collection is no exception and will impact the deep-sea marine environment through nodule removal, disturbance of seafloor sediment ("seafloor plumes") and return of seawater used for nodule transport that is expected to contain residual sediment and nodule fines back in the water column ("midwater plumes"). Baselining the impacted marine environment by characterizing the ecosystem and then developing measures to avoid and mitigate these impacts is the central focus of our offshore ESIA program currently being undertaken in partnership with some of the world's leading deep-sea research institutions. Nodule removal will impact species that depend on the hard nodule substrate for attachment. The severity of the impact will depend on (1) the extent to which these species are represented in the APEIs set aside by the ISA and additional no-take areas set aside by us and (2) the extent to which residual nodule cover will aid recruitment and recovery of these species in impacted areas. Disturbance of the seafloor by nodule collector vehicles is expected to disturb (mostly microbial) organisms living in and on the sediments. Impact severity will depend on the depth of sediment disturbance (expected to be approximately 5 centimeters based on modelling, laboratory tests, and recent collector tests completed in the CCZ by our subsidiary NORI and two other nodule contract-holders, Belgium's Global Sea Mineral Resources NV (GSR) and the German's BGR) and the impact this disturbance has on benthic ecosystem function. Over 90% of the entrained sediment is expected to be separated from nodules inside the collector vehicle and discharged behind the collector vehicle, most settling back to the seafloor within a few hundred meters. The impact of the residual plume will depend on how quickly the smaller mobile sediment particles re-settle, how far they travel and how the resulting sedimentation impacts the benthic organisms. Less than 10% of entrained sediment that will likely evade separation inside the collector vehicle will be transported with nodules and seawater through the riser pipe to the surface production vessel where nodules get dewatered and residual water, sediment and nodules fines will be returned at some depth in the water column below the highly populated and productive photic zone. Potential impacts from the mid-water sediment plume could include clogging of the delicate respiratory and filter feeding structures of pelagic zooplankton species, such as jellyfish and krill. However, the mid-water discharge is expected to have very low solid particle concentration and dilute to low levels within minutes. The depth of discharge will be selected based on ESIA results to minimize impact on life in the midwater column. According to a research paper on midwater sediment plumes published by researchers from the Massachusetts Institute of Technology ("MIT") in Communications Earth & Environment in July 2021, entrained sediment from the return of seawater used for nodule transport dilutes to natural background levels within a few hundred meters of the outlet. Another research paper on seafloor sediment plumes published by MIT and the Scripps Institution of Oceanography in September 2022 found that 92-98% of benthic plume generated from the pilot nodule collector vehicle rose only two meters above the seafloor.

Our Strategic Positioning

We believe we are well positioned to meet the growing demand for critical battery metals:

- **Supply for increasing demand**: The response to climate change is driving robust demand for EVs, renewable energy storage and infrastructure. To manufacture battery cells, gigafactories will need critical battery metals like nickel, cobalt, manganese, and copper to meet rising battery demand. Globally, the number of signatories to the Zero Emission Vehicle declaration announced at COP28 in November 2023 increased to 228, which is aimed at accelerating the transition to 100% new car sales being zero emission globally by 2040, and by 2035 in leading markets. The U.S. government enacted the IRA, spurring a ramp-up of investments in battery and battery component production. Additionally, the U.S. government entered into new critical mineral trade agreement with Japan, which we believe improves our business prospects related to our plans to commercially process nodules at the Pacific Metals Co. Ltd. ("PAMCO") facility in Hachinohe, Japan.

- **Path to energy security**: Throughout 2023, China limited exports of gallium and germanium, which are needed to produce semiconductor chips and graphite, a key ingredient in battery anodes. China also banned the export of rare earth metal extraction and separation technologies used in production of hybrid and battery electric vehicle motors. These events underscore a national security rationale for the U.S. and Western countries for reducing dependence on China as the world's largest refiner of Class 1 nickel, cobalt and manganese. With our NORI and TOML contract areas ranked as the world's first and second largest undeveloped nickel projects, respectively, by Mining.com in both 2022 and 2023, we believe the polymetallic nodules found in our NORI and TOML contract areas offer an internationally governed source of key battery metals that can effectively be decoupled from Chinese supply chains.

- **Advancing developing countries**: All three of our Sponsoring States are small developing Pacific Island nations impacted by climate change, each of which expect to receive income streams from their sponsored areas if exploration contracts are granted to extract polymetallic nodules in their sponsored areas. Royalties from commercial production of polymetallic nodules payable to the ISA are required to be distributed by the ISA with focus on developing countries.

Our Competitive Advantages

With the potential that our resources hold and the project advancements we have made to date, we believe we are better positioned than other suppliers to provide a solution to the growing need for critical battery metals:

- **Availability of abundant and high-grade resource off the U.S. western seaboard:** There are four critical battery metals (nickel, copper, cobalt and manganese) in relatively high concentrations in polymetallic nodules and we believe our contract areas have estimated *in situ* quantities of these metals equivalent to the requirement for 280 million EVs, roughly the size of the entire U.S. passenger vehicle fleet on the road today.

- **Opportunity for battery metal production in the U.S.:** The current supply chain of battery materials to the U.S. is approximately 50,000 miles long and is predominantly controlled by nations and companies outside of the U.S., which is leading to increasing concerns about supply chain security in the U.S. and interest in breaking the U.S. mineral dependence by re-shoring battery material supply chain in the U.S.

- **Opportunity to reuse existing offshore assets and skills:** We believe there is an opportunity for us to partner with offshore service providers with deep operational experience in subsea environments gained in the oil and gas industry and with existing assets that can be repurposed for our offshore nodule collection operations. We have taken advantage of this opportunity by forging a strategic alliance with Allseas Group S.A. ("Allseas"), a leading offshore contractor in 2019. In 2020, Allseas acquired a drillship that was repurposed and classified as the world's first deep-sea mining vessel.

- **Demonstrated offshore nodule collection technology:** In November 2022, NORI and Allseas completed the Pilot Mining Test where approximately 4,500 tonnes of wet nodules were collected and more than 3,000 tonnes of wet nodules were lifted 4.3 kilometers to the surface after traversing over 80 kilometers of the seafloor in the NORI Area D, achieving a sustained production rate of 86.4 tonnes per hour with a scaled-down prototype seafloor nodule collector vehicle.

- **Demonstrated onshore nodule processing technology:** In 2021, we successfully completed the calcining and smelting of nodules into a manganese silicate product and nickel-copper-cobalt alloy intermediate product, followed by conversion and sulfidation of the alloy into matte. Testwork on the matte to define conditions for the hydrometallurgical refinery has been successfully conducted on all process stages and we anticipate completion of the program in the first quarter of 2024 with generation of what we believe will be battery-grade nickel and cobalt sulfates in test quantities.

- **Opportunity to reuse existing onshore assets and skills:** We believe there is an opportunity for us to partner with onshore processors with deep operational experience in processing nickel-bearing ores and with existing Rotary Kiln Electric Arc Furnace ("RKEF") plants that can be repurposed for processing our nodules into intermediate products. We have taken advantage of this opportunity by signing a non-binding memorandum of understanding ("MoU") with PAMCO, an experienced operator of a nickel laterite smelting complex in Hachinohe, Japan (IRA-compliant jurisdiction) in 2023. Following the completion of a prefeasibility exercise by PAMCO to assess nodule processing at their facility, we have signed a binding MoU in November 2023 to complete a feasibility study to process the first 1.3 Mtpa (wet) of nodules at PAMCO's facility. A demonstration trial at PAMCO's Hachinohe facilities with 2,000 tonnes of nodules collected during the mining pilot is expected to take place in 2024, which would further de-risk the project.

- **Lower expected production cost:** Based on the Initial Economic Assessment completed for NORI Area D project in March 2021, which was based on potential steady state production of approximately 12.5Mtpa of wet nodules from 2030 to 2045, we expected to be the second lowest cost nickel producer in the world, when reflecting the value of our byproducts). This Initial Economic Assessment was based on a high-capital asset expenditure ("CAPEX") approach to our development and commercialization of operations where the majority of offshore and onshore production assets would be newly built by us. However, we are currently pursuing a low-CAPEX approach for our NORI Area D project where we reuse existing production assets.

- **Lower expected environmental, social and governance footprint:** The LCA completed by Benchmark in March 2023 shows that the NORI Area D project model performed better in most impact categories analyzed than all the land-based routes chosen for comparison. This favorable comparison is explained by the fact that we are developing a new type of high-grade multi-metal source found on the abyssal plain, a low biomass, low carbon sequestration deep-sea environment removed from human settlement.

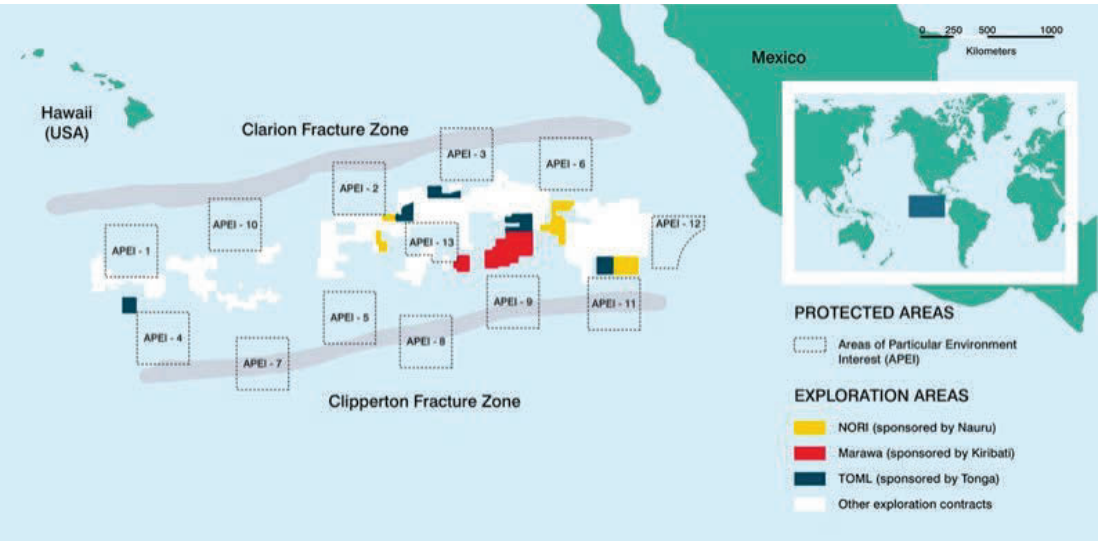
Exploration Contracts

We currently hold exclusive exploration rights through our subsidiaries NORI and TOML and exclusive commercial rights through an agreement with Marawa, to certain polymetallic nodule areas in the CCZ.

NORI. NORI our wholly-owned subsidiary, holds exploration rights to four blocks (NORI Area A, B, C, and D, the "NORI Contract Area") covering 74,830 square kilometers in the CCZ that were granted by the ISA in July 2011. NORI is sponsored by Nauru pursuant to a certificate of sponsorship signed by the Government of Nauru on April 11, 2011. The NORI Area D is the seafloor parcel where we have performed the most resource definition and environmental work to date. NORI commissioned AMC Consulting Ltd, a leading mining consulting firm (AMC), to undertake a preliminary economic assessment ("PEA") of the mineral resource contained in NORI Area D and to compile a technical report compliant with Canadian National Instrument (NI 43-101), which was completed in March 2021. AMC subsequently compiled the NORI Technical Report Summary, dated March 2021, which included an initial assessment and an economic analysis of NORI Area D prepared in accordance with the SEC Mining Rules. The NORI Technical Report Summary is filed as Exhibit 96.1 to this Annual Report.

TOML. TOML our wholly-owned subsidiary which we acquired in March 2020, holds exploration rights to an area covering 74,713 square kilometers in the CCZ that were granted by the ISA in January 2012 (the "TOML Contract Area"). On March 8, 2008, Tonga and TOML entered into a sponsorship agreement formalizing certain obligations of the parties in relation to TOML's exploration application to the ISA (subsequently granted) for the TOML Contract Area. The sponsorship agreement was updated on September 23, 2021. TOML commissioned a Technical Report Summary by AMC, dated March 2021, which is filed as Exhibit 96.2 to this Annual Report.

Marawa. DGE, our wholly-owned subsidiary, entered into agreements with Marawa and Kiribati which provide DGE with exclusive exploration rights to an area covering 74,990 square kilometers in the CCZ (the "Marawa Contract Area"). The exploration contract between Marawa and the ISA (the "Marawa Exploration Contract") was signed on January 19, 2015. To date, limited offshore marine resource definition activities in the Marawa Contract Area have occurred. We are collaborating with Marawa to assess the viability of any potential project in the Marawa Contract Area, although the timing of such assessment is uncertain. Marawa has delayed certain of its efforts in the Marawa Contract Area while it determines how it will move forward with additional assessment work.



Business Strategy

Our contemplated business spans the entire lifecycle from the resource acquisition and definition stage through the collection and transportation phases offshore into the processing and refining of nodules onshore and finally in product marketing and offtake (and eventually recycling of end-of-life products containing nodule-derived metals). NORI and TOML, two of our subsidiaries, intend to operate in the CCZ under the effective supervision, regulation and sponsorship of the Republic of Nauru and the Kingdom of Tonga, respectively. We intend to utilize processing operations in locations that are yet to be finalized. We have chosen a capital-light approach to our operations and have focused on forming deep strategic partnerships with leading offshore and onshore companies.

Our key strategic alliances include:

Allseas: Allseas, a leading global offshore contractor, has developed and successfully tested the pilot nodule collection system in the NORI Area D, completed in the fourth quarter of 2022. The experience from the development and testing program of the pilot system are now informing the design of upgrades and modifications into the initial smaller scale commercial production system which is expected to serve as the basis for the design of a full-scale commercial production system.

Glencore: Glencore International AG (Glencore) holds offtake rights to 50% of the NORI nickel and copper production. Glencore has the right to purchase from DGE 50% of the annual quantity of copper material and 50% of the annual quantity of nickel material produced by DGE from ore derived from the NORI Contract Area at a processing plant directly owned or controlled by DGE.

Hatch and KPM: We have worked with engineering firm Hatch Ltd. ("Hatch") and consultants Kingston Process Metallurgy Inc. (KPM) to develop a near-zero solid waste flowsheet. The primary processing stages of the flowsheet from nodule to NiCuCo matte intermediate were demonstrated as part of our pilot plant program at FLSmidth and Xpert Process Solutions, a Glencore company ("XPS"), facilities. The matte refining stages are being tested at SGS Lakefield. The near-zero solid waste flowsheet is expected to serve as the basis for our onshore processing facilities.

PAMCO: In November 2022, TMC entered into a non-binding MoU with PAMCO of Japan. In November 2023, we entered into a binding MoU with PAMCO whereby they must complete a feasibility study (anticipated to be completed during the third quarter of 2024) to toll treat 1.3 million tonnes of wet polymetallic nodules per year at its Hachinohe, Japan smelting facility, which is expected to start in the second quarter of 2026, if we obtain an exploration contract from the ISA in a timely manner. PAMCO's Hachinohe facility is located on the coast in northern Japan and is equipped with port and processing infrastructure required to receive and process polymetallic nodules and to ship products to customers.

The toll treatment is expected to take place on a dedicated RKEF processing line and produce two products: nickel-copper-cobalt alloy, an intermediate product used as feedstock to produce Li-ion battery cathodes, and a manganese silicate product used to make silico-manganese alloy, a critical input into steel manufacturing.

PAMCO successfully completed a pre-feasibility exercise pursuant to the non-binding MoU signed by the parties in November 2022. Under the binding MoU signed in November 2023:

- PAMCO, with our support, expects to complete the feasibility study by the third quarter of 2024.
- We will provide PAMCO with the exclusive right to the first 1.3Mtpa of the expected 3Mtpa of wet nodule collection capacity our first nodule collection system until completion of the feasibility study.
- The parties will enter into good faith negotiations to finalize definitive processing agreements on completion of the feasibility study.

The feasibility study is expected to confirm operating parameters and product specifications for PAMCO's dedicated production line and define the scope and execution plan for any additional equipment requirements, which are expected to be minor. An extended pilot demonstration program utilizing existing kilns and furnaces at PAMCO's Hachinohe, Japan facility is expected to treat a 2,000 tonne sample of polymetallic nodules collected during the successful pilot nodule collector test completed by Allseas in November 2022 on NORI Area D, with the goal of optimizing the furnace refractory selection and confirm commercial scale operating parameters such as tapping temperatures and dusting rates when treating nodules through the Hachinohe facility. The cost of processing polymetallic nodules will also be estimated to help finalize the definitive processing agreements.

In parallel, PAMCO is continuing to study the addition of a converting facility to process the intermediate alloy to nickel-copper-cobalt matte, which is an upgraded intermediate battery supply chain feedstock. It is expected that the additional facility would be constructed once commercial processing of polymetallic nodules to alloy has been demonstrated.

There can be no assurance that we will enter into a definitive strategic alliance with PAMCO in a particular time period, or at all, or on terms similar to those set forth in the binding MoU, or that if a definitive strategic alliance are entered into by us or that the existing facility will be able to successfully process nodules in a particular time period, or at all.

Phased Project Development

Currently, we are an exploration stage company with a completed Initial Economic Assessment, working towards a pre-feasibility study that will form an integral part of our ISA application for an exploitation contract for the NORI Contract Areas. We expect to enter into the feasibility study phase in 2024, having completed the pilot collection system test with Allseas in the CCZ in the fourth quarter of 2022. Having significantly advanced resource definition and environmental baseline studies on NORI Area D, we intend to apply for an exploitation contract on that area first. If we obtain an exploitation contract, we then plan to commence production offshore ("Project Zero") at the end of the first quarter of 2026 using the *Hidden Gem* vessel which, subject to further modifications, is expected to be upgraded to a maximum capacity of 3.0 Mtpa of wet nodules. Subject to the success of Project Zero and any regulatory requirements, we then expect to move into the next phase of production ("Project One") in which we intend to scale up production and expect to collect and process up to approximately 12.5Mtpa of wet nodules at steady state (expected 2030-2045), as outlined in the NORI – D Technical Report Summary.

Current Work Program

We are currently focused on preparing to submit our application to the ISA for our first exploitation contract, which will include the entire NORI Contract Area, with the initial collection activities occurring within NORI Area D only following the July 2024 meetings of the ISA's twenty-ninth session. Assuming a review process of approximately one-year, we expect to be in production offshore at the end of the first quarter of 2026, if the application is approved.

To reach our objective and initiate commercial production, we are: (i) defining our resource and project economics, (ii) developing a commercial offshore nodule collection system, (iii) assessing the environmental and social impacts of offshore nodule collection, and (iv) developing onshore technology to process collected polymetallic nodules into a manganese silicate product, and an intermediate nickel-copper-cobalt matte or nickel-copper-cobalt alloy product and/or end-products like nickel and cobalt sulfates, and copper cathode.

(i) **Resource definition and project economics:** Having completed a total of nine offshore resource definition campaigns, collected samples and completed subsea surveys for resource evaluation, we have defined the size and quality of our resource in the NORI and TOML Areas, as described below, in our SEC Regulation S-K (subpart 1300) compliant *Technical Report Summary - Initial Assessment of the NORI Property, Clarion Clipperton Zone, Pacific Ocean* dated March 17, 2021 ("NORI Initial Assessment") and *Technical Report Summary - TOML Mineral Resource, Clarion Clipperton Zone, Pacific Ocean* dated March 26, 2021 ("TOML Mineral Resource Statement"), respectively, prepared by AMC. From this work, both NORI and TOML have reported measured, indicated and inferred resources as tabulated below.

NORI Area 2020 Mineral Resource Estimate, in situ, for the NORI Areas within the CCZ at 4kg/m^2 nodule abundance cut-off.

NORI Area	Category	Tonnes (Mt (wet))	Abundance (wet kg/m^2)	Nickel (%)	Copper (%)	Cobalt (%)	Mn (%)	Silicon (%)
D	Measured	4	18.6	1.42	1.16	0.13	32.2	5.1
D	Indicated	341	17.1	1.4	1.14	0.14	31.2	5.5
D	Measured + Indicated	345	17.1	1.40	1.14	0.14	31.2	5.5
D	Inferred	11	15.6	1.38	1.14	0.12	31.0	5.5
A	Inferred	72	9.4	1.35	1.06	0.22	28.0	-
B	Inferred	36	11	1.43	1.13	0.25	28.9	-
C	Inferred	402	11	1.26	1.03	0.21	28.3	-

Note: Tonnes are quoted on a wet basis and grades are quoted on a dry basis, which is common practice for bulk commodities. Moisture content was estimated to 24% w/w. These estimates are presented on an undiluted basis without adjustment for resource recovery.

TOML Area 2020 Mineral Resource Estimate, in situ, for the TOML Areas within the CCZ at 4kg/m^2 nodule abundance cut-off.

TOML Area	Classification	Tonnes (x10^6 wet t)	Abundance (wet kg/m^2)	Ni (%)	Cu (%)	Co (%)	Mn (%)
A	Inferred	114	11.0	1.1	1.0	0.2	25.0
B	Measured	3	11.8	1.3	1.0	0.2	27.6
B	Indicated	14	11.1	1.3	1.1	0.2	28.6
B	Inferred	63	9.1	1.2	1.0	0.3	25.9
C	Indicated	15	8.6	1.3	1.2	0.2	30.5
C	Inferred	115	9.0	1.3	1.1	0.2	28.2
D	Indicated	29	12.2	1.3	1.2	0.2	30.1
D	Inferred	102	9.0	1.3	1.2	0.2	28.8
E	Inferred	58	10.6	1.3	1.1	0.2	28.7
F	Indicated	12	21.6	1.5	1.2	0.1	32.5
F	Inferred	244	16.6	1.4	1.2	0.1	32.2
Total	**Measured**	**2.6**	**11.8**	**1.3**	**1.0**	**0.2**	**27.6**
Total	**Indicated**	**69.6**	**11.8**	**1.3**	**1.2**	**0.2**	**30.3**
Total	**Inferred**	**696**	**11.3**	**1.3**	**1.1**	**0.2**	**29.0**

Note: Tonnes are quoted on a wet basis and grades are quoted on a dry basis, which is common practice for bulk commodities. Moisture content was estimated to 28% w/w. These estimates are presented on an undiluted basis without adjustment for resource recovery.

We plan to continue to define our resource in the NORI and TOML areas, develop project economics to pre-feasibility and feasibility level and convert resources into reserves.

(ii) **Commercial offshore nodule collection system development:** We are working with our strategic partner and investor, Allseas, to develop a system to collect, lift and transport nodules from the seafloor to shore. The offshore collection system consists of nodule collector vehicles on the seafloor, a riser and lift system, and a surface production support vessel. The nodules are collected from the seafloor by self-propelled, tracked nodule collector vehicles using seawater jets aimed at nodules in parallel with the seafloor. No rock cutting, digging, drill-and-blast or other breakage are required at the point of collection. The collectors are remotely controlled and supplied with electric power via umbilical cables from the production support vessel, the *Hidden Gem*. To test the system and assess its environmental impacts, we entered into a contract with Allseas to undertake a pilot trial of the collection system in the NORI Area D, which was completed in November 2022. The successful completion of the pilot trial will support our application for an exploitation contract with the ISA. An Environmental Impact Statement ("EIS") for this pilot trial was submitted to the ISA in July 2021 and approved on September 7, 2022, with infield testing commencing on September 19, 2022. The surface production support vessel, the *Hidden Gem*, was acquired by Allseas in March 2020 and has strategic importance to us, since it supported the pilot trial and is expected to be upgraded to a low-capital early production system. The vessel and collector system successfully completed trials in shallow and deepwater in the first half of 2022 prior to completing the collector test in NORI Area D in the fall of 2022, where approximately 4,500 tonnes of wet nodules were collected and more than 3000 tonnes of wet nodules were lifted 4.3 kilometers to the surface after traversing over 80 kilometers of the seafloor, achieving a production rate of 86.4 tonnes per hour.

As a result of the successful collector test in the fourth quarter of 2022, where more than 3000 tonnes of wet nodules were lifted to the *Hidden Gem*, Allseas and NORI believe that they can upgrade the pilot nodule collection system, including the *Hidden Gem*, into the first production system, which we refer to as the Project Zero Offshore Nodule Collection System.

In August 2023, we announced that Allseas and NORI are executing on a plan designed based on Allseas' estimates to increase the maximum production capacity of the Project Zero Offshore Nodule Collection System from the previous estimate of 1.3 million wet tonnes per annum to up to an estimated 3.0 million wet tonnes per annum in stepped increments, a potential increase of 130%. The upgrades are expected to include the addition of a second collector vehicle, the use of a wider diameter riser pipe from the seafloor to the surface, implementation of a larger compressor spread and improvements to the system designed to further mitigate its environmental impacts.

System capacity is expected to be increased over time as production and experience milestones are met, which we believe will help manage operational risk, minimize up-front capital expenditure requirements and allow for staged increases in capacity as environmental review thresholds are met.

The work program with Allseas during 2023 focused on the review of the pilot nodule collection system performance, review of operational issues and identification of potential improvements to overall system performance. Key aspects include scaling the technology to meeting the anticipated commercial production rates of the Project Zero Offshore Nodule Collection System and integration of the scaled-up technology into the *Hidden Gem*. Engineering scope has been split into six major work packages: (1) collector, (2) vertical transport system (riser and riser handling equipment), (3) storage & offloading, (4) control & automation, (5) electrical & instrumentation, and (6) flow assurance. Engineering studies have progressed on the offshore nodule offloading and transportation system, including hydrodynamic simulations and dynamic positioning analysis of the vessel-to-vessel interface during the nodule offloading activity. In line with engineering milestones, design reviews have been conducted at the Allseas office in Delft, Netherlands. The design reviews are attended by us, Allseas and third-party consultants. Regular meetings are held between us and Allseas project teams covering engineering, procurement, scheduling and estimating, operational planning (including health and safety aspects) and environmental impact.

Further to our non-binding term sheet entered into in March 2022 with Allseas, we continue discussions with Allseas regarding the specifics of these upgrades and the continued development of the Project Zero Offshore Nodule Collection System and anticipate reaching definitive agreements on commercial terms and key terms around continued development and commercial operations with Allseas before the submission of the NORI exploitation application in 2024. There can be no assurances, however, that we will enter into definitive agreements with Allseas in a particular time period, or at all, or on terms similar to those currently expected, or that if such definitive agreements are entered into that the Project Zero Offshore Nodule Collection System will be successfully developed or operated.

In addition, on August 1, 2023, we entered into an Exclusive Vessel Use Agreement with Allseas pursuant to which Allseas will give exclusive use of the *Hidden Gem* to us in support of the development of the Project Zero Offshore Nodule Collection System until the system is completed or December 31, 2026, whichever is earlier. In consideration of the exclusivity term, we have issued 4.15 million of our common shares to Allseas ("Common Shares") on August 14, 2023. We expect that the definitive agreement with Allseas discussed above will extend the exclusive use of the *Hidden Gem*.

(iii) **Environmental and social impact assessment ("ESIA") for offshore nodule collection**: The ESIA is an integral part of preparing our application for the ISA exploitation contract on the NORI Contract Area. Our ESIA program consists of over 100 studies and relies on the work of several independent deep-sea research institutions. In 2022, we undertook the collector test monitoring campaigns which involved completion of pre-collector test baseline data collection, monitoring of the collector test to and completion of post collection surveys to determine the immediate collector impact to the environment. The monitoring was undertaken using the Island Pride, a vessel contracted from Ocean Infinity Group Limited, deploying 2 remotely operated vehicles ("ROVs"), 3 autonomous underwater vehicles ("AUVs") and an array of more than 50 seafloor sensors, supervised by multiple teams of scientists and sediment plume expert consultants, DHI Water and Environment Inc. and HR Wallingford. These campaigns commenced on July 15, 2022 and were completed on December 23, 2022, representing 146 operational days at sea. The preliminary plume results from the collector test have been shared with a wide range of stakeholders and presentations were conducted at the ISA during the fourth quarter of 2023.

In October 2023 we entered into a services agreement with a third party in order for NORI to conduct an assessment of the benthic impact of the 2022 collector test in NORI Area D approximately 12 months post the collector test activities ("Campaign 8a"), which we believe will strengthen the quality of NORI's EIS and Environmental Management and Monitoring Plan ("EMMP") by providing additional information on the environmental regeneration of the collection test area. The key activities completed during campaign 8a were box cores, multicores, benthic and covariance lander works, and megafauna and sedimentation survey around the test field area.

Notwithstanding that Campaign 8a was subject to coordinated disruptive activities by Greenpeace International ("Greenpeace") designed to prevent and obstruct the campaign, it was successfully completed on December 28, 2023. The team selected 19 sampling stations in the locality of the 2022 nodule collection system test in NORI Area D and conducted 39 multicore deployments, recovering 395 individual core samples. These yielded more than 600 subsamples that will be shared with independent researchers from leading marine research institutions for further biological analysis. Additionally using a remotely operated vehicle, the research team deployed innovative seafloor lander systems that are capable of measuring seafloor oxygen fluxes using eddy covariance methods. This resulted in over 600 hours of data acquisition at a maximum deployment depth of 4,285 meters, which we believe is the first time these bespoke sensor suites have been deployed at abyssal depths. This data is further supplemented by over one thousand core sub-samples for geochemical analysis. Researchers also conducted the fourth annual recovery and redeployment of three oceanographic moorings within NORI Area D. The sensor payload on the moorings provides insights into the soundscape, regional oceanographic currents, and particulate organic carbon flux in the Eastern CCZ regions. This data contributes to the long-term oceanographic time series and importantly will cover the El Niño-Southern Oscillation fluctuations. Greenpeace spent 11 days, actively obstructing the planned work of Campaign 8a, resulting in a significant impact to the work scopes planned for the campaign which we were able to successfully mitigate. In the case of TOML and our planned work as part of Campaign 8a, its work scope included the deployment of long-term monitoring moorings which was completely obstructed and was not able to be completed. The NORI and TOML work scopes were part of ISA approved plans of work and in NORI's case, the post disturbance sampling was a specific suggestion of the ISA. NORI pursued legal action through the Dutch courts to halt Greenpeace's activities and requested further assistance from the ISA. The District Court of Amsterdam ruled that Greenpeace's occupation of NORI's contracted vessel, the MV Coco, was unlawful, which led to the disembarkation of Greenpeace personnel. Greenpeace continued to actively obstruct NORI's and TOML's activities notwithstanding the court ruling.

(iv) **Onshore technology development:** To process and refine collected nodules into critical metals, we have developed a flowsheet together with a metallurgical process design firm, Hatch. This flowsheet uses conventional equipment, modified for the unique nature of the polymetallic nodule resource to deliver a process that is expected to generate near zero solid waste. The key products generated by this process are nickel sulfate, cobalt sulfate, copper cathode, manganese silicate and fertilizer-grade ammonium sulfate. The processing flowsheet also provides the potential to generate an intermediate product, a nickel-copper-cobalt matte and a nickel-copper-cobalt-iron alloy. Nickel is expected to account for almost half of future production revenues. We have completed lab-scale test work and offshore campaigns to collect a bulk sample for pilot-scale metallurgical testing. We are continuing with a metallurgical test program. In 2021, we successfully completed calcining and smelting of the nodule bulk samples into a manganese silicate product and nickel-copper-cobalt alloy intermediate, followed by converting and sulfidation of the alloy into matte. We continue testing the hydrometallurgical refining phase where matte is processed to produce nickel sulfate, cobalt sulfate, copper cathode and fertilizer grade ammonium sulfate.

In addition, as described above and below, in 2022 and 2023, we entered into a non-binding MoU and a binding MoU with PAMCO to study the possibility of using PAMCO's facility in Hachinohe, Japan to produce up to 1.3 million tonnes of net polymetallic nodules per year.

PAMCO is continuing to study the addition of a converting facility to process the intermediate alloy to nickel-copper-cobalt matte, which is an upgraded intermediate battery supply chain feedstock. It is expected that the additional facility would be constructed once commercial processing of polymetallic nodules to alloy has been demonstrated. There can be no assurance that we will enter into a definitive processing agreement in a particular time period, or at all, or on terms similar to those set forth in the binding MoU, or that the existing facility will be able to successfully process nodules in a particular time period, or at all.

Summary of Mineral Resources

Below is a summary table of estimated mineral resources in NORI and TOML contract areas as of December 31, 2023. The estimated mineral resources in these areas were determined in 2021 as of December 31, 2020, and also reflect the estimated mineral resources as of December 31, 2023, as none of the mineral resources in these areas were depleted by mining or any other activities. See Item 2 entitled "*Properties*" below for additional information about our estimated mineral resources. Both of these contract areas are in the exploration stage.

Summary Mineral Resources, In-Situ, at end of the fiscal year ended December 31, 2023 at 4kg/m2 abundance cut-off and based on nickel metal $16,472/t; copper metal $6,872/t; cobalt metal $46,333/t; manganese in manganese silicate $4.50/dmtu Mn.

	Measured mineral resources		Indicated mineral resources		Measured + indicated mineral resources		Inferred mineral resources	
	Million tonnes (wet)	Grades (%)	Million tonnes (wet)	Grades (%)	Million tonnes (wet)	Grades (%)	Million tonnes (wet)	Grades (%)
Ni								
NORI								
NORI Area A	—	—	—	—	—	—	72	1.35
NORI Area B	—	—	—	—	—	—	36	1.43
NORI Area C	—	—	—	—	—	—	402	1.26
NORI Area D	4	1.42	341	1.40	345	1.40	11	1.38
TOML (Areas A to F)	2.6	1.33	69.6	1.35	72.2	1.35	696	1.29
Total	6.6	1.38	410.6	1.39	417.2	1.39	1,217	1.29
Cu								
NORI								
NORI Area A	—	—	—	—	—	—	72	1.06
NORI Area B	—	—	—	—	—	—	36	1.13
NORI Area C	—	—	—	—	—	—	402	1.03
NORI Area D	4	1.16	341	1.14	345	1.14	11	1.14
TOML (Areas A to F)	2.6	1.05	69.6	1.18	72.2	1.18	696	1.14
Total	6.6	1.12	410.6	1.15	417.2	1.15	1,217	1.10
Co								
NORI								
NORI Area A	—	—	—	—	—	—	72	0.22
NORI Area B	—	—	—	—	—	—	36	0.25
NORI Area C	—	—	—	—	—	—	402	0.21
NORI Area D	4	0.13	341	0.14	345	0.14	11	0.12
TOML (Areas A to F)	2.6	0.23	69.6	0.21	72.2	0.21	696	0.20
Total	6.6	0.17	410.6	0.15	417.2	0.15	1,217	0.21
Mn								
NORI								
NORI Area A	—	—	—	—	—	—	72	28.0
NORI Area B	—	—	—	—	—	—	36	28.9
NORI Area C	—	—	—	—	—	—	402	28.3
NORI Area D	4	32.2	341	31.2	345	31.2	11	31.0
TOML (Areas A to F)	2.6	27.6	69.6	30.3	72.2	30.2	402	29.0
Total	6.6	30.4	410.6	31.0	417.2	31.0	923	28.6

Note: Tonnes are quoted on a wet basis and grades are quoted on a dry basis, which is common practice for bulk commodities. Moisture content was estimated to be 24% w/w for NORI and 28% w/w for TOML. These estimates are presented on an undiluted basis without adjustment for resource recovery.

As reflected in the Initial Economic Assessment of NORI Area D contained in the NORI Technical Report Summary, a discounted cash flow analysis considering the intended pre-development work up to the end of 2024, discounting at 9% per annum, and assuming metal prices for nickel metal $16,472/t; nickel in nickel sulfate $18,807/t Ni; copper metal $6,872/t; cobalt metal $46,333/t; cobalt in cobalt sulfate $56,920/t Co; manganese in manganese silicate $4.50/dmtu Mn, indicates a NORI Area D project net present value (as of January 1, 2021) of $6.8 billion. The initial assessment included in the NORI Technical Report Summary is a conceptual study of the potential viability of NORI's mineral resources. This initial assessment indicates that development of the NORI mineral resource is potentially technically and economically viable; however, due to the preliminary nature of project planning and design, and the untested nature of the specific seafloor production systems at a commercial scale, economic viability has not yet been demonstrated.

The NORI Technical Report Summary and TOML Technical Report Summary do not include the conversion of mineral resources to mineral reserves.

You are specifically cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into mineral reserves, as defined by the SEC. You are also cautioned that mineral resources do not have demonstrated economic value. Inferred mineral resources have a high degree of uncertainty as to their existence and to whether they can be economically or legally commercialized. Under the SEC Mining Rules, estimates of inferred mineral resources may not form the basis of an economic analysis. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. A significant amount of exploration must be completed in order to determine whether an inferred mineral resource may be upgraded to a higher category. Therefore, you are cautioned not to assume that all or any part of an inferred mineral resource exists, that it can be economically or legally commercialized, or that it will ever be upgraded to a higher category. Approximately 97% of the NORI Area D resource is categorized as measured or indicated.

Likewise, you are cautioned not to assume that all or any part of measured or indicated mineral resources will ever be upgraded to mineral reserves.

Collection and Processing of Polymetallic Nodules

Collection and Shipping

We are planning a phased development for NORI Area D. Polymetallic nodules would be collected using offshore collection systems, comprising of nodule collector vehicles on the seafloor, a riser and lifting system (RALS) in the water column, and a production support vessel on the surface. The nodules are expected to be transferred to transport vessels and shipped to onshore processing facilities.

Through our strategic partnership with Allseas, a former drillship vessel (the *Hidden Gem*) acquired by Allseas in February 2020 has been converted and modified to undertake a pre-production collector test in which a collector vehicle, RALS and other systems have been tested. If we obtain an exploitation contract, the first phase of commercial production ("Project Zero") would then be expected to commence after the *Hidden Gem* has been upgraded to become a production support vessel that can produce up to 3 Mtpa (wet) of nodules. The nodules collected in Project Zero are expected to be processed through existing third-party RKEF facilities on a tolling basis. In the next phase of development ("Project One"), as outlined in the NORI – D Initial Assessment Technical Report Summary, production is expected to be expanded with an additional converted drillship (*Drill Ship 2*), a subsequent upgrade to the *Hidden Gem*, and the construction of a bespoke production support vessel (*Collector Ship 1*).

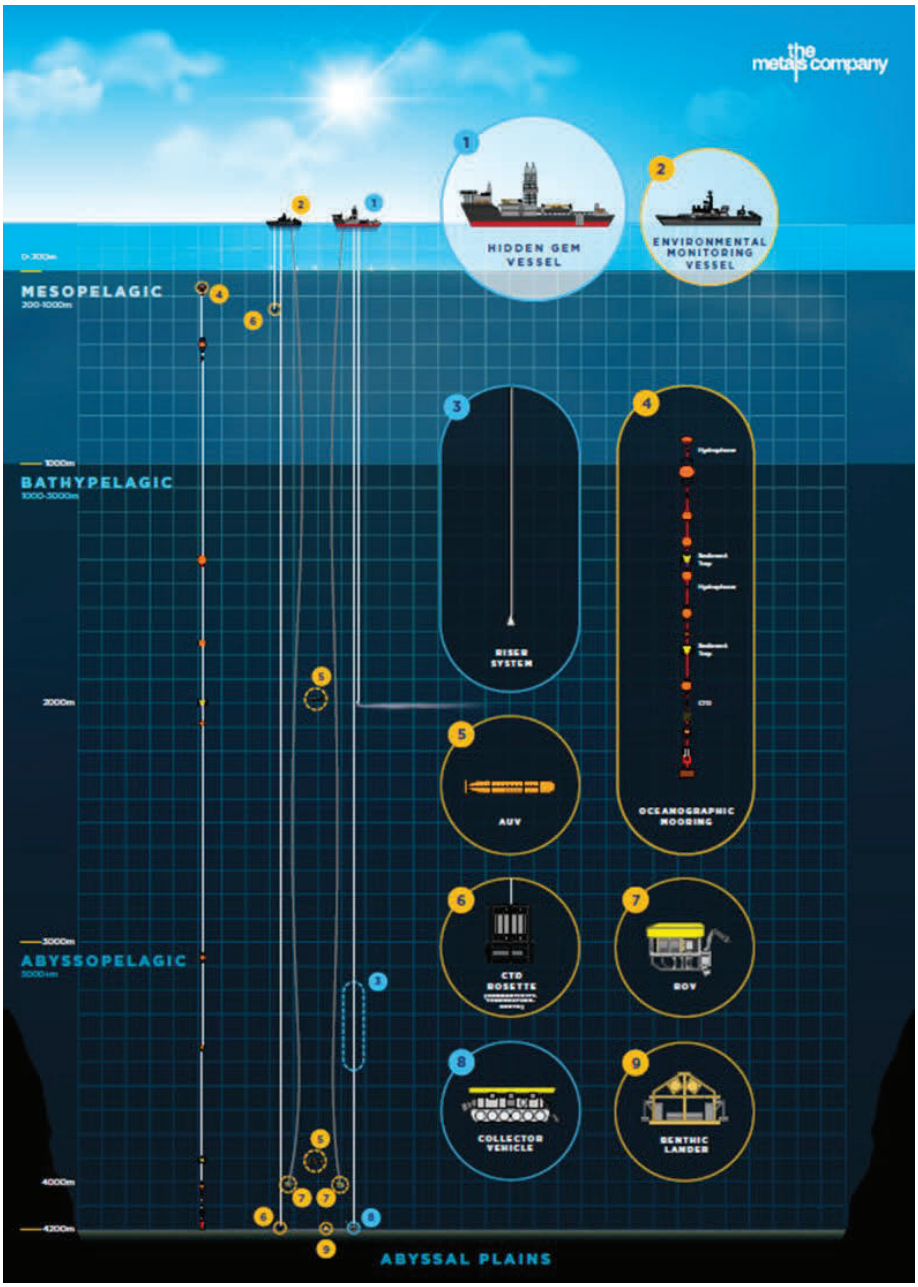
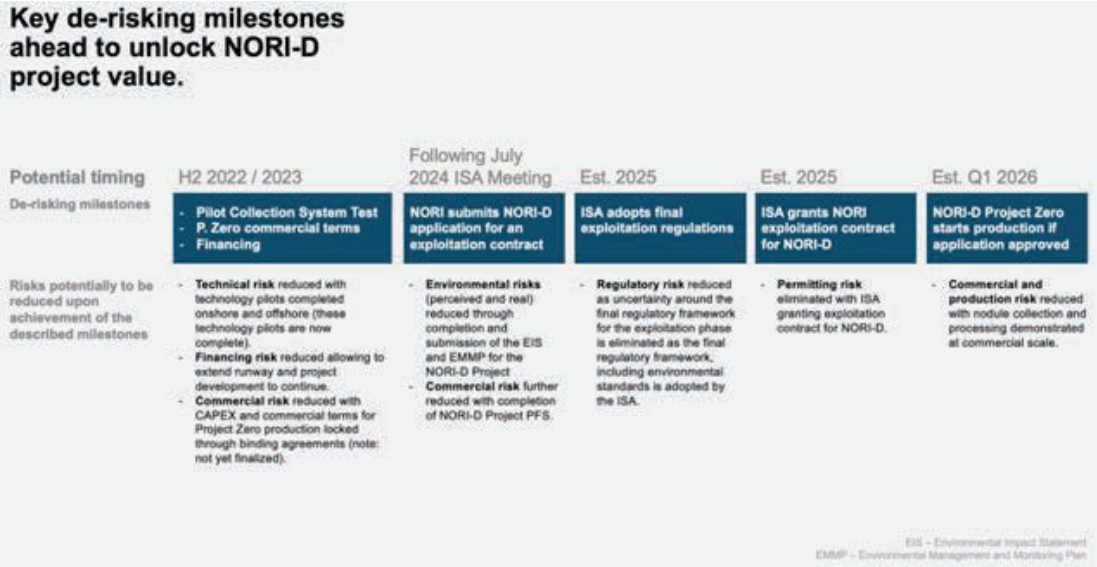


Illustration of a polymetallic nodule production system operated at 4 kilometers depth

In order to test the collection system, we entered into a contract with Allseas to undertake a pre-production collector test, which was successfully completed in the second half of 2022. We expect that Project Zero commercial production would then commence after the upgrading of the *Hidden Gem* into a production vessel. If we obtain an exploitation contract, we expect to commence Project Zero Collection at a rate of 1.3 Mtpa increasing in staged increments to up to 3.0 Mtpa of wet polymetallic nodules. For Project One, we believe that a fleet of three production vessels, each with multiple dedicated nodule collector vehicles, could be estimated to produce approximately 12.5 Mtpa of wet nodules at steady state (expected 2030-2045), which we intend to process, either at a new facility to be constructed by us or by potential processing partners, subject to available capital, or at third-party facilities pursuant to a toll treatment model.



We believe that this phased approach to development allows for proper management of risk and for progressive improvement of engineering and operating systems. The intention is to implement the project in multiple phases that will allow the offshore collection systems to be tested and then polymetallic nodule production to be gradually ramped- up. We believe that this approach will de-risk the project for a relatively low initial capital investment while retaining operational options, particularly in relation to logistics, to decrease unit operating cost as production is scaled up. Additionally, this phased development will allow for an adaptive approach to environmental management providing learning at small-scale which would be applied as production increases in scale.

Mineral Processing and Refining and Metallurgical Testing

Pyrometallurgical processing of polymetallic nodules has been extensively studied since the early 1970s.

From an early stage, we have recognized that processing represents a key to potentially commercializing seafloor polymetallic nodules and to becoming a low-cost producer of nickel, manganese, copper and cobalt products. Moreover, we believe that there is a commercial advantage in positioning ourselves as a leader in the onshore processing of seafloor polymetallic nodules.

To this end, we have been working with leading global process engineering group Hatch, and a professional services firm, to develop pyrometallurgical processing and hydrometallurgical refining technologies for the production of battery metals feedstocks from nodules. Hatch has developed a near-zero solid waste flowsheet and has overseen a pyrometallurgical pilot plant program consisting of several phases: the pyrometallurgical processing phase has been completed at FLSmidth's and XPS facilities, the hydrometallurgical refining phase is in progress at SGS facilities. Pursuant to an engineering and consulting services agreement, Hatch is assisting and advising us during the development of the pilot test program and is analyzing and interpreting the testing results through reports provided by such test facilities.

We expect that the processing of the polymetallic nodules from the NORI Contract Area would also be ramped up in phases. This plan includes initially toll treating polymetallic nodules at existing RKEF plants, utilizing existing excess industry capacity. We believe that there is significant interest to deploy underutilized RKEF plants which may have become stranded as a result of the Indonesian government nickel laterite ore export ban restricting supply of the nickel laterite feedstock that they have previously utilized. These RKEF plants were originally built to convert nickel laterite to ferro-nickel alloy or nickel pig iron and could potentially be converted to smelt polymetallic nodules.

In November 2023, we signed a binding MoU with PAMCO, where PAMCO must complete a feasibility study (expected to be completed during the third quarter of 2024) to toll treat 1.3 million tonnes of wet polymetallic nodules per year at its Hachinohe, Japan smelting facility expected to start in the second quarter of 2026, consistent with the commencement of NORI's planned first production offshore from the end of the first quarter of 2026, if our expected application to the ISA for an exploitation contract is approved assuming a review period of approximately one year. The toll treatment is expected to take place on a dedicated RKEF processing line and produce two products: nickel-copper-cobalt alloy, an intermediate product used as feedstock to produce Li-ion battery cathodes, and a manganese silicate product used to make silico-manganese alloy, a critical input into steel manufacturing.

Strategic Alliances and Key Commercial Agreements

Allseas Agreements

On March 29, 2019, we entered into a Strategic Alliance Agreement with Allseas, whereby the parties will conduct project development of an integrated offshore nodule collection system for use by our subsidiaries. As initially constituted, Allseas agreed to subscribe for (i) 6,666,667 DeepGreen Common Shares for a purchase price of $20,000,000 in cash (the "Subscription"), the entire amount of which was funded, and (ii) an additional 10,000,000 DeepGreen Common Shares in exchange for services rendered by Allseas in respect of the contemplated pilot mining test system (the "PMTS"), which would be designed, built and tested by Allseas. The 10,000,000 shares would only be issued upon completion of the pilot mining test in the CCZ using the PMTS (the "Success Fee Shares"), along with an additional $30 million cash success fee that would be payable simultaneously therewith. The Strategic Alliance Agreement also contemplated that the parties would enter into other commercial arrangements following the successful completion of the pilot trials of the PMTS in the CCZ.

On July 8, 2019, we and Allseas entered into the Pilot Mining Test Agreement (the "PMTA"), which governed the terms, design specifications, procedures, and timetable under which Allseas agreed to complete and test the PMTS, to be used by NORI. The PMTA was subsequently amended on September 1, 2019, February 20, 2020, March 4, 2021, June 30, 2021 and February 8, 2023. The Strategic Alliance Agreement was also amended on March 4, 2021 (collectively with the PMTA amendment of the same date, the "Amendment"), which Amendment became effective upon closing of the Business Combination. Pursuant to the Amendment, the cash fee payable pursuant to the PMTA was amended such that we would pay to Allseas (i) $10,000,000 on June 30, 2021 (which we subsequently amended with Allseas to change to within 10 business days of the Closing of the Business Combination in a further amendment; this amount was paid on October 5, 2021), (ii) $10,000,000 on the later of January 1, 2022 and such time that confirmation is received with respect to the successful completion of the North Sea drive test, which was paid on April 25, 2022, and (iii) $10,000,000 upon successful completion of the pilot trials in the CCZ using the PMTS which was settled through the issuance of 10 million Common Shares in February 2023, along with additional costs owed Allseas under the PMTA in 850,000 Common Shares, in each case, priced at $1.00 per share under the fifth amendment to the PMTA. Pursuant to the Amendment, except as provided therein, Allseas may not, without our prior written consent, terminate the Strategic Alliance Agreement or the PMTA before NORI receives an ISA exploitation contract.

The PMTA terminated by its terms upon the successful completion of the PMTS, whereas the overarching Strategic Alliance Agreement remains in place.

On March 16, 2022, NORI and Allseas entered into a non-binding term sheet for the development and operation of a commercial nodule collection system. The PMTS developed and tested by Allseas was expected to be upgraded to a commercial system with a targeted production capacity of at least 1.3 Mtpa of wet nodules ("Project Zero System"). NORI and Allseas intended to equally finance all costs related to developing and getting Project Zero System into production that were estimated at less than EUR100 million. It was anticipated that NORI will not have to make any Project Zero System-related payments to Allseas until later in 2023. Once in production, NORI expected to pay Allseas a nodule collection and transshipment fee estimated at approximately EUR 150 per wet tonne in the first year of operations and expected to be reduced by more than 20% in the following years as Allseas scaled up production to at least 1.3 Mtpa of wet nodules.

Subject to the necessary regulatory approvals, Allseas and NORI also intend to investigate acquiring a second production vessel similar to the *Hidden Gem*, a further Samsung 10000, with the potential for it to be engineered to support a production rate of 3.0 Mtpa of wet nodules.

Following the successful completion of the NORI Area D pilot collection system trials in November 2022 and subsequent analysis of pilot data, the parties reviewed Project Zero System production target increases, system design changes and associated cost estimates revisions. In August 2023, we announced that Allseas and NORI were executing on a plan designed based on Allseas' estimates to increase the maximum production capacity of the Project Zero Offshore Nodule Collection System from the previous estimate of 1.3 million wet tonnes per annum to up to an estimated 3.0 million wet tonnes per annum in stepped increments, a potential increase of 130%. The upgrades are expected to include the addition of a second collector vehicle, the use of a wider diameter riser pipe from the seafloor to the surface, implementation of a larger compressor spread and improvements to the system designed to further mitigate its environmental impacts.

System capacity is expected to be increased over time as production and experience milestones are met, which we believe will help manage operational risk, minimize up-front capital expenditure requirements and allow for staged increases in capacity as environmental review thresholds are met.

The work program with Allseas during 2023 focused on the review of the pilot nodule collection system performance, review of operational issues and identification of potential improvements to overall system performance. Key aspects include scaling the technology to meeting the commercial production rates of the Project Zero Offshore Nodule Collection System and integration of the scaled-up technology into the Hidden Gem. Engineering scope has been split into six major work packages: (1) collector, (2) vertical transport system (riser and riser handling equipment), (3) storage & offloading, (4) control & automation, (5) electrical & instrumentation, and (6) flow assurance. Engineering studies have been progressed on the offshore nodule offloading and transportation system, including hydrodynamic simulations and dynamic positioning analysis of the vessel-to-vessel interface during the nodule offloading activity. In line with engineering milestones, design reviews have been conducted at the Allseas office in Delft, Netherlands. The design reviews are attended by TMC, Allseas and third-party consultants. Regular meetings are held between TMC and Allseas project teams covering engineering, procurement, scheduling & estimating, operational planning (including health & safety aspects) and environment.

Further to our non-binding term sheet entered into in March 2022 with Allseas, Allseas is proceeding with system design and TMC continues its discussions with Allseas regarding the specifics of these upgrades, associated cost estimates and operational implications of the continued development of the Project Zero Offshore Nodule Collection System. We anticipate reaching definitive agreements on commercial terms and key terms around continued development and commercial operations with Allseas before the end of 2024.

In addition, in August 2023, we entered into an Exclusive Vessel Use Agreement with Allseas pursuant to which Allseas will give exclusive use of the Hidden Gem to us in support of the development of the Project Zero Offshore Nodule Collection System until the system is completed or December 31, 2026, whichever is earlier. In consideration of the exclusivity term, we have issued 4.15 million Common Shares (valued at $6.5 million) to Allseas on August 14, 2023. We expect that the definitive agreement with Allseas discussed above will extend the exclusive use of the Hidden Gem.

There can be no assurances, however, that we will enter into definitive agreements with Allseas contemplated by the non-binding term sheet in a particular time period, or at all, or on terms similar to those set forth in the non-binding term sheet, or that if such definitive agreements are entered into by us that the proposed commercial systems and second production vessel will be successfully developed or operated in a particular time period, or at all.

Offtake Agreements

On May 25, 2012, our wholly-owned subsidiary, DGE, and Glencore, entered into a copper offtake agreement and a separate nickel offtake agreement (together, the "Glencore Offtake Agreements"), pursuant to which Glencore has the right to purchase from DGE 50% of the annual quantity of copper material and 50% of the annual quantity of nickel material produced by DGE from ore derived from the NORI Contract Area at a processing plant directly owned or controlled by DGE. Pursuant to the Glencore Offtake Agreements, for London Metal Exchange ("LME") Codelco registered Grade "A" copper cathodes, the delivered price is the official LME Copper Grade "A" Cash Settlement quotation as published in the London Metal Bulletin averaged over the month of shipment or the following month at Glencore's choice, plus the official long-term contract premium as announced annually by Codelco, basis CIF Main European Ports (Rotterdam, the Netherlands). For LME Registered Primary Nickel, the delivered price is the official LME Primary Nickel Cash Settlement averaged over the month of shipping or the following month at Glencore's choice. For other copper-bearing material and other nickel-bearing material, the parties shall agree a price annually for the forthcoming calendar year on the basis of prevailing market prices for such copper products and such nickel products. The Glencore Offtake Agreements are for the life of the NORI Contract Area, and either party may terminate the agreement upon a material breach or insolvency of the other party. Glencore may also terminate either agreement by giving 12 months' prior written notice. The Glencore Offtake Agreements do not extend to any other of our entities in the event other entities are the ultimate processing owners for metal products. The Glencore Offtake Agreements only apply with respect to metals processed and developed from the NORI areas that are processed by a facility owned or controlled by DGE and do not apply to other projects (including for example Marawa or TOML). Concurrent with entering into the Glencore Offtake Agreements, Glencore made an equity investment of $5 million into our Company.

Binding MoU with PAMCO

In November 2022, we signed a non-binding MoU with PAMCO to evaluate the toll treatment of an initial quantity of 1.3 million tonnes of wet polymetallic nodules per year at PAMCO's Hachinohe, Japan smelting facility. Potential progression to a NiCuCo matte product along with potentially higher throughputs were also included in the evaluation study. PAMCO successfully completed a pre-feasibility exercise pursuant to the non-binding MoU signed by the parties in November 2022.

In November 2023 TMC signed a binding MoU with PAMCO, where PAMCO must complete a feasibility study (expected to be completed during the third quarter of 2024) to toll treat 1.3 million tonnes of wet polymetallic nodules per year at its Hachinohe, Japan smelting facility which is expected to start in the second quarter of 2026, if we obtain an exploration contract from the ISA in a timely manner. The toll treatment is expected to take place on a dedicated RKEF processing line and produce two products: nickel-copper-cobalt alloy, an intermediate product used as feedstock to produce Li-ion battery cathodes, and a manganese silicate product used to make silico-manganese alloy, a critical input into steel manufacturing. PAMCO's Hachinohe facility is located on the coast in northern Japan and is equipped with port and processing infrastructure required to receive and process polymetallic nodules and to ship products to customers. Under the new binding MoU:

- PAMCO, with our support, expects to complete the feasibility study by the third quarter of 2024;
- We will provide PAMCO with the exclusive right to the first 1.3Mtpa of the expected 3Mtpa of wet nodule collection capacity of our first nodule collection system until completion of the feasibility study;
- The parties will enter into good faith negotiations to finalize definitive processing agreements on completion of the feasibility study.

The PAMCO feasibility study is expected to confirm the operating parameters and product specifications for PAMCO's dedicated production line and define the scope and execution plan for any additional equipment requirements, which are currently expected to be minor. An extended pilot demonstration program utilizing existing kilns and furnaces at PAMCO's Hachinohe, Japan facility is expected to treat a 2,000 tonne sample of polymetallic nodules collected during the successful pilot nodule collector test completed by Allseas in November 2022 on the NORI Area D, with the goal of optimizing the furnace refractory selection and confirm commercial scale operating parameters such as tapping temperatures and dusting rates when treating nodules through the Hachinohe facility. The costs of processing polymetallic nodules will also be estimated to help finalize the definitive processing agreement.

In parallel, PAMCO is continuing to study the addition of a converting facility to process the intermediate alloy to nickel-copper-cobalt matte, which is an upgraded intermediate battery supply chain feedstock. It is expected that the additional facility would be constructed once commercial processing of polymetallic nodules to alloy has been demonstrated.

We expect this partnership to progress to a definitive agreement before the end of 2024, subject to successful feasibility study outcomes and agreement to mutually acceptable commercial terms. There can be no assurance that we will enter into a definitive tolling agreement in a particular time period, or at all, or on terms similar to those set forth in the binding MoU, or that if a definitive tolling agreement is entered into by us or that the existing facility will be able to successfully process nodules in a particular time period, or at all.

Competition

The metals production industry is capital intensive and competitive. Production of battery materials and manganese alloys is largely dominated by Chinese or Chinese-funded competitors. These competitors may have greater financial resources, as well as other strategic advantages to operate, maintain, improve and possibly expand their facilities. Additionally, Chinese resources firms have historically been able to produce minerals and/or process metals from land-based operations in developing countries across the globe (e.g., cobalt in the DRC, nickel in Indonesia and the Philippines) at relatively low costs due to scale, efficiency and regulatory factors, including less stringent environmental and social regulations and lower labor and benefit costs. We may be unable to compete successfully with these and other competitors, including other land-based mining operations.

In addition to the three contracts held by our subsidiaries and partners, 16 other entities (ISA Member States and private companies sponsored by ISA Member States) currently hold ISA Exploration Contracts for polymetallic nodules in the CCZ, Western Pacific and Indian Ocean Basin. If and when they move into the exploitation phase, each of these contract-holders could become a potential competitor with respect to the collection of polymetallic nodules and the production of nickel, manganese, copper and cobalt products. Furthermore, several nation states are working on developing polymetallic nodule resources inside their Exclusive Economic Zones ("EEZs"), with the Cook Islands granting three exploration contracts for polymetallic nodules in February 2022.

Beyond polymetallic nodules, nations like Norway, Japan, Cook Islands and the Kingdom of Saudi Arabia are exploring other types of deep-sea resources containing some of the metals contained in polymetallic nodules. There is increasing competition from new and existing marine mineral companies for the availability of marine exploration and support vessels, related marine equipment and specialized personnel, desirable exploration areas, suitable offshore collection and onshore processing equipment, and available capital. Some of our competitors may equally find more promising resources, identify or develop more economic technologies, enter into strategic partnerships that constrain our optionality, or may develop novel methods to collect nodules from the seafloor or process nodules into metals that are more economic than we currently contemplate.

Regulations

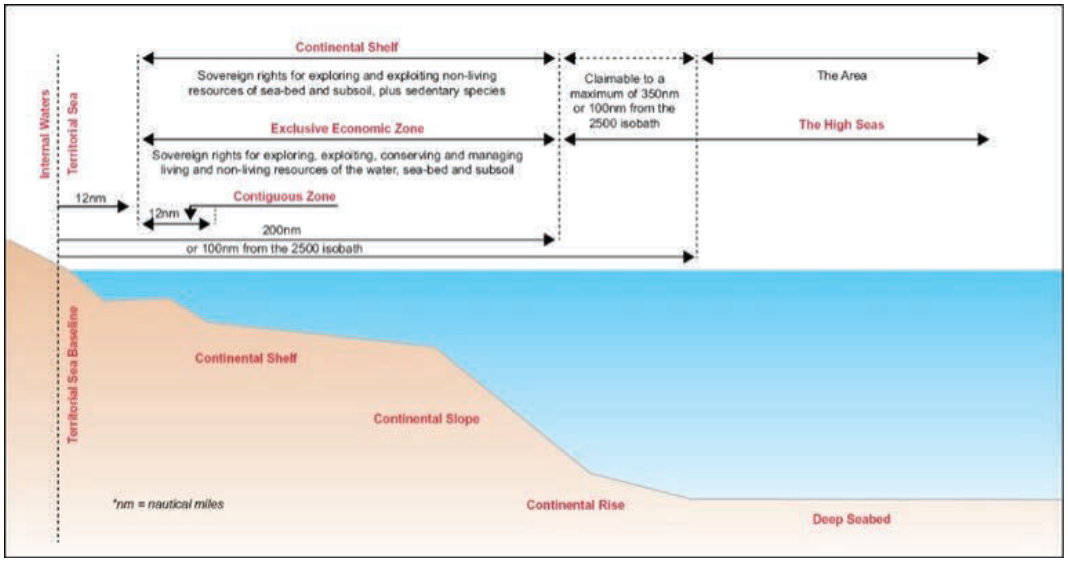
United Nations Convention on the Law of the Sea

The Area is defined as the seabed and subsoil beyond the limits of national jurisdiction (UNCLOS Article 1).

The principal policy documents governing the Area, including the CCZ, include:

- the UNCLOS, of 10 December 1982; and
- the 1994 Implementation Agreement.

UNCLOS deals with, among other things, navigational rights, territorial sea limits, exclusive economic zone jurisdiction, the continental shelf, freedom of the high seas, legal status of resources on the seabed beyond the limits of national jurisdiction, passage of ships through narrow straits, conservation and management of living marine resources in the high seas, protection of the marine environment, marine scientific research, and settlement of disputes.



Part XI of UNCLOS and the 1994 Implementation Agreement deal with mineral exploration and collection in the international seabed, known as the Area, providing a framework for entities to obtain legal title to areas of the seafloor from the ISA for the purpose of exploration and eventually collection of resources. UNCLOS became effective on November 16, 1994. A subsequent agreement relating to the implementation of Part XI of UNCLOS was adopted on July 28, 1994 and became effective on July 28, 1996. The 1994 Implementation Agreement and Part XI of UNCLOS are to be interpreted and applied together as a single instrument. As of February 6, 2024, UNCLOS had been signed by 168 States (countries) and the European Union.

International Seabed Authority

The ISA is an autonomous international organization established under UNCLOS and the 1994 Implementation Agreement to organize and control activities in the Area, particularly with a view to administering and regulating the development of the resources of the Area, in accordance with the legal regime established under UNCLOS and the 1994 Implementation Agreement. In so doing, the ISA has the mandate to regulate all mineral related activities in the Area for the benefit of humankind and ensure the effective protection of the marine environment from harmful effects that may arise from deep-seabed related activities. The ISA is comprised of UNCLOS signatories, 168 Member States, and the European Union. All parties to UNCLOS are members of the ISA. Two principal entities establish the policies and govern the work of the ISA: the Assembly, where all 169 members are represented (the "Assembly"), and a 36-member council elected by the Assembly (the "Council"). The Council has two advisory bodies: the Legal Technical Commission (LTC) (41 members), which advises the Council on matters relating to the exploration and collection of non-living marine resources, such as polymetallic nodules, polymetallic sulphides and cobalt-rich ferromanganese crusts, and the Finance Committee (15 members), which deals with budgetary and related matters.

All rules, regulations, and procedures issued by the ISA to regulate prospecting, exploration, and collection of marine minerals are issued within a general legal framework established by UNCLOS and the 1994 Implementation Agreement. To date, the ISA has issued the following regulations (*https://www.isa.org.jm/mining-code/Regulations*):

- The Regulations on Prospecting and Exploration for Polymetallic Nodules in the CCZ (adopted July 13, 2000, as amended in 2013; the Regulations).

- The Regulations on Prospecting and Exploration for Polymetallic Sulphides (adopted May 7, 2010).

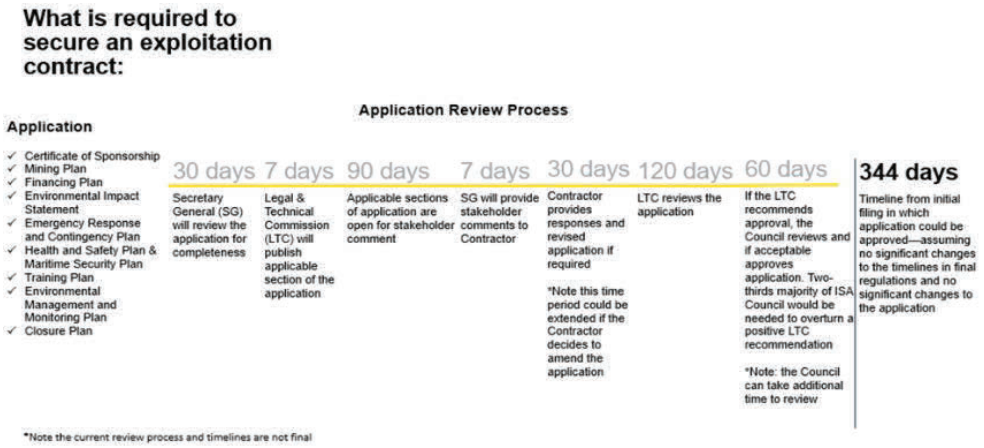
- The Regulations on Prospecting and Exploration for Cobalt-Rich Ferromanganese Crusts in the CCZ (July 2012).

No commercial polymetallic nodule collection operations have started anywhere in the world. Currently, exploration activities undertaken are aimed at gathering the necessary information on the location, quality and quantity of the minerals of the seabed as well as collecting the necessary environmental baseline information. To date, the ISA has approved 17 contracts in the CCZ for exploration of nodules, one in the Indian Ocean and one in the Western Pacific Ocean covering more than 1.35 million square kilometers of the seabed. This represents 0.3 percent of the world's oceans seafloor. Twelve of these contracts are sponsored by developing countries (including the sponsors of our subsidiaries NORI — Nauru, and TOML — Tonga, and our partner Marawa which is sponsored by the Republic of Kiribati). Thirteen countries and one intergovernmental consortium currently have contracts for the exploration of polymetallic nodules, seven countries have contracts for the exploration of polymetallic sulphides, and five countries have contracts for the exploration of cobalt-rich ferromanganese crusts. To date, no exploitation contracts for extracting minerals from the seafloor within the CCZ have been granted. The ISA is currently working on the development of a legal framework to regulate the commercialization of mineral development activities, as described below.

In 2014, the ISA completed a study looking at comparative extractive regulatory regimes. This was followed in March 2014 with a stakeholder survey seeking comments on what financial, environmental, and health and safety obligations should be included under the framework (ISA 2014).

In August 2017, the Council released the first Draft Regulations on Exploitation of Mineral Resources in the CCZ, as subsequently amended. In March 2019, the Council released the advance and unedited text (English only) of the Draft Regulations on Exploitation of Mineral Resources in the CCZ (ISBA/25/LTC/WP.1) (ISA, 2018). The revised draft exploitation regulations incorporated the consideration of requests addressed to the LTC by the Council during the first part of the 24th Session in March 2018, as well as certain comments by the Commission, and also reflected the responses to the first draft from stakeholder submissions. The exploitation regulations will create the legal and technical framework for collection and related operations. Finalization of the exploitation regulations remains subject to the decision of the members of the ISA. Final exploitation regulations must be adopted by the Council. The ISA was targeting to finalize these regulations by July 2020, but the COVID-19 pandemic disrupted ISA meetings and discussions.

The current proposed application process in the draft exploitation regulations consists of the following:



We are still in the exploration phase of the project and have not yet obtained an exploitation contract from the ISA ("ISA Exploitation Contract") to commence commercial-scale polymetallic nodule collection in the CCZ. An ISA exploitation contract application is comprised of several components, including: Certificate of Sponsorship, Mining Plan, Financing Plan, EIS, Emergency Response and Contingency Plan, Health and Safety Plan and maritime Security Plan, Training Plan, EMMP and Closure Plan. In addition, we do not have the applicable environmental and other permits required to build or modify and operate commercial scale polymetallic nodule processing and refining plants on land.

Section 1, paragraph 15 of the 1994 Agreement relating to the Implementation of Part XI of the UNCLOS allows a member state whose national intends to apply for approval of a plan of work for exploitation to notify the ISA of such intention. This notice obliges the ISA to complete the adoption of exploitation regulations within two years of the request made by the member state.

On June 25, 2021, Nauru submitted its notice to the ISA requesting that it complete the adoption, by July 9, 2023, of rules, regulations and procedures necessary to facilitate the approval of plans of work for exploitation in the Area. The ISA did not complete the adoption of the rules, regulations and procedures by July 9, 2023, as required. At its July 2023 28th Session meeting, the ISA adopted a Council decision agreeing on a timeline and modalities of work until July 2024, with a view to adopt final exploitation regulations during the thirtieth ISA session in 2025. Although we believe that the ISA will adopt the exploitation regulations and any necessary rules, regulations and procedures to facilitate the approval of a plan of work for exploitation by the thirtieth session as the ISA has indicated, there can be no assurances that the adoption of these regulations will not be delayed or halted paused as a result of the actions of ISA member States. The Draft Regulations and several supporting standards and guidelines are at an advanced stage, but there remains uncertainty regarding the final form that these will take as well as the impact that such regulations, standards and guidelines will have on our ability to begin commercial operations in a timely manner, or at all. If the ISA Council has not completed the adoption of such regulations within the prescribed time and an application for approval of a plan of work for exploitation is pending, the ISA shall nonetheless consider and provisionally approve such a plan of work for exploitation based on: (i) the provisions of the UNCLOS; (ii) any rules, regulations and procedures that the ISA may have adopted provisionally, (iii) the basis of the norms contained in the UNCLOS and (iv) the terms and principles contained in the Agreement relating to the Implementation of Part XI, including the principle of non-discrimination among contractors. There can be no assurance that the ISA will provisionally approve our plan or that such provisional approval would lead to the issuance of an exploitation contract by the ISA.

On August 1, 2023, we announced that our subsidiary, NORI, intends to submit its application for an exploitation contract to the ISA following the July 2024 meetings of the ISA. NORI is conducting a post-collection test campaign, strengthening its environmental baseline data and its application for an exploitation contract. This timing allows the Council to meet three more times to continue negotiating and progressing the rules, regulations and procedures.

Consistent with NORI's rights under the UNCLOS, and the 1994 Agreement relating to the Implementation of Part XI of UNCLOS (the Agreement), NORI reserves its right to submit an application for a plan of work for exploitation, which will be included as part of the application for an exploitation contract, prior to the ISA's provisional adoption and approval of the exploitation regulations, the possibility of which was recognized in the ISA Council decisions ISBA/28/C/24 and ISBA/28/C/25, and to have that application considered and provisionally approved pursuant to Section 1, Paragraph 15 of the Annex to the Agreement.

At the third and final meeting of the 28th ISA Session in November 2023, the Council agreed to consolidate the text of the draft regulations. The main objective of such a consolidated text, is to better harmonize and clean the text based on negotiations of the interested stakeholders to date. The consolidated text will be the basis for the negotiations of the regulators in 2024.

The NORI Exploration Contract

In July 2011, our wholly-owned subsidiary, NORI, was granted a polymetallic nodule exploration contract by the ISA, providing it exclusive rights to explore 74,830 square kilometers in the CCZ pursuant to the NORI Exploration Contract ("NORI Exploration Contract"). The NORI Exploration Contract was approved by the Council on July 19, 2011, and entered into on July 22, 2011 between NORI and the ISA, and terminates on July 22, 2026, subject to extension.

The NORI Exploration Contract, which was granted pursuant to the ISA's Regulations on Prospecting and Exploration for Polymetallic Nodules in the CCZ (the "Regulations"), formalized a 74,830 square kilometers exploration area, has an initial term of 15 years (subject to renewal for successive five-year periods), and provides for certain obligations with respect to exploration, training, and other programs of activities for an initial five-year period. The NORI Exploration Contract also formalized the rights of NORI around future rights. Pursuant to the Regulations, NORI has the priority right to apply for an exploitation contract to collect polymetallic nodules in the same area (Regulation 24(2)). Such preference or priority may be withdrawn by the Council if the contractor has failed to comply with the requirements of its approved plan of work for exploration within the time period specified in a written notice or notices from the Council to the contractor indicating which requirements have not been complied with by the contractor. After a hearing process, the Council would be required to provide the reasons for its proposed withdrawal of preference or priority and shall consider any contractor's response. The decision of the Council shall take account of that response and shall be based on substantial evidence.

On August 1, 2023, we announced that our subsidiary, NORI intends to submit its application for an exploitation contract to the ISA following the July 2024 meetings of the ISA. To date, no exploitation contracts for extracting minerals from the international seafloor have been granted. The ISA is currently working on the development of a legal framework to regulate the exploitation of polymetallic nodules in the Area, as described above.

In 2021, NORI submitted a review of the implementation of the plan of work for the period from 2017 to 2021 to the ISA. The review included a proposed plan of work for the next five-year period from 2022 to 2026. On February 3, 2022, the ISA confirmed that the Secretariat and Commission had reviewed NORI's report and noted that the program of activities for the next five-year period was acceptable.

The ISA Council may suspend or terminate the NORI Exploration Contract, without prejudice to any other rights that the ISA may have, if any of the following events should occur:

- if, in spite of written warnings by the ISA, NORI has conducted its activities in such a way as to result in serious persistent and willful violations of the fundamental terms of the NORI Exploration Contract, Part XI of UNCLOS, the 1994 Agreement and the rules, regulations and procedures of the ISA;

- if NORI has failed to comply with a final binding decision of the dispute settlement body applicable to it; or

- if NORI becomes insolvent or commits an act of bankruptcy or enters into any agreement for composition with its creditors or goes into liquidation or receivership, whether compulsory or voluntary, or petitions or applies to any tribunal for the appointment of a receiver or a trustee or receiver for itself or commences any proceedings relating to itself under any bankruptcy, insolvency or readjustment of debt law, whether now or hereafter in effect, other than for the purpose of reconstruction.

Additionally, if the nationality or control of NORI changes or NORI's sponsoring State, as defined in the Regulations, terminates its sponsorship and NORI does not obtain another sponsor meeting the requirements prescribed in the Regulations, then the NORI Exploration Contract will terminate.

The NORI Sponsorship Agreement

NORI is sponsored by Nauru pursuant to a certificate of sponsorship signed by the Government of Nauru on April 11, 2011. NORI is a Nauruan incorporated entity and is subject to applicable Nauruan legislation and regulations. In 2015, the Nauruan government established the Nauru Seabed Minerals Authority to regulate activities carried out by companies sponsored by Nauru.

Throughout the period of the NORI Exploration Contract, NORI must be sponsored by a State that is party to UNCLOS. If the nationality or control of NORI changes or NORI's sponsoring State, as defined in the Regulations, terminates its sponsorship, NORI must promptly notify the ISA. In either event, if NORI does not obtain another sponsor meeting the requirements prescribed in the Regulations and fails to submit to the ISA a certificate of sponsorship for NORI in the prescribed form within six months, the NORI Exploration Contract will terminate.

On July 5, 2017, Nauru, the Nauru Seabed Minerals Authority and NORI entered into a sponsorship agreement (the "NORI Sponsorship Agreement") formalizing certain obligations of the parties in relation to NORI's exploration and potential collection of nodules within the NORI Contract Area of the CCZ. The NORI Sponsorship Agreement will remain in force for the duration of the 15-year NORI Exploration Contract and will automatically extend for a further 20 years upon NORI reaching the minimum recovery level under an ISA Exploitation Contract, unless earlier terminated by the ISA as a result of NORI's breach of the NORI Exploration Contract or pursuant to its terms. Upon reaching the minimum recovery level within the tenement area, NORI will pay Nauru a seabed mineral recovery payment based on the polymetallic nodules recovered from the tenement area. In addition, NORI will pay an administration fee each year to Nauru for such administration and sponsorship, which is subject to review and increase in the event that NORI is granted an ISA Exploitation Contract. NORI has begun discussions with the Government of Nauru to renegotiate the existing sponsorship agreement and has committed to paying corporate income tax within Nauru.

During exploration, NORI is required to, among other things:

- submit an annual report to the ISA;
- meet certain performance and expenditure commitments;
- pay an annual overhead charge to cover the costs incurred by the ISA in administering and supervising the contract;
- implement training programs for personnel of the ISA and developing countries in accordance with an approved training program;
- take measures to prevent, reduce, and control pollution and other hazards to the marine environment arising from its activities in the CCZ;
- maintain appropriate insurance policies;
- establish environmental baselines against which to assess the likely effects of its program of activities on the marine environment; and
- establish and implement a program to monitor and report on such effects.

NORI is sponsored to carry out its mineral exploration activities in the CCZ by Nauru, pursuant to a certificate of sponsorship signed by the Government of Nauru on April 11, 2011. Sponsorship of an entity requires the sponsoring State to certify that it assumes responsibility for the entity's activities in the CCZ in accordance with UNCLOS. NORI is a Nauruan incorporated entity and is subject to applicable Nauruan legislation and regulations.

The TOML Exploration Contract

In March 2020, we acquired TOML from Deep Sea Mining Finance Limited, providing us with exclusive rights to explore a 74,713 square kilometers area of the CCZ seabed. TOML holds an exploration contract granted by the ISA and sponsored by the Kingdom of Tonga pursuant to the TOML Exploration Contract ("TOML Exploration Contract"). The plan of work was approved by the Council, acting on the recommendation of the LTC, on July 19, 2011. The TOML Exploration Contract was then signed on January 11, 2012 between TOML and the ISA and terminates on January 11, 2027, subject to a potential extension under the terms of the agreement.

The TOML Exploration Contract was granted pursuant to the ISA's Regulations, as well as Article 153 of UNCLOS, and formalized a 74,713 square kilometers exploration area. The TOML Exploration Contract includes an initial term of 15 years, which may be extended under the contract, and a program of activities to be completed within the first five-year period of the term. The TOML Exploration Contract also formalized the rights of TOML around future rights. Pursuant to the Regulations, TOML has the priority right to apply for an ISA Exploitation Contract to collect polymetallic nodules in the same area (Regulation 24(2)). The Regulations state that a contractor who has an approved plan of work for exploration only shall have a preference and a priority among applicants submitting plans of work for collection of the same area and resources. Such preference or priority may be withdrawn by the Council if the contractor has failed to comply with the requirements of its approved plan of work for exploration within the time period specified in a written notice or notices from the Council to the contractor indicating which requirements have not been complied with by the contractor. After a hearing process, the Council shall provide the reasons for its proposed withdrawal of preference or priority and shall consider any contractor's response. The decision of the Council shall take account of that response and shall be based on substantial evidence.

Under ISA requirements contractors are required to submit five-year work programs. The first TOML five-year work program was completed in 2016 and reviewed and accepted by the ISA in late 2016. In 2021, TOML submitted a review of the implementation of the plan of work for the period from 2017 to 2021 to the ISA. The review included a proposed plan of work for the next five-year period from 2022 to 2026.

On December 23, 2022, the ISA accepted TOML's proposed program of activities for the 2022-2026 five-year period.

The ISA Council may suspend or terminate the TOML Exploration Contract, without prejudice to any other rights that the ISA may have, if any of the following events occur:

- if, in spite of written warnings by the ISA, TOML has conducted its activities in such a way that results in serious persistent and willful violations of the fundamental terms of this contract, Part XI of UNCLOS, the 1994 Agreement and the rules, regulations and procedures of the ISA;

- if TOML has failed to comply with a final binding decision of the dispute settlement body applicable to it;

- if TOML becomes insolvent or commits an act of bankruptcy or enters into any agreement for composition with its creditors or goes into liquidation or receivership, whether compulsory or voluntary; or

- petitions or applies to any tribunal for the appointment of a receiver or a trustee for itself or commences any proceedings relating to bankruptcy, insolvency or readjustment of debt law, whether now or hereafter in effect, other than for the purpose of reconstruction.

Additionally, if the nationality or control of TOML changes or TOML's sponsoring State, as defined in the Regulations, terminates its sponsorship and TOML does not obtain another sponsor meeting the requirements prescribed in the Regulations, then the TOML Exploration Contract will terminate.

The TOML Sponsorship Agreement

On March 8, 2008, Tonga and TOML entered into the TOML Sponsorship Agreement formalizing certain obligations of the parties in relation to TOML's exploration and potential exploitation of a proposed application to the ISA (subsequently granted) known as the TOML Area. TOML updated the sponsorship agreement with Tonga in September 2021. Unless otherwise terminated by the parties, the term for the TOML Sponsorship Agreement is for the duration of TOML's ISA Exploration Contract and will automatically extend for a further 25 years upon TOML being granted an ISA Exploitation Contract. Upon reaching the minimum recovery level within the tenement area, TOML has agreed to pay Tonga a seabed mineral recovery payment based on the polymetallic nodules recovered from the tenement area. In addition, TOML will pay an administration fee each year to Tonga for such administration and sponsorship, which is subject to review and increase in the event that TOML is granted an ISA Exploitation Contract. TOML expects to renegotiate the existing sponsorship agreement with Tonga prior to entering into operations in the TOML area and has committed to paying corporate income tax within Tonga.

Marawa Agreements

On March 17, 2012, our wholly-owned subsidiary, DGE, entered into an Option Agreement (the "Option Agreement") with Marawa and Kiribati. In consideration of the $250,000 option fee, Marawa granted DGE an option to purchase tenements, as may be granted to Marawa by the ISA or any other regulatory body, for $300,000, or in consideration of DGE waiving any loan and other debt obligation pursuant to the Services Agreement (as defined below) if a default event occurs. The exercise period for the option is a maximum of 40 years after the date of the execution of the Option Agreement.

On July 26, 2012, the ISA Council approved a plan of work for exploration submitted by Marawa covering the Marawa Contract Area. Due to uncertainty of the economic potential of the Marawa Contract Area, Marawa is currently considering its options and expects to finalize its decision in 2024. Marawa delayed certain work programs until it determines how it will move forward.

On October 1, 2013, DGE entered into an agreement (the "Services Agreement") with the Republic of Kiribati and Marawa granting DGE the exclusive right for 40 years to carry out exploration and collection in the Marawa Contract Area as well as purchase polymetallic nodules collected from the Marawa Contract Area. The Marawa Exploration Contract was signed on January 19, 2015. To date, limited offshore marine resource definition activities in the Marawa Contract Area have occurred. We are collaborating with Marawa to assess the viability of any potential project in the Marawa Contract Area, although the timing of such assessment is uncertain. Marawa has delayed certain of its efforts in the Marawa Contract Area while it determines how it will move forward with additional assessment work.

DGE has the right to terminate the Services Agreement for convenience at any time at its election by giving written notice to Marawa and Kiribati and such termination shall take effect two months following the date of the termination notice, provided that DGE shall pay to the ISA on behalf of Marawa the fees or payments legally owed to the ISA by Marawa (including the Annual ISA Exploration Fee and ISA Royalties and Taxes) that are outstanding at the date of termination or that are incurred within 12 months of the date of such termination, provided that Marawa shall have an obligation to minimize such fees and payments to the extent practicable after the date of said termination. DGE and Marawa have considered the potential to amend the current contractual arrangements to provide additional mutual benefits in the conduct of operations, though no assurances may be given that any changes will be agreed.

Royalties and taxes

Royalties and taxes payable on any future production from the CCZ will be stipulated in the ISA's exploitation regulations. While the rates of payments are yet to be set by the ISA, the 1994 Implementation Agreement (Section 8(1)(b)) prescribes that the rates of payments "shall be within the range of those prevailing in respect of land-based mining of the same or similar minerals in order to avoid giving deep seabed miners an artificial competitive advantage or imposing on them a competitive disadvantage."

An open-ended working group has been formed and has met numerous times to discuss potential ISA royalty and sponsoring State taxation regimes supported by modelling conducted by the Massachusetts Institute of Technology. A final royalty and payment regime has not been agreed. However, recent discussions centered on a 2.5% ad valorem royalty on the gross metal value ("GMV") of nodule ore for the first five years of commercial production, thereafter increasing to 4.5% if GMV is equal or lower than $510 per dry tonne of nodules and scaling linearly to 9.5% if GMV is at or above $720 per dry tonne of nodules. An additional ad valorem environmental levy has also been discussed. The economic analysis included in the initial assessment contained in the NORI Technical Report Summary was based on a slightly different set of assumptions about ISA Royalty that were in use back in 2021: namely, 2% of GMV for the first five years, increasing to 6% thereafter plus 1% environmental levy. Additional discussions have considered capping any proposed environmental levy once an agreed total value has been reached and might no longer be collected once sufficient funds are in trust. We can provide no assurances that any such royalties or levies will not be greater than those discussed and could be significantly greater.

Under the NORI Sponsorship Agreement between Nauru and NORI and under the TOML Sponsorship Agreement between Tonga and TOML, upon reaching a minimum recovery level within the tenement areas, NORI and TOML have agreed to pay Nauru and Tonga a seabed mineral recovery payment for polymetallic nodules recovered from the tenement area, annually adjusted (from year 5) on a compounding basis based on the official inflation rate in the U.S. In addition, NORI and TOML will pay an administration fee each year to Nauru and Tonga for such administration and sponsorship, which is subject to review and increase in the event that NORI or TOML are granted an ISA Exploitation Contract. NORI and TOML have both committed to paying corporate income tax within Nauru and Tonga, respectively.

Environmental Regulation

The ISA is mandated through UNCLOS to "preserve and protect the marine environment" while developing the resources within the Area. Given the location of the NORI Contract Area, the ISA is responsible for assessing any ESIA prepared by NORI and for granting the relevant permits.

The ISA has issued Regulations on Prospecting and Exploration for Polymetallic Nodules (adopted on July 13, 2000, updated on July 25, 2013). The regulations are complemented by the LTC's recommendations for the guidance of contractors on assessing the environmental impacts of exploration. The exploitation regulations on deep-seabed collection will be complemented by various standards and guidelines, and thresholds. The ISA is currently developing these standards and guidelines, and thresholds which are expected to be finalized by the LTC and adopted by the Council. The ISA has divided the required standards and guidelines in three phases.

- Phase 1: Standards and guidelines deemed necessary to be in place by the time of adoption of the draft regulations on exploitation.
- Phase 2: Standards and guidelines deemed necessary to be in place prior to the receipt of an application of a plan of work for exploitation.
- Phase 3: Standards and guidelines deemed necessary to be in place before commercial mining activities commence in the Area.

Ten standards and guidelines have been prepared in Phase 1, provided to stakeholders for comment, reviewed and amended by the LTC and provided to Council for consideration and approval. Additional standards and guidelines will be drafted as part of the development of Phase 2 and 3.

Although the environmental impact review process has not yet been finalized, all contractors have been made aware that the ISA requires the completion of baseline studies and EIA, culminating in an EIS for proposed commercial operations, prior to collection. An EIS and an EMMP, will be required as part of the application for an ISA Exploitation Contract for operations in the CCZ. Environmental and social baseline studies are being conducted and NORI has engaged several leading deep-sea research institutions and scientists to contribute to our environmental and social impact assessment program, consisting of over 100 discrete studies.

NORI's offshore exploration campaigns have included sampling to support environmental studies, collection of high-resolution imagery, full column physical and chemical oceanographic data and environmental baseline studies. Our last offshore campaign to collect environmental baseline data was completed in 2022. An integrated collector test involving trialing of collector vehicle and riser system took place in 2022. The environmental impacts of this test were monitored from a separate research vessel. An additional environmental campaign was executed in 2023 to return to the site 12 months after the test. Data collected from the test monitoring campaign and 12-month revisit campaigns will be used to forecast the impacts for a full-scale commercial operation in NORI's EIS. NORI intends to manage the project under the governance of an environmental management system ("EMS"), which is to be developed in accordance with the international EMS standard, ISO 14001:2004. The EMS will provide the overall framework for the environmental management and monitoring plans that are required.

NORI's EMMP will specify the objectives and purpose of all monitoring requirements, the components to be monitored, frequency of monitoring, methods of monitoring, analysis required in each monitoring component, monitoring data management and reporting. The EMMP will be submitted to the ISA as part of the ISA Exploitation Contract application.

Pursuant to Article 165(2)(b) of the Convention and Paragraph 11(a) of the 1994 Agreement, an application for a Plan of Work is first reviewed by the LTC and a recommendation concerning the approval of the Plan of Work is submitted by the LTC to the Council. Rule 44 of the Commission's Rules of Procedure requires decision making by consensus. If all efforts to reach consensus have been exhausted, however, then a decision by voting shall be taken by a majority of members present and voting. A proposed timeline for the consideration of a Plan of Work by the Commission was developed in "Draft guideline on the preparation and assessment of an application for the approval of a Plan of Work for exploitation" (ISBA/27/C/3).

If a positive recommendation is submitted by the Commission to the Council concerning the approval of a Plan of Work, the Council is required to approve the Commission's recommendation unless a two-thirds majority of its members present and voting, including a majority of members present and voting in each of the chambers of the Council, decides to disapprove the Plan of Work. If the Council does not take a decision on the Commission's recommendation within 60 days, the recommendation shall be deemed to have been approved by the Council.

In addition, the sponsoring State has a responsibility to put in place legislation to ensure the entity it has sponsored complies with UNCLOS and ISA rules and regulations. Nauru implemented the Nauru International Seabed Minerals Act in 2015 which NORI is required to comply with.

NORI's assessment is that it is in compliance with existing exploration permits and contracts. In addition to working on key engineering aspects of the project such as designing the final nodule collector and the dewatering facility, NORI is also continuing the following tasks:

- delineating nodule mineralization;
- characterizing the nature of the seabed, water column and biology;
- finalizing environmental baseline studies and impact assessments;
- characterizing the nature of any materials returned to the environment;
- developing oceanographic and physical information to inform models (e.g., sediment plume models); and
- developing other plans, including the EMMP and the various subordinate plans.

The potential future onshore environmental impacts have not yet been assessed because the processing plants that we expect to use through a tolling or other arrangement have not been finalized, and the locations and host countries (and hence regulatory regime) have not been confirmed. The planned metallurgical process is expected to generate near-zero solid waste products. The deleterious elements' (for example, cadmium and arsenic) content of the nodules is understood to be very low, indicating that with careful management, the environmental impacts of the processing operation are expected to be low.

Intellectual Property

Our success depends in part upon our ability to obtain and maintain patent protection of our core technology and intellectual property, as well as that of our strategic partners, and particularly that our freedom to operate is not restricted by patents lodged by competitors or other third parties. Moreover, we rely on a combination of trade secret protection, non-disclosure and licensing agreements and trademarks to establish and protect our proprietary intellectual property. To this end, we maintain a portfolio of issued patents and pending patent applications, which relate to offshore collection systems and to the processing of polymetallic nodules for recovering metals. As we rely on a number of patents to establish and protect our intellectual property, we have obtained and filed patent applications in countries throughout North America, Europe and Asia.

We cannot conclusively state that any pending applications, existing or future intellectual property will be definitively useful in protecting or promoting our business and growth plans. Please see the section entitled "*Risk Factors*" for additional information on the risks associated with our intellectual property strategy and portfolio.

Human Capital

As of December 31, 2023, we employed forty-six (46) employees and contractors. None of our staff are covered by collective bargaining agreements.

Attracting Talent. Our team is comprised of highly skilled individuals from a variety of fields. Geographically, our staff are located in Tonga, Nauru, U.S., Canada, Australia, United Kingdom and United Arab Emirates. We are committed to attracting, developing and retaining world-class talent that is inclusive of a diverse range of perspectives, age, gender, gender identity, race, sexual orientation, physical capability, neurological difference, ethnicity and belief. Our goal is to develop cultural competency by seeking knowledge, increasing awareness, modeling respect and promoting inclusion.

People Engagement. As a company working to pioneer a new industry and new ways of doing things, our success depends on attracting and retaining strong, independent, entrepreneurial, and multi-talented team members capable of dealing with high levels of uncertainty and adversity. Our team is distributed across several continents and several time zones, with remote working being the norm for most of our staff and multi-week offshore campaigns being the norm for our offshore team. Despite physical and temporal separation, we maintain a strong sense of cohesion by attracting people who are intrinsically motivated by the company's purpose and core values, cultivating a flat organizational structure and deep care for each other. We rely on regular management and company meetings, ongoing communication flows across different technology platforms, frequent *ad hoc* video communication and creating opportunities for in-person gatherings. We offer our team members flexible work schedules and autonomy in managing their time while encouraging them to set boundaries between work on our shared mission and their home lives.

Compensation and Benefits. We compensate our staff competitively, striving to be in the 50th-60th percentile of our peers for total compensation and benefits. In addition to salaries, our compensation and benefits program includes annual discretionary bonuses, equity awards, an employee stock purchase plan, a 401(k) contribution/superannuation or RRSP benefit contribution (as applicable jurisdictionally), healthcare and insurance benefits, health savings and flexible spending accounts. Our annual equity compensation is focused on company priorities that we believe create long-term value for our stakeholders.

Environment, Health & Safety (EHS). Our EHS vision is to fully integrate environmental, health and safety into our operations, and to create a workplace free of incidents. In 2023, we relied on the EHS programs of our partners Allseas and a new offshore support service provider to conduct our operations in a safe manner and in compliance with applicable safety laws, rules and regulations. These all involve EHS systems incorporating thorough planning, risk assessment and disciplined implementation of controls as well as culturally-based safety observations systems like safe act observations and obligation of "stop work if it is unsafe to proceed".

Available Information

Our internet address is *https://themetals.co*, to which we regularly post copies of our press releases as well as additional information about us. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, are available to you free of charge through the Investors section of our website as soon as reasonably practicable after such materials have been electronically filed with, or furnished to, the SEC. The SEC maintains an internet site (*http://www.sec.gov*) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. We include our website address in this Annual Report only as an inactive textual reference. Information contained in our website does not constitute a part of this Annual Report or our other filings with the SEC.

Corporate Information

TMC is a corporation existing under the laws of British Columbia, Canada. TMC's registered office is currently located at 595 Howe Street, 10th Floor, Vancouver, British Columbia, Canada V6C 2T5, and its telephone number is: (604) 631-3115.

Item 1A. RISK FACTORS

Our business is subject to numerous risks and uncertainties that you should be aware of in evaluating our business. If any such risks and uncertainties actually occur, our business, prospects, financial condition and results of operations could be materially and adversely affected. The risks described below are not the only risks that we face. Additional risks and uncertainties not currently known to us, or that we currently deem to be immaterial may also materially adversely affect our business, prospects, financial condition and results of operations. The risk factors described below should be read together with the other information set forth in this Annual Report, including our consolidated financial statements and the related notes, as well as in other documents that we file with the SEC.

Summary of the Material Risks Associated with Our Business

These risks include, but are not limited to, the following:

- Our business is subject to numerous regulatory uncertainties which, if not resolved in our favor, would have a material adverse impact on our business.
- Our resource development activities are subject to changes in government regulation and political instability.
- Changes to any of the laws, rules, regulations or policies to which we are subject could have a significant impact on our business.
- Our exploration, collecting, shipping, processing and refining activities are subject to extensive and costly environmental requirements, and current and future laws, regulations, and permits may impose significant costs, liabilities, or obligations, or could limit or prevent our ability to continue our operations as currently contemplated or to undertake new operations.
- There can be no assurance that the Environmental Impact Assessment Post Collector Test will be successful.
- We may become subject to environmental liabilities as a result of noncompliance or newly imposed regulations.
- The grade and quality of the polymetallic nodule deposits that we intend to develop are estimates, and there are no guarantees that such deposits will be suitable for collecting or commercialization.
- No seafloor polymetallic nodule deposit has ever been commercially collected, and our offshore collection technology and development plans and processes may not be sufficient to accomplish our objectives.
- Mineral resource estimates from the contract areas of NORI and TOML are only estimates.
- Our business is subject to significant risks, and we may never develop minerals in sufficient grade or quantities to justify commercial operations.
- Uncertainty in our estimates of polymetallic nodule deposits could result in lower-than-expected revenues and higher costs.
- We operate in a highly competitive industry, and there are no assurances that our efforts will be successful.
- The prevailing market prices of nickel, manganese, copper, cobalt, and other commodities will have a material impact on our ability to achieve commercial success.
- We may be adversely affected by fluctuations in demand for nickel, manganese, copper, cobalt, and other commodities.
- We may experience difficulty in creating market acceptance for a novel manganese product.
- Negative perceptions related to the collection of polymetallic nodules could have a material adverse effect on our business.

- Offshore nodule collection, shipping and onshore processing and refining operations pose inherent risks and costs that may negatively impact our business.
- Our business is contingent on our ability to successfully identify, collect, ship and process polymetallic nodules, and in doing so, we will need to rely on certain existing and future strategic relationships, some of which we may be unable to maintain and/or develop.
- Some of the offshore equipment that we will need to accomplish our objectives has not been manufactured and/or tested.
- Our business is substantially dependent on our strategic relationship with Allseas.
- The polymetallic nodules that we may recover will require specialized treatment and processing, and there is no certainty that such processes will result in a recovery of metals that is consistent with our expectations, or that we will be able to develop or otherwise access processing plants that are suitable for our purposes.
- Our exploration and polymetallic nodule collecting activities may be affected by natural hazards, which could have a material adverse effect on our business.
- Actual capital costs, financing strategies, operating costs, production and economic returns may differ significantly from those we have anticipated and there can be no assurance that any future development activities will result in profitable metal production operations.
- We have a limited operating history, and there can be no assurance that we will be able to commercially develop our resource areas or achieve profitability in the future.
- We depend on key personnel for the success of our business. The loss of key personnel or the hiring of ineffective personnel could negatively impact our operations and profitability.
- We are dependent upon information technology systems, which are subject to cyber threats, disruption, damage and failure.
- Our business is subject to a variety of risks, some of which may not be covered by our future or existing insurance policies.
- We may not be able to adequately protect our intellectual property rights. If we fail to adequately enforce or defend our intellectual property rights, our business may be harmed.
- If we infringe, or are accused of infringing, on the intellectual property rights of third parties, it may increase our costs or prevent us from being able to commercialize new products.
- We may issue additional Common Shares or other equity securities without shareholder approval, which would dilute your ownership interests and may depress the market price of our Common Shares and sales of a substantial amount of our Common Shares may cause the price of our Common Shares to fall.
- If our outstanding warrants are exercised, the number of shares eligible for future resale in the public market will increase and result in dilution to our shareholders.
- We are involved in class action and securities litigation that may adversely affect us, and we may not be successful in our litigation related to non-performing Private Investment in Public Equity ("PIPE") investors.
- Our business is capital intensive, and we will be required to raise additional funds in the future in order to accomplish our objectives.
- We may incur debt in the future, and our ability to satisfy our obligations thereunder remains subject to a variety of factors, many of which are not within our control.
- An active trading market for our Common Shares and warrants may not be sustained, which would adversely affect the liquidity and price of our securities.
- There can be no assurance that we will be able to comply with the continued listing standards of Nasdaq.
- We have identified material weaknesses in our internal control over financial reporting. If we are unable to develop and maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results in a timely manner, which may adversely affect investor confidence in us and materially and adversely affect our business and operating results and the value of our common shares and we may face litigation as a result thereof.
- We are exposed to risks in our international operations, which could adversely affect our business.
- We may be classified as a PFIC in any taxable year, which could result in adverse U.S. federal income tax consequences to U.S. holders.

I. Regulatory and Environmental Risks.

Our business is subject to numerous regulatory uncertainties which, if not resolved in our favor, would have a material adverse impact on our business.

On March 4, 2023 the United Nations finalized the UN High Seas Treaty. The treaty does not replace or amend UNCLOS, or the authority of the ISA, and must be interpreted consistently with the rights granted by the Convention.

To date, no commercial collection (also referred to as "mining," "exploitation" or "harvesting") of nodules has occurred on the seafloor in the area of the high seas beyond the limits of national jurisdiction (the "Area"), which includes the CCZ. Moreover, despite the release by the ISA of the Draft Regulations on Exploitation of Mineral Resources (the "Draft Regulations"), finalization of such regulations remains subject to approval and adoption by the ISA. Once adopted, these regulations will add to the legal and technical framework for exploitation of the polymetallic nodules in the NORI, TOML and Marawa contract areas.

Section 1, paragraph 15 of the 1994 Agreement relating to the Implementation of Part XI of UNCLOS allows a member state whose national intends to apply for approval of a plan of work for exploitation to notify the ISA of such intention. This notice obliges the ISA to complete the adoption of exploitation regulations within two years of the request made by the member state.

On June 25, 2021, Nauru submitted such a notice, with an effective date of July 9, 2021, to the ISA requesting that it complete the adoption of rules, regulations and procedures ("RRPs" or the "Mining Code") necessary to facilitate the approval of plans of work for exploitation in the Area. As a result of that notice the ISA was required to adopt the relevant RRPs for exploitation by July 9, 2023. The ISA, however, did not adopt the RRPs for exploitation by the July 9, 2023 deadline. At its July 2023 session, the ISA released a road map for the finalization of the Mining Code, with a view to its adoption during the 30th session of the ISA in 2025, with the potential for earlier adoption during the 29th session of the ISA in 2024 if the Mining Code is ready for adoption by that time. The road map includes three scheduled ISA Council meetings through July 2024 to elaborate the Mining Code. Although we believe the ISA will adopt the Mining Code, there can be no assurances that the Mining Code will be adopted within these timelines, or at all, as a result of actions of ISA member States or otherwise. For example, 21 ISA member States out of the 169 ISA members have expressed reservations about the commercialization of seafloor mineral resources and have called for a ban, moratorium, or precautionary pause on the commercialization of these resources. In addition, although the Draft Regulations and several supporting standards and guidelines are at an advanced stage, there remains uncertainty regarding the final form that these will take, as well as the impact that such regulations, standards and guidelines will have on our ability to meet our objectives.

As the ISA Council did not complete the adoption and elaboration of the Mining Code by the prescribed deadline of July 9, 2023, pursuant to Section 1, Paragraph 15(c) of the Annex to the 1994 Agreement relating to the implementation of Part XI of UNCLOS, if an application for a plan of work for exploitation is now submitted to the ISA, the ISA is nonetheless required to consider and provisionally approve such a plan of work based on: (i) the provisions of the UNCLOS; (ii) any rules, regulations and procedures that the ISA may have adopted provisionally, (iii) the basis of the norms contained in the UNCLOS and (iv) the terms and principles contained in the 1994 Agreement relating to the Implementation of Part XI, including the principle of non-discrimination among contractors.

NORI intends to submit an application to the ISA for an exploitation contract, which will include a plan of work for exploitation for NORI Area D following the conclusion of the July 2024 meeting of the ISA's 29th session. If the ISA has not adopted the final Mining Code by the time NORI submits this application, we believe that the ISA will review and provisionally approve the plan of work for exploitation included therein pursuant to Section 1, Paragraph 15(c) of the Annex to the 1994 Agreement relating to the implementation of Part XI of UNCLOS discussed above. The ISA released its road map to finalize the Mining Code at its July 2023 session, however, it also stated that the commercial exploitation of mineral resources in the ISA's jurisdictional area should not be carried out in the absence of RRPs relating to exploitation. In addition, there can be no assurances that the ISA will come to a consensus as to the interpretation of Section 1, Paragraph 15(c) of the Annex to the 1994 Agreement relating to the implementation of Part XI of UNCLOS. Although we believe the ISA will accept and consider an application for a plan of work for exploitation in the absence of the final Mining Code, there is no consensus within the ISA as to the process to be followed for its consideration of such an application, including the involvement of the ISA's Legal and Technical Commission and whether and how long the ISA could delay its consideration of an application past the proscribed 60-day period. As a result, and in light of some ISA members States calling for a ban, moratorium or precautionary pause on the commercialization of seafloor mineral resources, there can be no assurance that the ISA will provisionally approve our plan of work for exploitation, within one year from submission thereof, or at all, or that such provisional approval would lead to the issuance of an exploitation contract with the ISA.

The collection of polymetallic nodules within the CCZ, where our exploration areas are located, will require approval of an ISA Exploitation Contract (which will authorize commercial collection activities). As part of the application for an ISA Exploitation Contract, all contractors are required to complete baseline studies and an ESIA, culminating in an EIS, prior to collecting nodules at a commercial scale. The EIS would be accompanied by an EMMP which is expected to specify the objectives and purpose of all monitoring requirements, the components to be monitored, frequency of monitoring, methods of monitoring, analysis required in each monitoring component, monitoring data management and reporting.

In order to move our exploration projects into commercial production, our wholly-owned subsidiaries, NORI and TOML will each need to conclude an exploitation contract with the ISA, as will our partner, Marawa, in addition to obtaining related permits that may be required by our commercial partners. There can be no assurance that the ISA will approve our application for a plan of work for exploitation and issue an exploitation contract to our subsidiaries in a timely manner or at all. Even if the ISA timely evaluates such applications(s), our subsidiaries may be required to submit a supplementary EIS or perform additional studies or campaigns before obtaining approval. As such, there is a risk that an exploitation contract may not be granted by the ISA, may not be granted on a timely basis, thereby delaying our potential timeline for commercial exploitation, or may be granted on uneconomic terms.

Similarly, with respect to sponsoring State regulation, no assurance can be given that new rules and regulations will not be enacted or that existing rules and regulations will not be applied in a manner that would limit or curtail production or development by our subsidiaries. Amendments to current laws and regulations governing the operations and activities of deep-sea mineral resources companies, or changes in interpretation thereto, or the unwillingness of countries throughout the world to enforce such laws and regulations, could have a material adverse impact on our business, and could cause increases in exploration expenses, capital expenditures, production costs, or put the security of our equipment at risk to activism or piracy. Such amendments could also cause reductions in our future production, or the delay or abandonment in the development of our polymetallic mineral resource properties. There can be no certainty that actions by governmental and regulatory authorities, including changes in regulation, taxation and other fiscal regimes, will not adversely impact our projects or our business. Further, our operations depend on the continuation of the sponsorship agreements between our subsidiaries NORI and TOML and each of their host Sponsoring States, Tonga and Nauru, respectively. Each subsidiary has been registered and incorporated within such host nation and each host nation has maintained effective control, supervision, regulation, and sponsorship over the conduct of such subsidiary. While we have beneficial ownership over such subsidiaries, each subsidiary operates under the regulation and sponsorship of Nauru and Tonga. If such arrangement is challenged, or sponsorship is terminated, we may have to restructure the ownership or operations of such subsidiary to ensure continued State sponsorship. Failure to maintain sponsorship, or secure new state sponsorship, will have a material impact on such subsidiary and on our overall business and operations.

While the rates of payments are yet to be set by the ISA, the 1994 Agreement relating to the Implementation of Part XI of the UNCLOS prescribes a relevant framework that the rates of payments "shall be within the range of those prevailing in respect of land-based mining of the same or similar minerals in order to avoid giving deep seabed miners an artificial competitive advantage or imposing on them a competitive disadvantage." The ISA has held workshops with stakeholders to discuss and seek comments on the potential financial regime for the collecting of polymetallic nodules in the CCZ. There can be no assurance that the ISA will put in place a Mining Code in a timely manner or at all. Such regulations may also impose burdensome obligations or restrictions on us, and/or may contain terms that do not enable us to develop our projects.

Our resource development activities are subject to changes in government regulation and political instability.

Parties carrying out exploration and collection operations in the CCZ must be sponsored by a State that is a member of the ISA. The Sponsoring States of our subsidiaries NORI and TOML are Nauru and Tonga, respectively. In addition, our subsidiary, DGE, has an exclusive contract with Marawa, which is sponsored by Kiribati, that permits DGE to conduct activities in connection with the exploration contract held by Marawa with the ISA. If any of these countries cease such sponsorship, our subsidiaries or their partners (as applicable) would need to seek sponsorship elsewhere, which could impact our operations as a group.

There is a risk that a State sponsoring activities in a project area ceases to be a sponsor, or is not permitted to be a sponsor, or that NORI and TOML cease to remain as sponsored contractors by such State; and if an agreement cannot be reached with a substitute sponsoring State, or if we are unable to transfer our sponsorship to another State, such subsidiary could be forced to cease activities in the CCZ.

Additionally, there is little jurisprudence or interpretative guidance regarding the application of the sponsorship regulations that are applicable to our business. For example, with respect to the question over the regulation of which State can impact the activities of any contractor (such as NORI or TOML), we have taken the view that incorporation, registration and the grant of nationality are critical factors, amongst others, notwithstanding the beneficial ownership of a subsidiary by its parent ("beneficial ownership"). While this position has not been challenged by our Sponsoring States or the ISA, certain organizations that oppose the deep-sea polymetallic nodule exploration and collecting industry have advocated for the use of a beneficial ownership test for state sponsorship, and there are no guarantees that our interpretation will be universally accepted in the future.

The mineral exploration activities of our subsidiaries and their future project development prospects could be affected in varying degrees by political instability and changes in government regulation relating to foreign investment and the deep-sea polymetallic collecting business, including expropriation. Operations may also be affected in varying degrees by possible natural disasters in the region, terrorism, military conflict, crime, piracy, fluctuations in currency rates, and high inflation. In addition, from time to time, governments may nationalize private businesses, including companies such as ours. There can be no assurance that the governments of countries where we or our affiliates or third-party contractors operate or the governments with which our subsidiaries work in the CCZ will not nationalize companies such as ours and our assets in the future or impose burdensome obligations or restrictions. There can also be no assurance that the ISA will not impose burdensome obligations or restrictions on our business or our projects (or those of our affiliates and third-party contractors), or that they will not implement policies or regulations that would prevent us from accomplishing our objectives.

Changes to any of the laws, rules, regulations or policies to which we are subject could have a significant impact on our business.

Changes to any of the laws, rules, regulations, taxation or other policies to which we are subject could have a significant impact on our business. There can be no assurance that we will be able to comply with any future laws, rules, regulations and policies. Failure to comply with applicable laws, rules, regulations, and policies may subject us to civil or regulatory proceedings, including fines or injunctions, which may have a material adverse effect on our business, financial condition, liquidity, and results of operations. In addition, compliance with any future laws, rules, regulations, and policies could negatively impact our profitability, and could have a material adverse effect on our business, financial condition, liquidity and results of operations.

Furthermore, we may seek to expand our production capabilities in the future, which would require additional regulatory approvals that may not be provided in a timely manner or at all. Furthermore, such additional approvals could require changes to environmental offset areas and related environmental protections which, if overly burdensome, could impact our operations.

Our exploration, collecting, processing and refining activities are subject to extensive and costly environmental requirements, and current and future laws, regulations, and permits may impose significant costs, liabilities, or obligations, or could limit or prevent our ability to continue our operations as currently contemplated or to undertake new operations.

All phases of exploring for and collecting and processing polymetallic nodules are subject to environmental regulation in various jurisdictions and under national as well as international laws and conventions. No seafloor polymetallic nodule deposit has been developed commercially, and it is not clear what environmental parameters may need to be measured to satisfy regulatory authorities for an ISA Exploitation Contract to be granted. A full ESIA for deep-sea collecting operations has yet to be completed and approved by the ISA, and the full impact of any polymetallic nodule collecting operation on the environment has yet to be determined. Further, the required standards for an ESIA have not been finalized by the ISA, which could require changes to any submissions made by our subsidiaries in connection with an ISA Exploitation Contract application. Environmental legislation is evolving in a manner which is likely to require strict standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees.

Nodule collection operations in the CCZ are certain to disturb wildlife in the operating area and may impact ecosystem function. The nature and severity of these impacts on CCZ wildlife are expected to vary by species and are currently subject to significant uncertainty. Our campaigns to baseline wildlife and ecosystem function, pilot the nodule collection system and monitor impacts arising from the use of this system have been completed. Data processing and analysis is in progress and, similar to studies conducted in respect of land-based mining, may not definitively establish the impacts of activities on the biodiversity in the CCZ. Given the significant volume of deep water and the difficulty of sampling and retrieving biological specimens, a complete biological inventory might never be established. Accordingly, impacts on CCZ biodiversity may never be, completely and definitively known. For the same reasons, it may also not be possible to definitively say whether the impact of nodule collection on global biodiversity will be less significant than those estimated for land-based mining for a similar amount of produced metal.

It is also currently not definitively known whether the risk of biodiversity loss in the CCZ could be eliminated through setting aside large representative areas of CCZ under protection (13 areas currently set aside by ISA covering 43% of the CCZ) or reduced through mitigation strategies inside operating areas or how long it will take for disturbed seabed areas to recover naturally. Prior research indicates that the density, diversity and function of fauna representing most of resident biomass (including mobile, pelagic and microbial life) are expected to recover naturally over years to decades. However, a high level of uncertainty exists around recovery of fauna that requires the hard substrate of nodules for critical life function. The extent to which planned measures, such as leaving behind partial nodule cover and setting aside no-take zones, would aid recruitment and recovery of nodule-dependent species in impacted areas will depend on factors like habitat connectivity, which is an area that is still under study.

While we intend to collect seafloor polymetallic nodules in a way that mitigates and reduces potential damage to the seafloor, marine life and ecosystem function, we do not know whether the ISA or any other regulatory body will seek to impose onerous methods for the restoration of the disturbed area or rehabilitation obligations on our collecting process. Any such obligations, to the extent they are overly burdensome, could result in material changes to our business as currently contemplated.

Although the environmental impact review process has not yet been finalized, all contractors have been made aware of the requirement to complete baseline studies and an ESIA, culminating in an EIS, prior to collecting. The EIS would be accompanied by an EMMP, which will be required as part of the application for an ISA Exploitation Contract within the contract areas of NORI, TOML and Marawa. The EMMP is expected to specify the objectives and purpose of all monitoring requirements, the components to be monitored, frequency of monitoring, methods of monitoring, analysis required in each monitoring component, monitoring data management and reporting.

The EMMP will also be submitted to the ISA for approval as part of the ISA Exploitation Contract application. There are no guarantees that the ISA will evaluate any exploitation contract application by our subsidiaries in a timely manner, and even if the ISA does timely evaluate such applications(s), such subsidiary may be required to submit a supplementary EIS before being approved. This may result in delays that could impact our projected timeframe. Furthermore, in the event that the ISA evaluates and approves an application in a timely manner, any aspect of such application and approval theoretically could be subject to legal challenges which could result in further delays that could detrimentally impact our business. For example, certain conservation groups have called for a ten-year moratorium on all deep-sea mineral exploration and exploitation activities. While this agenda does not appear to have directly impacted the development of proposed Final Regulations and Standards and Guidelines by the ISA, any such moratorium would have a material adverse effect on our business.

The environmental permitting process, which includes considerations of the impacts of our activities on the biodiversity of the CCZ, is expected to involve a series of checks and balances with reviews being conducted by the ISA, including technical evaluations by the ISA Secretariat and the Legal and Technical Commission (the "LTC"). The recommendations of the LTC will then go before the ISA Council ("Council"), a core policy-making body of the ISA, which will then review and, if it deems appropriate, approve the contractor's application. It would require a two-thirds majority of the Council to reject a development proposal that is recommended to it by the LTC. There are no assurances that the work our subsidiaries have done to date, or their contemplated future operations will satisfy the final environmental rules and regulations adopted by the ISA, and any future changes could delay the timing of such submissions to the ISA or our subsidiaries operations more generally, which could have a material adverse effect on our business. Sponsoring State approvals and permits are currently and may in future be required in connection with our operations. To the extent such approvals are required and not obtained, our subsidiaries may be curtailed or prohibited from proceeding with planned exploration or development of mineral properties. Failure to comply with applicable laws, regulations, and permitting requirements may result in enforcement actions thereunder, including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed and may include corrective measures requiring capital expenditures, installation of additional equipment, or remedial actions. Parties engaged in collection operations may be required to compensate those suffering loss or damage by reason of the collection activities and may have civil or criminal fines or penalties imposed for violations of applicable laws and regulations.

We may become subject to environmental liabilities as a result of noncompliance with existing or future regulations.

All of the exploration and development operations of our subsidiaries will be subject to environmental permitting and regulations, which can make operations expensive or prohibit them altogether. We may also be subject to potential risks and liabilities associated with pollution of the environment that could occur as a result of our subsidiaries' exploration, development, and production activities.

To the extent that a subsidiary becomes subject to environmental liabilities, the payment of such liabilities, or the costs incurred to remedy environmental pollution, would reduce funds otherwise available to us, which could have a material adverse effect on our business. If we or our subsidiaries are unable to fully remedy an environmental problem, they might be required to suspend operations or enter into interim compliance measures pending completion of the required remedy. The potential exposure could be material to our business.

All of our exploration, development, production and processing activities will be subject to regulation under certain environmental laws and regulations. Our subsidiaries may be required to obtain permits for their activities. They may be required to update and review permits from time to time, and may also be subject to environmental impact analyses and public review processes prior to the approval of any future activities. It is possible that future changes in applicable laws, regulations and permits, or changes in their enforcement or regulatory interpretation by local governments, sponsor states, and other regulatory bodies, could have a significant impact on our business.

II. Resource and Market Risks.

The grade and quality of the polymetallic nodule deposits that we intend to develop are estimates, and there are no guarantees that such deposits will be suitable for collecting or commercialization.

The grades and abundances of the seafloor polymetallic nodule deposits that we intend to develop and commercialize are estimates that may prove to be inaccurate. While limited samples have been collected and analyzed, there are no guarantees that our estimates of quality will hold true with respect to the polymetallic nodule deposits that we are able to collect from the seafloor. Actual nodule grades and abundances may vary from our estimates, which could have a material adverse impact on our projections for future revenues, cash flows, royalties, and development and operating expenditures.

In addition, the precise form of mineral occurrence, grade, abundance, and tonnage, which is projected based on the mapping and analysis of samples, is not yet known. There is a risk that the sampling and imaging that has been completed to date, and that which will need to be completed in the future, has not and/or will not allow us to accurately quantify the tonnage, abundance and grade of identified polymetallic nodule deposits. Moreover, the projections or classifications based on such sampling could result in inaccurate environmental, geological or metallurgical assumptions (including with respect to the size, grade, abundance, and/or recoverability of minerals) or incorrect assumptions concerning economic recoverability.

No seafloor polymetallic nodule deposit has ever been commercially collected, and our offshore collection technology and development plans and processes may not be sufficient to accomplish our objectives.

Seafloor polymetallic nodules have never been commercially mined, and there is a risk that our offshore collection and recovery methods and the equipment that we intend to utilize during this process, including transferring nodules to transport vessels and delivering of nodules to port, may not be adequate for the economic development of seafloor polymetallic nodule deposits. The equipment and technology that we intend to utilize has not been fully proven in such subsea conditions and for this specific material and application, and failure to adapt existing equipment or to develop suitable equipment or recovery, transportation and development techniques for the prevailing material and seafloor conditions would have a material adverse effect on the business of our subsidiaries, and the results of their operations and financial condition. As a result, even if the ISA timely reviews and approves our expected application for an exploitation contract, which will include a plan of work for exploitation, for NORI Area D, there are no assurances that we will have successfully completed all development and pre-production work necessary to start commercial production at the end of the first quarter of 2026. We have partnered with Allseas, a leading global offshore contractor, to undertake a pre-production pilot collection system test in which a collector vehicle, a riser and lift system and surface production vessel have been tested. Although the pilot collection system test was successful, there can be no assurance that their technology will eventually be adequate for full scale commercial production.

On March 16, 2022, NORI and Allseas entered into a non-binding term sheet for the development and operation of the Project Zero Offshore Nodule Collection System. NORI and Allseas intend to equally finance all costs related to developing and getting Project Zero Offshore Nodule Collection System into production currently. The parties intend to detail and revise these cost estimates in three definitive agreements for the engineering, build and operations phases which the parties expect to enter into before the submission of our exploitation application in 2024. There can be no assurances, however, that we will enter into the binding Heads of Terms and definitive agreements with Allseas in a particular time period, or at all, or on terms similar to those set forth in the non-binding term sheet, or that if such definitive agreements are entered into by us that the proposed commercial systems and second production vessel will be successfully developed or operated in a particular time period, or at all and hence, we may be delayed in obtaining offshore collection equipment in the event we do not reach agreement with Allseas and have to develop such equipment on our own or through new third-party contractual relationships.

We are reliant on third parties to conduct independent analyses with respect to our business, and any inaccuracies in such analyses could have a material adverse effect on our offshore collection and onshore processing and refining objectives.

We rely upon third-party consultants, engineers, analysts, scientists, and others to provide analyses, reviews, reports, advice, and opinions regarding our potential projects. For example, the NORI Initial Assessment and the TOML Mineral Resource Statement, contain mineral resource estimates and other information with respect to our contract areas. There is a risk that such analyses, reviews, reports, advice, opinions, and projects are incorrect, in particular with respect to resource estimation, process development, and recommendations for products to be produced, as well as with respect to economic assessments, including estimating the capital and operating costs of our project and forecasting potential future revenue streams. Uncertainties are also inherent in such estimations.

Mineral resource estimates from the contract areas of NORI and TOML are only estimates.

Estimates of mineral resources from the contract areas of NORI and TOML described in our SEC filings and reported in technical reports prepared by AMC are only estimates and depend on geological interpretation and statistical inferences or assumptions drawn from survey data and recovery and sampling analysis, which might prove to be materially inaccurate. While these reports have been provided by experts, there is a degree of uncertainty attributable to the estimation of mineral resources. Mineral reserves have not been defined and will require completion of further studies. Until mineral resources are actually collected and processed, the quantity of metal and nodule abundance must be considered as estimates only and no assurance can be given that the indicated levels of metals will be produced. In making determinations about whether to advance any of our projects to further development, we must rely upon calculated estimates for the mineral resources and grades of mineralization in our contract areas and estimated equipment production rates, equipment availability and utilization and collection efficiency.

The estimation of mineral reserves and mineral resources is an iterative process and is, at times, partially dependent upon the judgment of the persons preparing the estimates. The process relies on the quantity and quality of available data and is based on knowledge, experience, statistical analysis of data and industry practices. Valid estimates made at a given time may significantly change when new information becomes available.

Estimated mineral reserves and mineral resources may have to be recalculated based on changes in metal prices, further exploration or development activity or actual production experience. This could materially and adversely affect estimates of the volume or grade of mineralization, estimated recovery rates or other important factors that influence mineral reserves and mineral resources estimates. The extent to which mineral resources may ultimately be reclassified as mineral reserves is dependent upon the demonstration of their profitable recovery. Any material changes in volume and grades of mineralization will affect the economic viability of placing a property into production and a property's return on capital. We cannot provide assurance that polymetallic nodules can be collected or processed profitably.

The mineral resource estimates in our SEC filings have been determined and valued based on assumed future metal prices, cut-off grades, production rates and operating costs that may prove to be inaccurate. Extended declines in the market price for nickel, manganese, copper and cobalt may render portions of our mineralization uneconomic and result in reduced reported volume and grades, which in turn could have a material adverse effect on our financial performance, financial position and results of operations.

In addition, inferred mineral resources have a great amount of uncertainty as to their existence and their economic and legal feasibility. You should not assume that any part of an inferred mineral resource will be upgraded to a higher category or that any of the mineral resources will be reclassified as mineral reserves. Currently 97% of the NORI Area D resource is classified into indicated and measured categories.

Our business is subject to significant risks, and we may never develop minerals in sufficient grade or quantities to justify commercial operations.

Mineral resource exploration, development, and operations are highly speculative and are characterized by a number of significant risks, including, among other things, unprofitable efforts resulting not only from the failure to discover mineral resources, and from finding mineral resources which, though present, are insufficient in quantity and quality to return a profit from production. Once mineralization is discovered, it may take a number of years from the initial exploration phases before production is possible, during which time the potential feasibility of the project may change adversely. Substantial expenditures are required to establish mineral resources and reserves, to determine processes to collect and transport the minerals and, if required, to construct processing facilities.

No deep-sea polymetallic properties in the CCZ that have been identified have as of today been developed into production. Exploration and exploitation risks exist in the discovery, location, definition and recovery of seafloor polymetallic nodule deposits. Given that no seafloor polymetallic nodule deposit has ever been commercially developed, such risks may have a material impact on our ability to accomplish our objectives. Operations may be affected by the availability of suitable vessels and equipment, prevailing sea conditions, changes in meteorological conditions and climate change, currents close to the seafloor and throughout the water column, recovery of materials sampled, lack of experience in delineating deposits, or unsuitability of equipment for recovering such material in prevailing conditions. Substantial expenditures are required to establish mineral reserves, to develop metallurgical processes, and to construct collection and transportation vessels, and we will be required to rely upon the expertise of consultants and others for exploration, development, construction and operational knowhow, and such consultants and third parties may not always be available to support our operations. If we are not able to obtain such expertise or identify alternative sources of expertise, our operations and financial results will be negatively impacted.

While we believe that seafloor polymetallic nodules in the contract areas of our subsidiaries account for some of the world's largest aggregated estimated deposits of battery metals, no assurance can be given that minerals will be discovered in sufficient grade or quantities to justify commercial operations. Whether an exploration property will be commercially viable depends on a number of factors, including: the particular attributes of the deposit, such as size, grade and proximity to infrastructure; metal prices, which are highly cyclical; availability of and effectiveness of technology to recover, trans-ship, transport and process nodules; government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, and environmental protection; availability of required personnel, third-party partners and contractors, any required financing and commercial demand in the marketplace for such metals. The precise impact of these factors cannot accurately be predicted, but the combination of these factors may result in the inability of our subsidiaries to operate or generate an adequate return on invested capital.

While we and our subsidiaries will evaluate the political and economic factors in determining an exploration strategy, there can be no assurance that significant restrictions will not be placed on intended development areas. Such restrictions may have a material adverse effect on our business and results of operation.

Uncertainty in our estimates of polymetallic nodule deposits could result in lower-than-expected revenues and higher costs.

We base our estimates of polymetallic nodule deposits on engineering, economic, and geological data assembled and analyzed by outside firms, which are reviewed by third-party expert consultants including engineers and geologists. Such estimates, however, are necessarily imprecise and depend to some extent on professional interpretation, including statistical inferences drawn from available data, which may prove unreliable. There are numerous uncertainties inherent in estimating quantities and qualities of the polymetallic nodules that we intend to collect and the costs associated therewith, including many factors beyond our control. Estimates of economically recoverable minerals necessarily depend upon a number of variable factors and assumptions, all of which may vary considerably from actual results, such as:

- environmental, geological, geotechnical, collecting and processing conditions that may not be fully identified by available data or that may differ from experience;

- changes to the strategic approach to collecting and processing, which will depend in large part on market demand, corporate strategy and other prevailing economic and financial conditions;

- assumptions concerning future prices of products (including, most notably, battery metals and manganese ore) foreign exchange rates, production rates, process recovery rates, transportation costs, operating costs, capital costs and reclamation costs; and

- assumptions concerning future effects of regulation, including the issuance of required permits and taxes by governmental agencies and foreign government policies relating to our collecting of the mineral resources from our contract areas.

Uncertainty in estimates related to the availability of polymetallic nodules could result in lower-than-expected revenues and higher than expected costs or a shortened estimated life for our projects. Fluctuations in factors out of our control such as changes in future product pricing, foreign government policies and foreign exchange rates can have a significant impact on the estimates of mineral resources and reserves and can result in significant changes in the quantum of our resources and/or reserves period-to-period.

We operate in a competitive industry, and there are no assurances that our efforts will be successful.

The battery metals production industry is capital intensive and competitive. Production of battery materials and manganese alloys is largely dominated by Chinese competitors. These competitors may have greater financial resources, as well as other strategic advantages to operate, maintain, improve and possibly expand their facilities. Additionally, domestic Chinese resources firms have historically been able to produce minerals and/or process metals from land-based operations at relatively low costs due to domestic economic and regulatory factors, including less stringent environmental and governmental regulations and lower labor and benefit costs. In addition to three contracts held by our subsidiaries and partners, 16 other entities (ISA Member States and private companies sponsored by ISA Member States) currently hold ISA Exploration Contracts for polymetallic nodules. If and when they move into the exploitation phase, each of these contract-holders could become potential competitors with respect to the collection of polymetallic nodules and the production of nickel, manganese, copper and cobalt products. Some of these contract holders may possess greater financial and/or technical resources. There is increasing competition from new and existing marine mineral players for the availability of marine exploration and support vessels, related marine equipment and specialized personnel, desirable exploration areas, suitable offshore collection and onshore processing equipment, and available capital. There is a risk that competitors may find more promising resources, identify or develop more economic technologies, enter into strategic partnerships that constrain our optionality, or may develop novel methods to collect nodules from the seafloor or process nodules into metals that are more economic than we currently contemplate.

The prevailing market prices of nickel, manganese, copper, cobalt, and other commodities will have a material impact on our ability to achieve commercial success.

The profitability of our nodule collection operations is significantly affected by changes in the market price of battery metals (nickel, copper and cobalt) and manganese ores and the cost of power, natural gas, coal, marine fuels, among other commodities and supply requirements. Prices of such metals are affected by numerous factors beyond our control, including: military conflict; prevailing interest rates and returns on other asset classes; expectations regarding inflation, monetary policy and currency values; speculation; governmental and exchange decisions regarding the disposal of metal stockpiles; political and economic conditions; available supplies of battery metals from mine production, inventories and recycled metal; sales by holders and producers of battery metals; and demand for products containing nickel, manganese, copper and cobalt. The price of nickel, manganese, copper, cobalt and other minerals and natural gas has fluctuated widely in recent years. Depending on the prevailing price of nickel, manganese, copper, and cobalt, and the cost of power, natural gas, chemical reagents, marine fuels, cash flow from our metal production operations may not be sufficient to cover our operating costs or the costs to service any outstanding debt. In addition, our proposed full scale production plans would involve placing a large percentage of global manganese production in the market, and we may be constrained in our ability to sell such large volumes, or such production may negatively impact the market price of manganese, which would, in either case, negatively impact our overall economic position.

We are not currently party to any commodity hedging contracts, as we do not yet have any production. Debt financing may not be available on commercially reasonable terms, or at all.

We may be adversely affected by fluctuations in demand for nickel, manganese, copper, cobalt, and other commodities.

Because our revenue is expected to be from the collection and processing of minerals, changes in demand for, and taxes and other tariffs and fees imposed upon, such minerals and derived mineral products (most notably, nickel, manganese, copper, and cobalt) could significantly affect our profitability. A prolonged or significant economic contraction in the U.S., China or worldwide could put downward pressure on market prices of minerals. Protracted periods of low prices for minerals could significantly reduce revenues and the availability of required development funds in the future. This could cause substantial reductions to, or a suspension of, our exploration, collecting and production operations, and impair asset values.

Demand for our minerals may be impacted by changes in supply dynamics and sources, and changes in demand for downstream products, including batteries for EV and energy storage that consume high volumes of the metals we intend to produce, as well as demand for manganese alloys used in steel-making, the targeted market for most of our manganese production. Lack of growth or material increases in new sources of supply in this or in any other related markets may adversely affect the demand for our minerals and any related products, and if the market for these critical existing and emerging technologies does not grow as we expect, grows more slowly than we expect, or if the demand for our products in these markets decreases, then our business, prospects, financial condition and operating results could be harmed. Notably, our financial success in part will depend in part on the expansion of the global manganese market to consume the additional volume of manganese that we intend to produce.

In contrast, extended periods of high commodity prices may create economic dislocations that could be destabilizing to the supply and demand of minerals, and ultimately to the broader markets. Periods of high market prices for our minerals are generally beneficial to our financial performance. However, strong prices also create economic pressure to identify or create new sources of supply and alternate technologies requiring consumption of metals that ultimately could depress future long-term demand for nickel, cobalt, copper and related products, and at the same time may incentivize development of competing properties.

We may experience difficulty in creating market acceptance for a novel manganese product.

We will be producing a novel manganese silicate product which does not yet have recognition in the marketplace with customers. Metallurgical testwork, market studies by CRU International Limited, value-in-use studies by SINTEF and initial engagement with customers indicate that this manganese silicate product will be a premium product with high value in use as an input into silicomanganese alloy production that we believe will receive strong market acceptance. However, mineral processing industries may be slow to change feed stocks and suppliers, even in the face of potential advantages.

Additionally, manganese silicate is not a conventional mineral product and may require additional approvals for export and import from our processing facilities to our future customers.

Our ability to generate revenue will be diminished if we are unable to compete with substitutions for the minerals that we intend to process.

Technology changes rapidly in the industries and end markets that utilize our materials. If these industries shift to new technologies or products (e.g., nickel-rich battery chemistries could be replaced by other battery chemistries that do not use nickel or cobalt such as lithium iron phosphate (LFP), or copper could be increasingly substituted by aluminum) or use less of the metals that we intend to collect and process, or if suitable substitutes become available, it could result in a decline in demand for our metal products. If the demand for our metal products decreases, it will have a material adverse effect on our business and the results of our operations and financial condition.

III. Social License and Public Perceptions Risks.

Negative perceptions related to the offshore collection of polymetallic nodules could have a material adverse effect on our business.

There exist certain negative perceptions related to acquiring metals produced from deep-sea minerals. Under pressure from non-governmental organizations, some governments and companies in the EV supply chain have expressed reservations about using battery metals derived from deep-sea minerals (including polymetallic nodules), pending more research on the impacts of deep-sea mineral extraction operations on marine biodiversity and ecosystem function. If this position gains broad traction by governments and commercial customers alike in relation to battery metals sourced from polymetallic nodules, it could have a material impact on our business and operations.

Reduced growth in the adoption of electric vehicles by consumers may change our strategy and our business and operating results may be impacted.

Given that we have focused part of our operating plan on the sale of nodule-derived battery metals into the EV supply chain, our growth may be affected by the consumer adoption of EVs. The market for EV is relatively new, rapidly evolving, characterized by rapidly changing technologies, price competition, additional competitors, evolving government regulation and industry standards, frequent new vehicle announcements and changing consumer demands and behaviors. While it has been projected that demand for EVs will surge over time, if the market for EVs does not develop as we expect, or develops more slowly than we expect, our business and operating results may be impacted, as we refocus on other industrial uses of the metals we plan to produce.

We, our partners and our shareholders may be adversely impacted by pressure and lobbying from non-governmental organizations.

Like other businesses that operate in the resources industry, we along with our partners, and our shareholders are subject to pressure and lobbying from non-governmental organizations, particularly with respect to impacts on the deep-sea environment. There is a risk that the demands and actions of such non-governmental organizations may cause significant disruption to our business, which could have a material adverse effect on our operations and financial condition. It is possible that direct action from non-governmental environmental groups could physically impact ongoing operation during exploration, project development and commercial operations. As seen during the coordinated and disruptive activities by Greenpeace International during Campaign 8a, designed to prevent and obstruct the campaign, such activities can have significant impacts from a timing, financial and safety perspective. There can be no assurances that such activities by Greenpeace and other stakeholder will not materially impact our ongoing operations.

IV. Offshore and Onshore Technology Risks and Operational Risks.

Offshore collection and onshore processing and refining operations pose inherent risks and costs that may negatively impact our business.

Offshore collection and onshore processing and refining operations involve many hazards and uncertainties, including, among others:

- technical and operational challenges in the offshore collection operations and scaling up of such operations;

- challenges in and delays caused by transferring nodules to transport vessels and delivering nodules to port (including limited availability of and cost to secure the equipment to allow the activity);
- industrial accidents;
- unusual and unexpected maritime conditions;
- unexpected seafloor conditions;
- onshore metallurgical or other processing problems;
- unexpected environmental conditions, including contamination or leakage;
- periodic interruptions due to inclement or hazardous weather conditions or other acts of nature;
- fire;
- piracy and disruptive action by non-governmental actors opposed to deep-sea mineral extraction;
- organized labor disputes or work slowdowns;
- mechanical equipment failure and facility performance problems;
- the availability of financing, market demand, critical technology and equipment, and skilled labor; and
- the inability of suppliers to provide key process inputs like electricity, gas, coal and processing reagents on a timely basis at the prices that have been forecast.

These occurrences could result in damage to, or destruction of, production facilities, personal injury or death, environmental damage, delays in processing, increased production costs, asset write downs, monetary losses and legal liability, any of which could have an adverse effect on our results of operations and financial condition and adversely affect our projected development and production estimates. In addition, our operations could be interrupted by or negatively influenced by non-governmental actors which could negatively impact our or our subsidiaries' ability to operate in the CCZ and international markets, obtain capital, collect, transport, process or sell metals, or otherwise conduct business.

The polymetallic nodules that we may recover may require specialized transfer and delivery equipment and processes, and there is no certainty that we will be able to develop or otherwise access such transfer and delivery equipment or processes that are suitable for our purposes.

The polymetallic nodules that we may collect may require specialized equipment and processes in connection with the transfer of such nodules to transport vessels and delivery of the nodules to port. To date, we have not transferred significant quantities of nodules to transport vessels nor delivered significant quantities of nodules to port. The anticipated cost to develop this equipment and processes is significant. There is a risk that the equipment and/or processes necessary to transfer commercial quantities of nodules to transport vessels and deliver them to port may be economically prohibitive.

Although we are currently negotiating with third-party shipping companies to transfer nodules to transport vessels and to deliver nodules to port, our future needs with respect to the required equipment and processes have yet to be fully determined, and as such, the capital costs, performance, reliability, and maintenance of such equipment and processes is currently uncertain and may be more expensive and take longer to develop than we currently estimate. In addition, the required equipment and processes may not be developed or become available at commercial scale in the time frame we require, which could have a material negative impact on our short-term operations and financial results.

Our business is contingent on our ability to successfully identify, collect, ship and process polymetallic nodules profitably, and in doing so, we will need to rely on certain existing and future strategic relationships, some of which we may be unable to maintain and/or develop.

In conducting our business, we will rely on continuing existing strategic relationships as well as new relationships in a variety of disciplines, including the offshore equipment and services industries, the onshore mineral processing industry, and others involved in the mineral exploration industry. We will also need to continue to develop new relationships with third-party contractors, as well as with certain regulatory and governmental departments.

For example, we have been working with Hatch, a global engineering, project management, and professional services firm, to support the development of onshore processing technology for the production of readily saleable copper and manganese products, as well as products such as high-grade nickel and cobalt sulfates for the electric vehicle battery markets. In connection therewith, Hatch has supported us with the development of a near-zero solid waste flowsheet. We are also party to certain agreements with Allseas, pursuant to which, among other things, Allseas has agreed to design, engineer and construct an integrated offshore collection system to collect nodules from NORI Areas, and to assist with shipping efforts thereafter. Allseas developed a test system and demonstrated this capability, but it is not certain that Allseas will convert, or will be able to convert such system into a full-scale commercial operation or that we will reach contractual terms with Allseas for such commercial arrangements. If we are unable to enter into definitive agreements with Allseas for the use of its technology for the collection, transport and commercial production of polymetallic nodules, it will have a material adverse effect on our business. We are also in discussions with third party shipping companies to develop a system and method to transfer nodules to transport vessels and deliver nodules to port.

There can be no assurance that we will be able to continue to maintain and develop our existing relationships, or that we will be able to form the new relationships that are required for our business to be successful. There can be no assurances that we will be able to find additional partners with the correct capabilities to support our development efforts or whether we will be able to engage these partners on acceptable terms or at all.

Some of the offshore equipment that we will need to accomplish our objectives has not been manufactured and/or tested.

Our subsidiaries will need to rely on high-value equipment for the offshore collection and transport of materials. Notwithstanding the successful collector test completed in 2022, much of the commercial-scale equipment, particularly as it pertains to subsea engineering and recovery systems, has yet to have completion of engineering, and has not been constructed and fully tested, and may not be suitable or may prove unreliable, and may not be delivered to us on a timely basis, thereby delaying our contemplated timetable. We have not yet identified a third-party shipping company with the necessary equipment to transfer nodules to transport vessels and deliver nodules to port. Moreover, our future needs with respect to commercial-scale subsea engineering and recovery systems have yet to be fully determined, and as such, the capital costs, performance, reliability, and maintenance associated with the necessary equipment is currently unknown. There can be no guarantees that the necessary commercial-scale subsea engineering and recovery systems can be developed, or if developed, that such systems will be deployable in an economically viable manner. Any equipment downtime or delayed mobilization of equipment may impact operations. Additionally, as we launch exploration, collection, and development initiatives, our subsidiaries may need to compete for the availability of suitable vessels and equipment, even though we have a close commercial relationship with our partners, there is a risk that certain vessels and equipment will be under long-term charter and will thus not be available to them when needed, if at all.

Our business is substantially dependent on our strategic relationship with Allseas. If we and Allseas are unable to successfully maintain and expand this relationship, our business may be materially harmed.

We have partnered with Allseas, a leading global offshore contractor and significant shareholder in our Company, to undertake the development of many of the offshore systems we expect to utilize in our potential commercialization efforts [(including equipment required for the transfer of nodules to transport vessels and delivery to port)]. We are also in discussions with Allseas to enter into binding agreements with them for the future development and operation of the Project Zero Offshore Nodule Collection System and other services. Allseas also provides us with exclusive access to the earlier of the development of the Project Zero Offshore Nodule Collection System and December 31, 2026 to the *Hidden Gem*, the converted drillship expected to be converted into a production vessel by Allseas for our commercial use. In addition, Allseas has invested $5 million in our August 2022 private placement of Common Shares, $7 million in our August 2023 registered direct offer of our Common Shares and Class A Warrants and entered into an unsecured credit facility with us under an affiliate of Allseas agreed to lend us up to $25 million through August 31, 2025. We cannot provide any assurance with respect to the success of our continued relationship with Allseas, that we will be able to enter into additional binding agreements with Allseas on commercially reasonable terms, or at all, that Allseas will continue to devote its resources to its relationship with us or otherwise perform its obligations under its current and future arrangements with us as expected, as a result of its limited experience in the collection and transportation of seafloor polymetallic nodules or otherwise, the result of any of which would have a material adverse effect on our business, financial condition, liquidity, and results of operations. As a result, we may need to engage and depend on other third parties for the services and funding Allseas currently and is expected to provide us. If these new relationships are not timely entered into or not entered into on commercially reasonable terms, or at all, or if any such relationship is not successful, this would likely have a material adverse effect on our business, financial condition, liquidity, and results of operations.

The polymetallic nodules that we may recover may require specialized onshore processing and refining, and there is no certainty that such processes will result in a recovery of metals that is consistent with our expectations, or that we will be able to develop or otherwise access processing plants that are suitable for our purposes.

The polymetallic nodules that our subsidiaries may collect, contain several base metals in varying concentrations, which will require processing and refining in metallurgical plants. To date, no nodules have been processed and refined into metal products commercially, and there is a risk that such processing and refining may not be economically viable and/or that there are presently unknown technical aspects that render the selected flowsheet unsuitable for processing to the products as described.

While the metallurgical recovery estimates have been derived from commercial operation benchmarking, benchscale and pilot scale testwork, the commercial metal recoveries to products could vary significantly from these estimates.

Should our offshore nodule collection plans become successful, we intend to partner with existing onshore processing partners to produce and develop new build onshore processing plants as we scale up production. Our future needs with respect to such processing plants have yet to be fully determined, and as such, the capital costs, performance, reliability, and maintenance of such plants is currently uncertain.

We have identified potential tolling facilities to process nodules into two products, manganese silicate and copper-nickel-cobalt alloy, or matte and developed a marketing strategy to place the latter products into existing smelting and refining facilities. There is no guarantee that these facilities will be available at the required times or that we would be able to secure them at commercially attractive rates. Additionally, even if we are able to secure appropriate processing facilities (through tolling arrangements), there is no guarantee that we will be able to provide them with the required nodule feedstocks at the required times.

While we believe that we have identified specific sites for the potential construction of nodule processing plants (based on factors such as proximity to deep-water ports, cost access to renewable electric power and natural gas, and proximity to customers), there is a risk that we will be unable to secure one or more of these sites on suitable terms. For example, having faced significant issues in securing technical service provider capacity with scenario-based capability in 2022, we moved away from developing a new Project Zero Plant in India and instead are now reviewing the feasibility of utilizing existing facilities as an alternative. In the event that we are unable to secure one or more of the sites we have identified, or if modification scope identification, development and associated construction delays of this scope implementation impact our ability to develop one or more of such sites, our ability to process polymetallic nodules would be detrimentally impacted. Additionally, there can be no guarantees that such plants can be developed, or if developed, that such plants will perform in an economically viable manner or provide the projected metal recovery rates at the estimated project capital and operating costs, which could impact projections for our future revenues, cash flows, royalties, and development and operating expenditures.

Accordingly, the timing in which we expand our operations may vary depending on geological, operational and financial developments, in addition to regulatory approvals from the ISA, among other factors, and these may impact our revenue and financial performance.

Our exploration and polymetallic nodule collecting activities may be affected by natural hazards, which could have a material adverse effect on our business.

Deep-sea mineral exploration and collection activities are inherently difficult and dangerous and may be delayed or suspended by severe weather events, sea conditions or other natural hazards, including volcanos, storms, hurricanes, tsunamis and unpredictable weather patterns. In addition, even though sea conditions in a particular location may be somewhat predictable, the possibility exists that unexpected conditions may occur that adversely affect our operations. Nodule collection activities, including, without limitation, the transfer of nodules to transport vessels and delivery to port, may be subject to interruptions resulting from weather and related marine conditions that adversely affect our collection operations or the ports of delivery, and any such delays could have a material adverse effect on our business.

Fluctuations in transportation costs or disruptions in transportation, processes or services, or damage or loss during transport could decrease our profitability or impair our ability to supply polymetallic nodules, processed minerals or products to our customers, which could adversely affect our results of operations.

Once our subsidiaries have been able to successfully collect the polymetallic nodules, they will be required to transport them to onshore facilities for processing, including the transfer of nodules to transport vessels and delivery to port. Furthermore, once they have reached a point of commercialization, we will need to transport our products to our future customers, wherever they may be located. Finding affordable and dependable transportation is important because it allows us to supply customers around the world. Labor disputes, embargos, sanctions, government restrictions, work stoppages, pandemics, derailments, damage or loss events, adverse weather conditions, vessel groundings inhibiting access to key navigation routes, other environmental events, changes to rail or ocean freight systems, availability of appropriate equipment or processes for transfer of nodules to transport vessels or other events and activities beyond our control could interrupt or limit available transport services, which could result in customer dissatisfaction and loss of sales potential and could materially adversely affect our results of operations.

Actual capital costs, financing strategies, operating costs, production and economic returns may differ significantly from those we have anticipated and there can be no assurance that any future development activities will result in profitable metal production operations.

The actual operating costs of our subsidiaries to collect polymetallic nodules, transport, process and refine such nodules commercially will depend upon changes in the availability of financing or partners who undertake capital developments in partnership with us, and prices of labor, equipment and infrastructure, shipping costs, variances in ore recovery from those currently assumed, operational risks, changes in governmental regulation, including taxation, environmental, permitting and other regulations and other factors, many of which are beyond our control. Due to any of these or other factors, our capital and operating costs may be significantly higher than those set forth in the NORI Initial Assessment and TOML Mineral Resource Statement prepared by AMC and filed as exhibits to this Annual Report. As a result of higher capital and operating costs, our financing ability may be impacted, and this may be further affected by lower commodity prices in the international markets that could impact production or economic returns which may differ significantly from those set forth in the NORI Initial Assessment and TOML Mineral Resource Statement and there can be no assurance that any of our development activities will result in profitable operations.

We have limited operating history, and there can be no assurance that we will be able to commercially develop our resource areas or achieve profitability in the future.

We have a limited operating history, and we expect that our losses will continue until we achieve profitable commercial production. NORI currently intends to explore and collect mineral resources in the NORI areas identified in the exploration contract executed by NORI with the ISA, and we hope to expand such operations if viable in certain other parts of the CCZ, including by TOML in the TOML areas identified in the exploration contract executed between TOML and the ISA and DGE in the Marawa areas identified in the exploration contract executed by Marawa with the ISA. Although NORI anticipates that its first production of nodules from NORI Area D could be in the first quarter of 2026 (assuming submission of an application for an exploitation contract, that includes a plan of work for exploitation, for NORI Area D following the July 2024 ISA meeting and the ISA's timely one-year review and approval thereof), there can be no assurance that it will be able to commercially develop these properties or that it will be able to generate profits in the future.

Limited offshore marine resource definition activities in the Marawa Contract Area, however, have occurred to date and we expect to collaborate with Marawa to assess the viability of any potential project in the Marawa Contract Area, although the timing of such assessment is unclear. Marawa has also delayed certain of its efforts in the Marawa Contract Area while it determines how it will move forward with additional assessment work. There are no assurances that we will be able to come to an agreement with Marawa on the future development of the Marawa Contract Area or that we will be able to keep our rights in the Marawa Contract Area as a result of our efforts there, either of which could have a material and adverse effect on our future business prospects and financial condition.

Our operating expenses and capital expenditures will increase in the future as consultants and new employees are engaged, equipment associated with advancing exploration is leased or purchased, and properties are developed. There can be no assurance that we will generate any revenues or achieve profitability, or that the assumed levels of expense associated with our exploration, development, and commercialization processes will prove to be accurate.

Work stoppages or similar difficulties could significantly disrupt our operations, reduce our revenues and materially adversely affect our results of operations.

A work stoppage by any of the third parties providing services in connection with our operations or those of our strategic partners (such as for onshore or offshore operations) could significantly disrupt our activities, reduce our future revenues and materially adversely affect our results of operations.

A shortage of skilled technicians and engineers may further increase operating costs, which could materially adversely affect our results of operations.

Efficient collection, transport and processing using modern techniques and equipment requires skilled technicians and engineers. In addition, our optimization and eventual downstream efforts will significantly increase the number of skilled operators, maintenance technicians, engineers and other personnel required to successfully operate our business. If we are unable to hire, train and retain the necessary number of skilled technicians, engineers and other personnel there could be an adverse impact on our labor costs and our ability to reach anticipated production levels in a timely manner, which could have a material adverse effect on our results of operations.

We depend on key personnel for the success of our business. The loss of key personnel or the hiring of ineffective personnel could negatively impact our operations and profitability.

We depend on the services of our senior management team, our board of directors, our strategic partners and other key personnel. The loss of the services of any member of senior management, our board of directors or a key employee, or similar personnel within our strategic partners could have an adverse effect on our business. We and our partners may not be able to locate, attract or employ on acceptable terms qualified replacements for senior management, board of directors or other key employees if their services are no longer available.

Our growth will depend on our ability to execute on our plans and expand our operations and controls while maintaining effective cost controls.

Deep-sea exploration, nodule collection, and processing is an emerging industry, and our ability to implement our strategy requires effective planning and management control systems. Our plans may place a significant strain on our management and on our operational, financial and personnel resources. As such, our future growth and prospects will depend on our ability to manage this growth and to continue to expand and improve operational, financial and management information and quality control systems on a timely basis, while at the same time maintaining effective cost controls. Any failure to expand and improve operational, financial and management information and quality control systems in line with our growth could have a material adverse effect on our business, financial condition and results of operations. There are also risks associated with establishing and maintaining systems of internal controls.

We are dependent upon information technology systems, which are subject to cyber threats, disruption, damage and failure.

We depend upon information technology systems in the conduct of operations. Such information technology systems are subject to disruption, damage or failure from a variety of sources, including, without limitation, computer viruses, security breaches, cyber-attacks, natural disasters and defects in design. Cybersecurity incidents, in particular, are evolving and include, but are not limited to, malicious software, attempts to gain unauthorized access to data and other electronic security breaches that could lead to disruptions in systems, unauthorized release of confidential or otherwise protected information or the corruption of data. Various measures have been implemented to manage our risks related to information technology systems and network disruptions. However, given the unpredictability of the timing, nature and scope of information technology disruptions, we could potentially be subject to downtimes, operational delays, the compromising of confidential or otherwise protected information, destruction or corruption of data, security breaches, other manipulation or improper use of our systems and networks or financial losses from remedial actions, any of which could have a material adverse effect on our business, operating results and financial condition.

Our business is subject to a variety of risks, some of which may not be covered by our future or existing insurance policies.

In the course of the exploration, development, and production of our mineral resource properties, we may be subject to a variety of risks that could result in: (i) damage to, or destruction of, transportation vessels and processing facilities, (ii) personal injury or death, (iii) environmental damage, (iv) delays in collecting, transporting or processing, (v) monetary losses, (vi) natural disasters, (vii) environmental matters, and (viii) legal liability, among others. It is not always possible to fully insure against such risks, and we may determine not to insure against all such risks as a result of high premiums or for other reasons. Should such liabilities arise, they could reduce or eliminate any future profitability and result in an increase in cost and a decline in the value of our securities. We cannot be certain that insurance for some or all of these risks will be available on acceptable terms or conditions, if at all, and in some cases, coverage may not be acceptable or may be considered too expensive relative to the perceived risk.

V. Intellectual Property Risks.

We may not be able to adequately protect our intellectual property rights. If we fail to adequately enforce or defend our intellectual property rights, our business may be harmed.

Much of the technology used in the markets in which we compete is or may become protected by patents and trade secrets, and our commercial success will depend in significant part on our ability to access, obtain and maintain patent and trade secret protection for future products and methods or those of any of our strategic partners such as Allseas or onshore processing partners. To compete in these markets, we rely or may need to rely on a combination of trade secret protection, nondisclosure and licensing agreements, patents and trademarks to establish and protect our proprietary intellectual property rights. Our intellectual property rights (or those of our partners) may be challenged or infringed upon by third parties, or we may be unable to maintain, renew or enter into new license agreements with third-party owners of intellectual property on reasonable terms. In addition, our intellectual property may be subject to infringement or other unauthorized use outside of the U.S. In such case, our ability to protect our intellectual property rights by legal recourse or otherwise may be limited, particularly in countries where laws or enforcement practices are undeveloped or do not recognize or protect intellectual property rights to the same extent as the U.S. Unauthorized use of our intellectual property rights (or those of our partners) or our inability (or the inability of our partners) to preserve our existing intellectual property rights (or those of our partners) could adversely impact our competitive position and results of operations. The loss of our patents could reduce the value of the related products. In addition, the cost to litigate infringements of our patents, or the cost to defend ourselves against patent infringement actions by others, could be substantial and, if incurred, could materially affect our business and financial condition.

Proprietary trade secrets and unpatented know-how may become important to our business. We will likely rely on trade secrets to protect certain aspects of our business systems and designs, especially where we do not believe that patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. Our employees, consultants, contractors, outside scientific collaborators and other advisors may unintentionally or willfully disclose our confidential information to competitors, and confidentiality agreements may not provide an adequate remedy in the event of unauthorized disclosure of confidential or proprietary information. Enforcing a claim that a third-party illegally obtained and is using our trade secrets is expensive and time consuming, and the outcome is unpredictable. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. Failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

We or our partners may not be able to obtain necessary patents and the legal protection afforded by any patents may not adequately protect our or our partners' rights or permit us to gain or keep any competitive advantage.

Our ability (or that of our partners) to obtain necessary patents is uncertain, and the legal protection to be afforded by any patents we (or they) may be issued in the future may not adequately protect our (or their) rights or permit us (or them) to gain or keep any competitive advantage necessary for our operations or our partnerships. In addition, the specific content required of patents and patent applications that are necessary to support and interpret patent claims is highly uncertain due to the complex nature of the relevant legal, scientific and factual issues. Changes in either patent laws or interpretations of patent laws in the U.S. or elsewhere may diminish the value of our intellectual property or narrow the scope of our patent protection. Even if patents are issued regarding our products and processes, our competitors may challenge the validity of those patents. Patents also will not protect our products and processes if competitors devise ways of making products without infringing our patents.

If we infringe, or are accused of infringing, on the intellectual property rights of third parties, it may increase our costs or prevent us from being able to commercialize new products.

There is a risk that we (or our partners) may infringe, or may be accused of infringing, the proprietary rights of third parties under patents and pending patent applications belonging to third parties that may exist in the U.S. and elsewhere in the world that relate to our products and processes (or those of our strategic partners). Because the patent application process can take several years to complete, there may be currently pending applications that may later result in issued patents that cover our products and processes. In addition, our products and processes may infringe existing patents.

Defending ourselves against third-party claims, including litigation in particular, would be costly and time consuming and would divert management's attention from our business, which could lead to delays in our exploration, collecting, processing, and commercialization efforts. If third parties are successful in their claims, we might have to pay substantial damages or take other actions that are adverse to our business. As a result of intellectual property infringement claims, or to avoid potential claims, we might:

- be prohibited from, or delayed in, selling or licensing some of our products or using some of our processes unless the patent holder licenses the patent to us, which it is not required to do;
- be required to pay substantial royalties or grant a cross license to our patents to another patent holder; or
- be required to redesign a product or process so it does not infringe a third-party's patent, which may not be possible or could require substantial funds and time.

In addition, we could be subject to claims that our employees, or we, have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of third parties.

If we are unable to resolve claims that may be brought against us by third parties related to their intellectual property rights on terms acceptable to us, we may be precluded from offering some of our products or using some of our processes.

In addition, we have not obtained definitive global trademark protection for the name "The Metals Company" and we may not be able to secure such protection over time. If we are unable to secure such protection, we may need to rebrand or otherwise modify our name, which could result in costs, delays and loss of market recognition.

VI. Public Company Risks and Risks Related to our Securities

Our business is capital intensive, and we will be required to raise additional funds in the future to accomplish our objectives. This additional financing may not be available on acceptable terms or at all. Failure to obtain this necessary capital when needed may force us to reduce or terminate our operations.

In light of the significant deficit in expected funding following the closing of the Business Combination in September 2021, we adopted what we call a "capital-light" strategy whereby we removed any allocation of funds to capital expenditures that were not deemed necessary to support the submission of an application for a plan of work for exploitation for NORI Area D, and by negotiating the settlement of program expenditures with our equity whenever possible in order to preserve our cash. The continuing exploration and development of the NORI, TOML and Marawa contract areas, however, will depend upon our ability to obtain dilutive and/or non-dilutive financing through stake sales in our assets, offtakes with prepayments, debt financing, equity financing, joint ventures, project-based or asset-based financing or other means. The actual amount of capital needed or that we raise for our projects, however, may vary materially from our current estimates. We currently expect that we will raise additional funds to finance our operations. There is no assurance that we will be successful in obtaining the required financing for these or other purposes, including for general working capital, or that any funds raised will be sufficient for the purposes contemplated, which could negatively impact our operating plans, financial results and ability to continue as a going concern. We will not initially have any producing properties and will have no source of significant operating cash flow until the end of the first half of 2026 at the earliest. There is no precedent for projects like ours, and therefore, financing may not be available on acceptable terms or at all. Failure to obtain additional financing on a timely basis could cause us to reduce or terminate our operations. Organizations such as the United Nations Environment Programme Finance Initiative, warn against investing in activities focused on exploitation of deep-sea nodules as a result of the potential environmental impact of the activities. The influence of these groups could negatively impact our operations and ability to raise capital on acceptable terms or at all.

If additional funds are raised through further issuances of equity or convertible debt securities, existing shareholders could suffer significant dilution, and any new equity securities issued could have rights, preferences and privileges superior to those they possess prior to such issuances. Additionally, U.S. and global economic uncertainty, higher interest rates and diminished credit availability may limit our ability to incur indebtedness on favorable terms. Any debt financing secured in the future could involve restrictive covenants relating to capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions.

Furthermore, the impact of geopolitical tension, such as a deterioration in the bilateral relationship between the U.S. and China or an escalation in conflict between Russia and Ukraine, or the ongoing conflict in Israel and Gaza, including any resulting sanctions, export controls or other restrictive actions, could also lead to disruption, instability and volatility in the global markets, which may have an impact on our ability to obtain additional funding.

We may issue additional Common Shares or other equity securities without shareholder approval, which would dilute your ownership interests and may depress the market price of our common shares and sales of a substantial amount of our Common Shares may cause the price of our Common Shares to fall.

As at December 31, 2023, we had 306,558,710 Common Shares, 15,074,240 Short-Term Incentive Plan ("STIP") options, 9,783,922 Long-Term Incentive Plan ("LTIP") options and 24,500,000 warrants to acquire Common Shares issued and outstanding, which does not include the 4,500,000 Common Shares and 2,250,000 Class A warrants issuable in the private placement financing we announced in August 2023. Subject to the requirements of the Business Corporations Act (British Columbia) ("BCBCA"), our Articles authorize us to issue Common Shares and rights relating to our Common Shares for the consideration and on the terms and conditions established by our board of directors in its sole discretion, whether in connection with acquisitions or otherwise. In addition, 56,634,518 Common Shares are reserved for issuance under the TMC Incentive Equity Plan, including 12,262,348 shares added to the plan in January 2024 pursuant to the plan's evergreen provision, and 10,988,032 Common Shares are reserved for issuance under our 2021 Employee Stock Purchase Plan, in each case (the "ESPP"), including 3,065,587 shares added to the plan in January 2024, pursuant to the plan's evergreen provision, in each case, subject to adjustment in certain events. In addition, up to 136,239,964 Common Shares, subject to adjustment in certain events, may be issued to the holders of special shares and holders of options underlying special shares upon conversion of special shares if certain common share price thresholds are met ("Special Shares"). Any Common Shares issued, including in connection with the August 2023 registered direct financing, upon exercise of warrants, upon conversion of the Special Shares or under the TMC Incentive Equity Plan, the ESPP or other equity incentive plans that we may adopt in the future, would dilute the percentage ownership held by you.

Our issuance of additional Common Shares or other equity securities of equal or senior rank would have the following effects:

- our existing shareholders' proportionate ownership interest in the Company will decrease;
- the amount of cash available per share, including for payment of dividends in the future, may decrease;
- the relative voting strength of each previously outstanding common share may be diminished; and
- the market price of our Common Shares may decline.

In addition, the contractual lock-up agreements on certain of our securities entered into in connection with the Business Combination have all expired. As a result, all of our public shares are freely transferable. Sales of substantial amounts of our common shares in the public market, or the perception that such sales will occur, could adversely affect the market price of our Common Shares.

If our outstanding warrants are exercised, the number of shares eligible for future resale in the public market will increase and result in dilution to our shareholders. You will likely experience further dilution if we issue common shares in future financing transactions.

We have 15,000,000 outstanding Public Warrants to purchase 15,000,000 Common Shares and 9,500,000 Private Warrants outstanding exercisable for 9,500,000 shares of our Common Shares at an exercise price of $11.50 per share, which warrants became exercisable beginning on October 9, 2021. In addition, there are 3,980,770 Class A Warrants outstanding to purchase 3,980,770 Common Shares at an exercise price of $3.00 per share, that were issued as part of the August 2023 registered direct offering. In certain circumstances, the Public Warrants, Private Warrants and Class A Warrants may be exercised on a cashless basis and the proceeds from the exercise of such warrants will decrease. To the extent such warrants are exercised, additional shares of our Common Shares will be issued, which will result in dilution to the holders of our Common Shares and increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public market could adversely affect the market price of our Common Shares, the impact of which is increased as the value of our stock price increases. Furthermore, if we raise additional funds by issuing additional Common Shares, or securities convertible into or exchangeable or exercisable for common stock, our shareholders will experience additional dilution, and new investors could have rights superior to existing stockholders.

There can be no assurance that the Public Warrants, Private Warrants and Class A Warrants will be in the money, and they may expire worthless.

The exercise price for the outstanding Public Warrants and Private Warrants is $11.50 per Common Share. There can be no assurance that such warrants will be in the money prior to their expiration, and as such, such warrants may expire worthless. Since the closing of the Business Combination through March 11, 2024, the price of our Common Shares has ranged from a high of $10.38 to a low of $0.55 and as of March 15, 2024, the closing price of our Common Shares was $1.67. Based on the current trading price of our common shares we do not expect to receive any proceeds from exercise of the Public Warrants and Private Warrants unless there is a significant increase in the price of our Common Shares.

There are currently outstanding an aggregate of 28,480,770 warrants to acquire our Common Shares, which comprise 9,500,000 Private Warrants initially issued in connection with SOAC's initial public offering, which were transferred to permitted transferees of the initial holders thereof, 15,000,000 Public Warrants and 3,980,770 Class A Warrants. All of our warrants are currently exercisable for one common share in accordance with their terms. Therefore, as of December 31, 2023, if we assume that each outstanding whole warrant is exercised and one common share is issued as a result of such exercise, with payment of the exercise price ranging from $3.00 to $11.50 per share, our fully-diluted share capital would increase by a total of 28,480,770 shares, with approximately $293.7 million paid to us to exercise the warrants. Furthermore, even if the warrants are in the money following the time they become exercisable, the holders of the warrants are not obligated to exercise their warrants, and we cannot predict whether holders of the warrants will choose to exercise all or any of their warrants.

We are involved in litigation that may adversely affect us and may not be successful in our litigation related to non-performing Private Investment in Public Equity ("PIPE") investors.

Due to the nature of our business, we may be subject to regulatory investigations, claims, lawsuits and other proceedings in the ordinary course of our business. The results of these legal proceedings cannot be predicted with certainty due to the uncertainty inherent in litigation, including the effects of discovery of new evidence or advancement of new legal theories, the difficulty of predicting decisions of judges and juries and the possibility that decisions may be reversed on appeal. We can provide no assurances that these matters will not have a material adverse effect on our business. Following periods of volatility in the market, securities class-action litigation has often been instituted against companies. On October 28, 2021, a shareholder filed a putative class action against us and certain executives in federal district court for the Eastern District of New York, captioned Caper v. TMC The Metals Company Inc. F/K/A Sustainable Opportunities Acquisition Corp., Gerard Barron and Scott Leonard. The complaint alleges that all defendants violated Section 10(b) of the Exchange Act, and Rule 10b-5 promulgated thereunder, and Messrs. Barron and Leonard violated Section 20(a) of the Exchange Act, by making false and/or misleading statements and/or failing to disclose information about our operations and prospects during the period from March 4, 2021 to October 5, 2021. On November 15, 2021, a second complaint containing substantially the same allegations was filed, captioned Tran v. TMC the Metals Company, Inc. These cases have been consolidated. On March 6, 2022, a lead plaintiff was selected. An amended complaint was filed on May 12, 2022, reflecting substantially similar allegations, with the Plaintiff seeking to recover compensable damages caused by the alleged wrongdoings. We deny any allegations of wrongdoing and filed and served the plaintiff a motion to dismiss on July 12, 2022 and intend to defend against this lawsuit. On July 12, 2023, an oral hearing on the motion to dismiss was held. The parties are currently awaiting a ruling. On January 23, 2023, investors in the 2021 private placement from the Business Combination filed a lawsuit against us in the Commercial Division of New York Supreme Court, New York County, captioned Atalaya Special Purpose Investment Fund II LP et al. v. Sustainable Opportunities Acquisition Corp. n/k/a TMC The Metals Company Inc., Index No. 650449/2023 (N.Y. Sup. Ct.). We filed a motion to dismiss on March 31, 2023, after which the plaintiffs filed an amended complaint on June 5, 2023. The amended complaint alleges that we breached the representations and warranties in the plaintiffs' private placement Subscription Agreements and breached the covenant of good faith and fair dealing. The Plaintiffs are seeking to recover compensable damages caused by the alleged wrongdoings. We deny any allegations of wrongdoing and filed a motion to dismiss the amended complaint on July 28, 2023. On December 7, 2023, the Court granted our motion to dismiss the claim for breach of the covenant of good faith and fair dealing and denied our motion to dismiss the breach of the Subscription Agreement claim. We filed a notice of appeal regarding the Court's denial of our motion to dismiss the breach of the Subscription Agreement claim. There is no assurance that we will be successful in our defense of this lawsuit or that insurance will be available or adequate to fund any settlement or judgment or the litigation costs of this action. Such losses or range of possible losses cannot be reliably estimated.

We expected to receive approximately $330 million of proceeds in the private placement that closed on September 9, 2021 in connection with the Closing but only received $110.3 million (net of transactions costs). On September 20, 2021, we commenced litigation in the New York Superior Court, New York County against two investors who failed to fund their commitments pursuant to subscription agreements entered into in connection with the expected financing. These actions are captioned Sustainable Opportunities Acquisition Corp. n/k/a TMC the metals company Inc. v. Ethos Fund I, LP, Ethos GP, LLC, Ethos DeepGreen PIPE, LLC, and Ethos Manager, LLC, Index No. 655527/2021 (N.Y. Sup. Ct.) and Sustainable Opportunities Acquisition Corp. n/k/a TMC the metals company Inc. v. Ramas Capital Management, LLC, Ramas Energy Opportunities I, LP, Ramas Energy Opportunities I GP, LLC, and Ganesh Betanabhatla, Index No. 655528/2021 (N.Y. Sup. Ct.). The operative complaints allege that the investors breached the relevant subscription agreement and that the investors' affiliates tortiously interfered with the subscription agreements by causing the investor not to fund its contractual obligations. We are seeking compensatory damages (plus interest), expenses, costs, and attorneys' fees. There can be no assurances, however, that we will be successful in our efforts against these investors.

We are an emerging growth company and a smaller reporting company within the meaning of the Securities Act, and if we take advantage of certain exemptions from disclosure requirements available to "emerging growth companies" or "smaller reporting companies," this could make our securities less attractive to investors and may make it more difficult to compare our performance with other public companies.

We are an "emerging growth company" within the meaning of the Securities Act, as modified by the JOBS Act, and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. As a result, our shareholders may not have access to certain information they may deem important. We could be an emerging growth company for up to five years, although circumstances could cause us to lose that status earlier, including if the market value of our Common Shares held by non-affiliates exceeds $700 million as of the end of any second quarter of a fiscal year, in which case we would no longer be an emerging growth company as of the last day of such fiscal year. We cannot predict whether investors will find our securities less attractive because we will rely on these exemptions. If some investors find our securities less attractive as a result of our reliance on these exemptions, the trading prices of our securities may be lower than they otherwise would be, there may be a less active trading market for our securities and the trading prices of our securities may be more volatile.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a registration statement under the Securities Act declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such election to opt out is irrevocable. We have elected not to opt out of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of our financial statements with another public company that is not an emerging growth company or is an emerging growth company which has opted out of using the extended transition period difficult or impossible because of the potential differences in accounting standards used.

Additionally, we are a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K. Smaller reporting companies may take advantage of certain reduced disclosure obligations, including, among other things, providing only two years of audited financial statements. We will remain a smaller reporting company until the last day of the fiscal year in which (i) the market value of our Common Shares held by non-affiliates is greater than or equal to $250 million as of the end of that fiscal year's second fiscal quarter, and (ii) our annual revenues are greater than or equal to $100 million during the last completed fiscal year and the market value of our Common Shares held by non-affiliates exceeds $700 million as of the end of that fiscal year's second fiscal quarter. To the extent we take advantage of such reduced disclosure obligations, it may also make comparison of our financial statements with other public companies difficult or impossible.

We may incur debt in the future, and our ability to satisfy our obligations thereunder remains subject to a variety of factors, many of which are not within our control.

We may seek to incur debt in the future to fund our exploration and operational programs, which would reduce our financial flexibility and could have a material adverse effect on our business, financial condition or results of operation.

Should we incur debt, including through the drawdown of our credit facility with Allseas and/or our credit facility with ERAS Capital LLC and Gerard Barron, our ability to satisfy any resulting debt obligations and to reduce our level of indebtedness will depend on future performance. General economic conditions, mineral prices, and financial, business and other factors will have an impact on our operations and future performance, and many of these factors are beyond our control. As such, we cannot assure investors that we will be able to generate sufficient cash flow to pay the interest on any debt, or that future working capital, borrowings, or equity financing will be available to pay or refinance such debt or meet future debt covenants. Factors that will affect our ability to raise cash through an offering of securities or a refinancing of any debt include financial market conditions, the value of our assets, and our performance at the time we are seeking to raise capital. We cannot assure investors that we will have sufficient funds to make such payments. If we do not have sufficient funds and are otherwise unable to negotiate renewals of our current borrowings or to arrange for new financing, we might be required to take measures to generate liquidity, such as selling some or all of our assets. Any such sales could have a material adverse effect on our business, operations and financial results. Moreover, failure to obtain additional financing, if required, on a timely basis, could cause us to reduce or delay our proposed operations.

We may need to raise additional capital in order to complete our programs and commence commercial operations and there is no assurance that we will be able to obtain adequate financing in the future or that such financing will be available to us on advantageous terms.

An active trading market for our Common Shares and warrants may not be sustained, which would adversely affect the liquidity and price of our securities.

An active trading market for our securities may not be sustained. In addition, the price of our securities could fluctuate significantly for various reasons, many of which are outside our control, such as our stock performance, large purchases or sales of our Common Shares, legislative changes and general economic, political or regulatory conditions. The release of our financial results may also cause our share price to vary. The continued existence of an active trading market for our securities will depend to a significant extent on our ability to continue to meet Nasdaq's listing requirements, which we may be unable to accomplish.

There can be no assurance that we will be able to comply with the continued listing standards of Nasdaq.

On September 10, 2021, our Common Shares and Public Warrants began trading on Nasdaq under the symbols "TMC" and "TMCWW," respectively. If in the future Nasdaq delists our Common Shares from trading on its exchange for failure to meet the listing standards, we and our securityholders could face significant material adverse consequences including:

- a limited availability of market quotations for our securities;
- reduced liquidity for our securities;
- a determination that our Common Shares are "penny stock" which will require brokers trading in our Common Shares to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our securities;
- a limited amount of news and analyst coverage; and
- a decreased ability to issue additional securities or obtain additional financing in the future.

The closing bid price of our Common Shares has been below the Nasdaq's minimum $1.00 per share for extended periods of time in 2022 and into 2023. As a result, we received written notices from the Nasdaq in 2022 and 2023 notifying us that the closing bid price of the Common Shares over 30 consecutive trading days had fallen below the minimum $1.00 per share. Although we regained compliance with the Nasdaq's minimum closing bid price, we may not be able to continue to meet this Nasdaq listing requirement. If the closing bid price of our Common Shares falls below $1.00 per share for another consecutive 30 trading days, we expect to receive another notification from the Nasdaq to that effect. If this were to happen, in accordance with Nasdaq Listing Rule 5810(c)(3)(A), we expect to have 180 calendar days from the notice date to regain compliance. To regain compliance, the closing bid price of our Common Shares must be at least $1.00 per share for a minimum of 10 consecutive trading days. If we do not regain compliance in this 180-day period and we are not otherwise able to transfer our listing to another Nasdaq market and regain compliance with the $1.00 minimum closing bid price, the Nasdaq could delist our Common Shares and Public Warrants.

In the event that our Common Shares and Public Warrants are delisted from Nasdaq and are not eligible for quotation or listing on another market or exchange, trading of our Common Shares and warrants could be conducted only in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for, our Common Shares and Public Warrants, and there would likely also be a reduction in our coverage by securities analysts and the news media, which could cause the price of our Common Shares and Public Warrants to decline further.

If we are unable to implement and maintain effective internal controls over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and we may face litigation.

As a public company, we are required to implement and maintain internal controls over financial reporting and to report any material weaknesses in such internal controls. There is no guarantee we will maintain effective internal controls in the future.

If during the evaluation and testing process, we identify one or more material weaknesses in the design or effectiveness of our internal control over financial reporting or determine that existing material weaknesses have not been remediated, our management will be unable to assert that our internal control over financial reporting is effective. Even if our management concludes that our internal control over financial reporting is effective, our independent registered public accounting firm may conclude that there are material weaknesses with respect to our internal controls or the level at which our internal controls are documented, designed, implemented, or reviewed. If we are unable to assert that our internal control over financial reporting is effective, or when required in the future, if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and the valuation of our common stock could be adversely affected.

As a result of the material weaknesses and the associated restatements to our previously issued financial statements for the three months ended March 31, 2023, the six months ended June 30, 2023 and the nine months ended September 30, 2023 contained in its Quarterly Reports on Form 10-Q for the quarter ended March 31, 2023, June 30, 2023 and September 30, 2023, respectively, filed with the SEC and other matters that may be raised by the SEC, we may be subject to potential litigation or other disputes which may include, among others, claims invoking the federal and state securities laws, contractual claims or other claims arising from these matters and the preparation of our financial statements. We can provide no assurance that such litigation or dispute will not arise in the future. Any such litigation or dispute, whether successful or not, could have a material adverse effect on our business, results of operations and financial condition.

The market price of our securities may be volatile, which could cause the value of your investment to decline.

The market price of our securities may be highly volatile and could be subject to wide fluctuations. In addition, the trading volume in our Common Shares and Public Warrants may fluctuate and cause significant price variations to occur. Securities markets worldwide experience significant price and volume fluctuations. This market volatility, as well as general economic, market and political conditions (including as a result of regional conflicts, geopolitical events and natural disasters), could reduce the market price of our securities in spite of our operating performance. If we are unable to operate as profitably as investors expect, the market price of our Common Shares will likely decline when it becomes apparent that the market expectations may not be realized. In addition, our results of operations could be below the expectations of public market analysts and investors due to a number of potential factors, including variations in our quarterly or annual results of operations, operating results of other companies in the same industry, additions or departures of key management personnel, changes in our earnings estimates (if provided) or failure to meet analysts' earnings estimates, publication of research reports about our industry, litigation and government investigations, changes or proposed changes in laws or regulations or differing interpretations or enforcement thereof affecting our business, adverse market reaction to any indebtedness we may incur or securities it may issue in the future, changes in market valuations of similar companies or speculation in the press or the investment community with respect to us or our industry, negative media coverage, adverse announcements by us or others and developments affecting us, announcements by our competitors of significant contracts, acquisitions, dispositions, strategic partnerships, joint ventures or capital commitments, actions by institutional shareholders, the possible effects of war, terrorism and other hostilities, adverse weather conditions, changes in general conditions in the economy or the financial markets or other developments affecting the industry in which we operate, and increases in market interest rates that may lead investors in our Common Shares to demand a higher yield, and in response the market price of our Common Shares could decrease significantly.

These broad market and industry factors may decrease the market price of our Common Shares, regardless of our actual operating performance. The stock market in general has, from time to time, experienced extreme price and volume fluctuations. In addition, in the past, following periods of volatility in the overall market and the market price of a company's securities, securities class action litigation has often been instituted against these companies. Such litigation, if instituted against us, could result in substantial costs, a material negative impact on our liquidity and a diversion of our management's attention and resources.

We may redeem unexpired warrants prior to their exercise at a time that is disadvantageous, thereby making the warrants worthless.

We have the ability to redeem outstanding Public Warrants and Private Warrants at any time after they become exercisable and prior to their expiration, at a price of $0.01 per warrant, provided that the closing price of our Common Shares equals or exceeds $18.00 per share (as adjusted for share subdivisions, share capitalizations, reorganizations, recapitalizations and the like) for any 20 trading days within a 30-trading day period ending on the third trading day prior to proper notice of such redemption and provided that certain other conditions are met. Our Class A Warrants have a similar call provision if the price of our Common Shares is over $6.50 per share (subject to adjustments) for 30 consecutive trading days at a price per warrant share of $0.0001. If and when the warrants become redeemable by us, we may exercise our redemption right even if we are unable to register or qualify the underlying securities for sale under all applicable state securities laws. Redemption of the outstanding warrants could force you to (i) exercise your warrants and pay the exercise price therefor at a time when it may be disadvantageous for you to do so, (ii) sell your warrants at the then-current market price when you might otherwise wish to hold your warrants or (iii) accept the nominal redemption price which, at the time the outstanding warrants are called for redemption, is likely to be substantially less than the market value of your warrants. None of the private placement warrants will be redeemable by us on such terms so long as they are held by permitted transferees.

Reports published by analysts, including projections in those reports that differ from our actual results, could adversely affect the price and trading volume of our Common Shares.

Securities research analysts may establish and publish their own periodic projections for us. These projections may vary widely and may not accurately predict the results we actually achieve. Our common share price may decline if our actual results do not match the projections of these securities research analysts. Similarly, if one or more of the analysts who write reports on us downgrades our shares or publishes inaccurate or unfavorable research about our business, our share price could decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, our share price or trading volume could decline. While we expect research analyst coverage, if no analysts commence coverage of us, the market price and volume for our Common Shares could be adversely affected.

As we are not a reporting issuer in Canada, our Common Shares and Special Shares may be subject to restrictions on resale in Canada.

Our Common Shares and Special Shares were distributed pursuant to an exemption from the prospectus requirements in Canada. As we are not a reporting issuer in Canada and we do not intend to become a reporting issuer in Canada in the future, any distributions or trades of our securities will be a distribution that is subject to the prospectus requirements in Canada unless an exemption therefrom is available. An exemption from the prospectus requirements would be available to holders of shares of a class (and any underlying shares of such class) in respect of a trade if residents of Canada (the "Canadian Owners") own, directly or indirectly, not more than 10% of the outstanding shares of such class or any underlying shares of such class, and represent in number not more than 10% of the total number of owners, directly or indirectly, of shares of the applicable class or underlying shares, on any distribution date (collectively, the "Ownership Cap") and the trade is made through an exchange or market outside of Canada or to a person or company outside of Canada. On September 7, 2021, we received exemptive relief from the prospectus requirements in Canada such that the Common Shares and Special Shares issued to Canadian Owners in connection with the Business Combination are not subject to resale restrictions in Canada, subject to the terms and conditions set forth in the exemptive relief order. There can be no assurance that any future securities offered to Canadian Owners will be freely transferable by the Canadian Owners.

We are exposed to risks in our international operations, which could adversely affect our business.

We are exposed to foreign currency risk in connection with the business we conduct in foreign currencies to the extent that the exchange rates of the foreign currencies are subject to adverse change over time. It has not been our practice to enter into foreign exchange contracts to protect against adverse foreign currency fluctuations, and we cannot predict whether exchange rate fluctuations will significantly harm our operations or financial results in the future. In addition to adverse fluctuations in foreign currency exchange rates, we are exposed to further risks inherent in doing business abroad, including limitations on asset transfers, changes in foreign regulations and political turmoil, all of which could adversely affect us.

We may be classified as a PFIC in any taxable year which could result in adverse U.S. federal income tax consequences to U.S. holders.

If we are classified as a PFIC, such status may have adverse U.S. federal income tax consequences to U.S. Holders (as defined in the section titled "Material U.S. Federal Income Tax Considerations"). The rules governing PFICs can have adverse effects for U.S. federal income tax purposes. The tests for determining PFIC status for a taxable year depend upon the relative values of certain categories of assets and the relative amounts of certain kinds of income. The determination of whether we are a PFIC depends on the particular facts and circumstances (such as the valuation of our assets, including goodwill and other intangible assets) and may also be affected by the application of the PFIC rules, which are subject to differing interpretations. Based on our initial assessment, we do not believe that we were classified as a PFIC for U.S. federal income tax purposes for the taxable year ending December 31, 2023. However, the application of the PFIC rules is subject to uncertainty in several respects, and we cannot assure you the U.S. Internal Revenue Service will not take a contrary position. Furthermore, where we are classified as a PFIC this is a factual determination that must be made annually after the close of each taxable year. Accordingly, there can be no assurance with respect to our PFIC status for the current year or any future taxable year. If we are a PFIC for any taxable year during which a U.S. holder holds our Common Shares or Public Warrants, certain adverse U.S. federal income tax consequences could apply to such U.S. holder and such holders may be subject to additional reporting requirements. See "*U.S. Federal Income Tax Considerations — Tax Consequences of Ownership and Disposition of Public Shares and Public Warrants — Passive Foreign Investment Company Rules*" included in our registration statement on Form S-1 filed with the SEC on October 7, 2021 for a more detailed discussion with respect to our PFIC status and the application of the PFIC rules. U.S. Holders of our Common Shares and Public Warrants are urged to consult their tax advisors regarding the application of the PFIC rules to them.

Canadian law and our Notice and Articles contain certain provisions, including anti-takeover provisions that limit the ability of shareholders to take certain actions and could delay or discourage takeover attempts that shareholders may consider favorable.

Provisions in our Notice of Articles and Articles, as well as certain provisions under the BCBCA and applicable Canadian laws, may discourage, delay or prevent a merger, acquisition or other change in control of TMC that shareholders may consider favorable, including transactions in which they might otherwise receive a premium for their Common Shares.

For instance, our Notice of Articles and Articles contain provisions that establish certain advance notice procedures for nomination of candidates for election as directors at shareholders' meetings.

Limitations on the ability to acquire and hold Common Shares may also be imposed by the *Competition Act* (Canada). This legislation permits the Commissioner of Competition, or Commissioner, to review any acquisition or establishment, directly or indirectly, including through the acquisition of shares, of control over or of a significant interest in TMC. Moreover, a non-Canadian must file an application for review with the Minister responsible for the *Investment Canada Act* and obtain approval of the Minister prior to acquiring control of a "Canadian business" within the meaning of the *Investment Canada Act*, where prescribed financial thresholds are exceeded.

Further, changes to critical minerals policies and regulations in Canada and the U.S. and elsewhere may impact our ability to conduct our businesses internationally, including processing and sales of minerals and metals, and the ability to negotiate or agree any merger, acquisition or change of control.

Our Notice of Articles and Articles provide that any derivative actions, actions relating to breach of fiduciary duties and other matters relating to our internal affairs will be required to be litigated in the Province of British Columbia, Canada, and will contain an exclusive federal forum provision for certain claims under the Securities Act, which could limit your ability to obtain a favorable judicial forum for disputes with us.

Our Notice of Articles and Articles include a forum selection provision that provides that, unless we consent in writing to the selection of an alternative forum, the Supreme Court of British Columbia, Canada and the appellate courts therefrom, will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf; (ii) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or other employees to us; (iii) any action or proceeding asserting a claim arising pursuant to any provision of the BCBCA or TMC Notice of Articles and Articles (as either may be amended from time to time); or (iv) any action or proceeding asserting a claim otherwise related to the relationships among us, our affiliates and their respective shareholders, directors and/or officers, but excluding claims related to our business or of such affiliates. The forum selection provision also provides that our securityholders are deemed to have consented to personal jurisdiction in the Province of British Columbia and to service of process on their counsel in any foreign action initiated in violation of the foregoing provisions. The forum selection provision may impose additional litigation costs on securityholders in pursuing any such claims. This provision will not apply to suits brought to enforce any duty or liability created by the Securities Act or the Exchange Act, or the rules and regulations thereunder.

Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all claim brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder and our Notice and Articles will provide that the federal district courts of the U.S. will, to the fullest extent permitted by law, be the sole and exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act (the "Federal Forum Provision"). Application of the Federal Forum Provision means that suits brought by our securityholders to enforce any duty or liability created by the Securities Act must be brought in federal court and cannot be brought in any state court.

Section 27 of the Exchange Act creates exclusive federal jurisdiction over all claims brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. Accordingly, actions by our shareholders to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder must be brought in federal court. Our shareholders will not be deemed to have waived our compliance with the federal securities laws and the regulations promulgated thereunder.

Any person or entity purchasing or otherwise acquiring or holding any interest in any of our securities shall be deemed to have notice of and consented to the aforementioned forum selection provisions, including the Federal Forum Provision. Additionally, our securityholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder. These provisions may limit our securityholders' ability to bring a claim in a judicial forum they find favorable for disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers, and other employees. Alternatively, if a court were to find the choice of forum provision contained in our Notice and Articles to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, operating results and financial condition.

Our Notice and Articles permit us to issue an unlimited number of Common Shares and preferred shares without seeking approval of the holders of our Common Shares.

Our Notice of Articles and Articles permit us to issue an unlimited number of Common Shares. Subject to the requirements of the BCBCA and applicable securities exchange, we will not be required to obtain the approval of shareholders for the issuance of additional Common Shares. Any further issuances of Common Shares will result in immediate dilution to existing shareholders and may have an adverse effect on the value of their shareholdings.

The TMC Notice of Articles and Articles also permit us to issue an unlimited number of preferred shares, issuable in series and, subject to the requirements of the BCBCA, having such designations, rights, privileges, restrictions and conditions, including dividend and voting rights, as our board of directors may determine, and which may be superior to those of the Common Shares. The issuance of preferred shares could, among other things, have the effect of delaying, deferring or preventing a change in control and might adversely affect the market price of the Common Shares. Subject to the provisions of the BCBCA and the Nasdaq, we will not be required to obtain the approval of the holders of Common Shares for the issuance of preferred shares or to determine the maximum number of shares of each series of preferred shares, create an identifying name for each series and attach such special rights or restrictions as our board of directors may determine.

As a company incorporated in British Columbia with some of our directors and officers residing outside of the U.S., it may be difficult for investors in the U.S. to enforce civil liabilities against us based solely upon the federal securities laws of the U.S.

We are incorporated under the laws of British Columbia with our registered office located in British Columbia, Canada. Many of our directors and officers reside outside of the U.S. and all or a substantial portion of our assets and those of such persons are located outside the U.S. Consequently, it may be difficult for U.S. investors to effect service of process within the U.S. upon us or our directors or officers who are not residents of the U.S., or to realize in the U.S. upon judgments of courts of the U.S. predicated upon civil liabilities under the Securities Act. Investors should not assume that Canadian courts: (i) would enforce judgments of U.S. courts obtained in actions against us or such persons predicated upon the civil liability provisions of the U.S. federal securities laws or the securities or blue-sky laws of any state within the U.S. or (ii) would enforce, in original actions, liabilities against us or such persons predicated upon the U.S. federal securities laws or any such state securities or blue-sky laws.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 1C. CYBERSECURITY

We recognize the critical importance of maintaining the trust and confidence of investors, business partners and employees toward our business and are committed to protecting the confidentiality, integrity and availability of our business operations and systems. Our board of directors is involved in oversight of our risk management activities, and cybersecurity represents an important element of our overall approach to risk management. Our cybersecurity policies, standards, processes and practices are based on recognized frameworks established by the National Institute of Standards and Technology (NIST) and the International Organization for Standardization (ISO). In general, we seek to address cybersecurity risks through a comprehensive, cross-functional approach that is focused on preserving the confidentiality, security, and availability of the information that we collect and store by identifying, preventing and mitigating cybersecurity threats and effectively responding to cybersecurity incidents when they occur.

Cybersecurity Risk Management and Strategy; Effect of Risk

We face risks related to cybersecurity such as unauthorized access, cybersecurity attacks and other security incidents, including as perpetrated by hackers and unintentional damage or disruption to hardware and software systems, loss of data, and misappropriation of confidential information. To identify and assess material risks from cybersecurity threats, we maintain a comprehensive cybersecurity program to ensure our systems are effective and prepared for information security risks, including regular oversight of our programs for security monitoring for internal and external threats to ensure the confidentiality and integrity of our information assets. We consider risks from cybersecurity threats alongside other company risks as part of our overall risk assessment process.

To mitigate these risks, we have implemented technology solutions that are designed to recognize anomalous activity and behavior on systems used by TMC employees, alongside other technical safeguards including:

- Web Application Firewalls (WAF)
- Intrusion detection systems
- Antivirus
- Endpoint protection and response
- Security Event and Incident Management (SIEM)
- Identity and Access management (IAM)
- Multi-factor authentication

We utilize a third-party consultancy to provide services including security audits, CISO, risk management and response strategies. This consultancy provides the Chief Technology Officer, who is responsible for leading our cyber security strategy, guidance on policy, standards and processes alongside managing the risk management process.

We identify our cybersecurity threat risks by comparing our processes to standards set by the NIST, and the ISO specifically basing our policies and procedures on ISO27001 guidelines.

To provide for the availability of critical data and systems, maintain regulatory compliance, manage our material risks from cybersecurity threats, and protect against and respond to cybersecurity incidents, we undertake the following activities:

- monitor emerging data protection laws and implement changes to our processes that are designed to comply with such laws;

- through our policies, practices and contracts (as applicable), require employees, as well as third parties that provide services on our behalf, to treat confidential information and data with care;

- employ technical safeguards that are designed to protect our information systems from cybersecurity threats, including firewalls, intrusion prevention and detection systems, anti-malware functionality and access controls, which are evaluated and improved through vulnerability assessments and cybersecurity threat intelligence;

- provide regular, mandatory training for our employees and contractors regarding cybersecurity threats as a means to equip them with effective tools to address cybersecurity threats, and to communicate our evolving information security policies, standards, processes and practices;

- conduct regular phishing email simulations for all employees and contractors with access to our email systems to enhance awareness and responsiveness to possible threats;

- dark web scanning to determine any leaked credentials both corporate and personal for key employees.

- leverage the NIST incident handling framework and our MSPs to help us identify, protect, detect, respond and recover when there is an actual or potential cybersecurity incident;

- carry information security risk insurance that provides protection against the potential losses arising from a cybersecurity incident; and

Our incident response plan coordinates the activities we take to prepare for, detect, respond to and recover from cybersecurity incidents, which include processes to triage, assess severity for, escalate, contain, investigate and remediate the incident, as well as to comply with potentially applicable legal obligations and mitigate damage to our business and reputation.

As part of the above processes, we regularly engage with consultants, auditors and other third parties, including annually having a third-party review our cybersecurity program to help identify areas for continued focus, improvement and compliance.

Our processes also address cybersecurity threat risks associated with our use of third-party service providers, including our suppliers and manufacturers or who have access to patient and employee data or our systems. In addition, cybersecurity considerations affect the selection and oversight of our third-party service providers. We perform diligence on third parties that have access to our systems, data or facilities that house such systems or data, and continually monitor cybersecurity threat risks identified through such diligence. Additionally, we generally require those third parties that could introduce significant cybersecurity risk to us to agree by contract to manage their cybersecurity risks in specified ways, and to agree to be subject to cybersecurity audits, which we conduct as appropriate.

We describe whether and how risks from identified cybersecurity threats, including as a result of any previous cybersecurity incidents, have materially affected or are reasonably likely to materially affect us, including our business strategy, results of operations, or financial condition, under the heading "We are dependent upon information technology systems, which are subject to cyber threats, disruption, damage and failure" which disclosures are incorporated by reference herein.

In the last three fiscal years, we have not experienced any material cybersecurity incidents and the expenses we have incurred from cybersecurity incidents were immaterial. This includes penalties and settlements, of which there were none.

Cybersecurity Governance; Management

Cybersecurity is an important part of our risk management processes and an area of focus for our management. The audit committee of our board of directors is responsible for the oversight of risks from cybersecurity threats, as part of our Enterprise Risk Management system. In the event of a cybersecurity incident that meets established reporting thresholds, our audit committee will receive prompt and timely information regarding such incident, as well as ongoing updates until it has been addressed.

Our cybersecurity risk management and strategy processes, which are discussed in greater detail above, are led by our Chief Technology Officer with guidance from external security consultant. Such individuals have collectively over 40 years of prior work experience in various roles involving managing information security, developing cybersecurity strategy, implementing effective information and cybersecurity programs, as well as relevant degrees and certifications, including Certified Information Security Manager and Certified CISO. These management team members are informed about and monitor the prevention, mitigation, detection, and remediation of cybersecurity incidents through their management of, and participation in, the cybersecurity risk management and strategy processes described above, including the operation of our incident response plan.

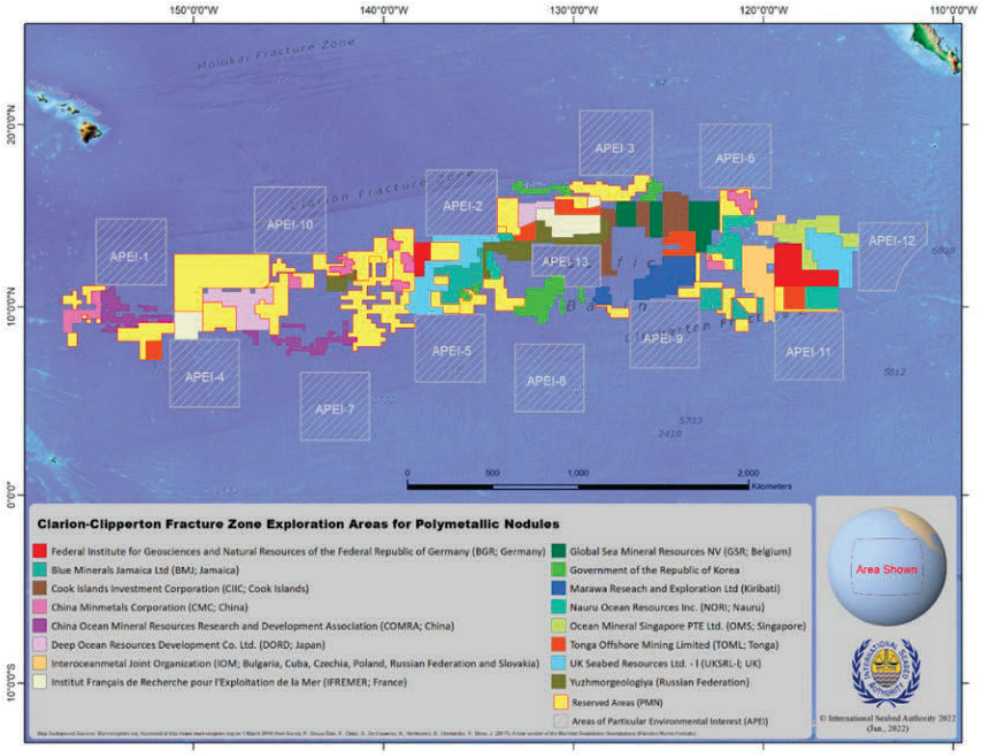
Item 2. PROPERTIES

NORI Contract Area

The information that follows relating to the NORI Contract Area of the CCZ is derived, for the most part, from, and in some instances is an extract from, the NORI Technical Report Summary prepared in compliance with the SEC Mining Rules. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein. Reference should be made to the full text of the NORI Technical Report Summary, which has been incorporated by reference as Exhibit 96.1 to this Annual Report. The NORI Technical Report Summary is incorporated herein by reference and made a part hereof. In the event that we determine that any modifying factors, estimates and other scientific and technical information in the report materially change, we may update or file a new technical report in the future. The NORI Contract Area is an exploration stage property.

Location of the NORI Area and access

The NORI Contract Area is located within the CCZ of the northeast Pacific Ocean. The CCZ is located in international waters between Hawaii and Mexico. The western-end of the CCZ is approximately 1,000 kilometers south of the Hawaiian island group. From here, the CCZ extends almost 5,000 kilometers east-northeast, in an approximately 600 kilometers wide trend, with the eastern limits approximately 2,000 kilometers west of southern Mexico. The region is well-located to ship nodules to the American continent or across the Pacific to Asian markets. The NORI Contract Area comprises four separate blocks (A, B, C and D) in the CCZ with a combined area of 74,830 square kilometers.



NORI Contract Area extents

Area	Minimum Latitude (DD)	Maximum Latitude (DD)	Minimum Longitude (DD)	Maximum Longitude (DD)	Minimum UTM X (m)	Maximum UTM X (m)	Minimum UTM Y (m)	Maximum UTM Y (m)	UTM Zone
A	11.5000	13.00000	(134.5830)	(133.8330)	545220.4	627276.0	1271339	1437255	8
B	13.5801	14.00000	(134.0000)	(133.2000)	607995.7	694759.8	1501590	1548425	8
C	12.0000	14.93500	(123.0000)	(120.5000)	500000.0	769458.3	1326941	1652649	10
D	**9.8950**	**11.08333**	**(117.8167)**	**(116.0667)**	**410465.2**	**602326.1**	**1093913**	**1225353**	**11**

DD — Decimal degrees, UTM — Universal Transverse Mercator map projection

As the CCZ deposit does not include any habitable land and is not near coastal waters, there is no requirement to negotiate access rights from landowners for seafloor collection operations. All personnel and material will be transported to the project area by ship.

See Section 3 of the NORI Technical Report Summary for further specific information of the location of the NORI Contract Area.

Tenements and permits

See Business Regulations-The NORI Exploration Contract, Business Regulations-The NORI Sponsorship Agreement and Business Regulations- International Seabed Authority above for information related to tenements and permits in the NORI Contract Area.

NORI obligations and sponsorship

See Business Regulations-The NORI Exploration Contract, Business Regulations-The NORI Sponsorship Agreement above for information related to this agreement in the NORI Contract Area.

Royalties and taxes

See Business Regulations-Royalties and taxes above for information with respect to our obligations for royalties and taxes in the NORI Contract Area.

History of previous exploration activities in the NORI Contract Area

Prior to the implementation of UNCLOS, many offshore exploration campaigns were completed by international organizations and consortia. A number of at-sea trial collection operations were successfully carried out in the CCZ in the 1970s to test potential collection concepts. These system tests evaluated the performance of self-propelled and several towed collection devices, along with submersible pumps and airlift technology for lifting the nodules from the deep ocean floor to the support vessel. Certain pioneer investors include those entities that carried out substantial exploration in the CCZ prior to the entry into force of UNCLOS, as well as those entities that inherited such exploration data.

NORI Area D was originally explored by Arbeitsgemeinschaft Meerestechnisch Rohstoffe ("AMR"). AMR subsequently joined Ocean Management Inc. ("OMI"). The OMI consortium comprised Inco Ltd (Canada), AMR (Federal Republic of Germany), SEDCO Inc. (US), and Deep Ocean Mining Co. Ltd (Japan). OMI completed a successful trial collection operation in 1978. Hydraulic pumps, an air lift system, and towed collectors were tested in approximately 4,500 meters of water. Approximately 800 tonnes of nodules were recovered.

Kennecott consortium (now a division of Rio Tinto) first became seriously interested in seafloor polymetallic nodules in 1962 (Agarwal et al. 1979). In the 1970s, Kennecott developed and tested components and subsystems of a seafloor collection system, and also carried out significant polymetallic nodule metallurgical processing test work.

Using a different system to OMI, Ocean Mining Associates recovered approximately 500 tonnes of nodules during its trial collection in the 1970s.

Between 1969 and 1974, Deepsea Ventures Inc. carried out 16 survey cruises of three to four weeks' duration each, to define the extent of the polymetallic nodule deposit discovered by them in 1969 in the CCZ. As reported by Deepsea Ventures Inc.:

"These activities included the taking of some 294 discrete samples, including the bulk dredging of some 164 tons of manganese nodules from some 263 dredge stations, 28 core stations and three grab sample stations, cutting of some 28 cores, approximately 1000 lineal miles of survey of seafloor recorded by television and still photography, etc. As a result, the deposit of nodules identified with the discovery has been proved to extend generally throughout the entire area (American Society of International Law, 1975)."

Also active in the CCZ was the Ocean Minerals Company ("OMCO"), comprising Amoco Minerals Co. (United States), Lockheed Missiles and Space Company Inc. (United States), Billiton International Metals BV, and dredging company Bos Kalis Westminster (Netherlands). In a program lasting 16 years, OMCO collected thousands of free-fall grab and box core samples of nodules from its claim area and carried out trial collection operations. Lockheed's design efforts resulted in over 80 patents, a seafloor production system that consisted of a remote-controlled collector and crusher, a seafloor to surface slurry riser system, the first industrial-scale dynamic positioning system for a vessel, and a metallurgical processing plant.

Upon making an application, the pioneer investors were required to submit sufficient data and information to enable designation of a reserved area based on the estimated commercial value. These sample data provide the basis of a database held by the ISA and were used initially to define the areas of the NORI application.

See Section 5 of the NORI Technical Report Summary for further specific information of the history of previous exploration of the NORI Contract Area.

Geology and sampling

Seafloor polymetallic nodules occur in all oceans, but the CCZ hosts a relatively high abundance of high Ni and Cu grade nodules. The CCZ seafloor forms part of the Abyssal Plains, which are the largest physiographic province on Earth.

The average depth of the seafloor in the Project Area is 3,800 to 4,200 meters. Overall, the seafloor slopes at approximately 0.57° (1 meter per kilometer) but the Abyssal Plains are traversed by ridges, with amplitude of 50 to 300 meters (maximum 1,000 meters) and wavelength of 1 to 10 kilometers. The Abyssal Plains are punctuated by extinct volcanoes rising 500 to 2,000 meters above the seafloor.

Seafloor polymetallic nodules rest on the seafloor at the seawater — sediment interface. Such nodules are composed of nuclei and concentric layers of manganese and iron hydroxides and are formed by precipitation of metals from the surrounding seawater and sediment pore waters. Nickel, cobalt and copper are also precipitated and occur within the structure of the manganese and iron minerals.

Nodules are abundant in abyssal areas with oxygenated bottom waters and low sedimentation rates (less than 10 cm per thousand years). Nodules generally range from about 1 to 12 cm in their longest dimension. Nodules of 1 to 5 cm are typically the most common in NORI Area D, where they have been classified as Type 1 nodules.

The specific conditions of the CCZ (water depth, latitude, and seafloor sediment type) are considered to be the key controls for the formation of polymetallic nodules.

Information on the mineralization within NORI Area D comprises a combination of sampling undertaken by NORI as well as free-fall grab sampler ("FFG") and box core sampler ("BC") data supplied by the ISA at the time of the NORI application and also supplied by the ISA to NORI in 2012. Additional regional data, assembled by the ISA as part of its Geological Model Project during 2008 to 2010 ("ISA 2010"), are available. The data provide significant coverage over NORI Area D and indicate a high abundance of nodules in this region, as has been confirmed by NORI's exploration.

During the 2018 NORI campaign, 91% of nodules sampled were situated at surface. These include nodules on the surface and nodules with their top surfaces in the upper 1 cm of sediment. A few nodules were found at depth; most of these were usually clustered around the edges of the box core and are considered to have been pushed below surface by the box coring process. Significant nodule abundance below surface was only recorded in one out of 45 samples. The nodules vary in abundance, in some cases touching one another and covering more than 70% of the seafloor. They can occur at any depth, but the highest concentrations have been found on abyssal plains between 4,000 and 6,000 mbsl. Data analysis in Section 9 of the NORI Technical Report Summary shows that nodule abundance variability is significantly higher than metal grades, suggesting that abundance estimation will be the key variable in mineral resource estimation.

NORI completed offshore exploration campaigns in 2012, 2013, 2018, 2019 and 2020. During these campaigns a variety of data was collected including:

- bathymetric mapping of most of NORI Areas A, B and C and all of NORI Area D using a hull-mounted Kongsberg Simrad EM120 12 kHz, full-ocean depth multibeam echo-sounding system (MBES). This system also provided backscatter data with which seafloor characteristics could be interpreted;

- detailed seafloor survey work with an autonomous underwater vehicle (AUV), utilizing an MBES, Side Scan Sonar (SSS), Sub-Bottom Profiler (SBP), and camera payload; and

- a total of 252 box core samples collected using a 0.75 square meters box corer, mainly on a 10 kilometers by 10 kilometers square grid were used for resource evaluation.

The nodules in the box cores were collected, and their characteristics measured and recorded in detail. Samples of nodules were collected in duplicate and assayed at two reputable, well-qualified laboratories: ALS and Bureau Veritas. Certified reference material, and blank samples were inserted to provide additional levels of quality control. No significant issues were identified with the assay results.

The backscatter data and the sidescan sonar and seafloor photography indicate strong continuity of nodule abundance across NORI Area D. There is a clear relationship between nodule long axis length and nodule weight and therefore it is possible to estimate nodule abundance from photographs. Several estimation techniques were tested, and methodologies were developed that are suitable for closely-packed (Type 1) and less closely-packed (Type 2 and 3) nodules.

For more information about the NORI exploration campaigns in 2012, 2013, 2018, 2019 and 2020, see Section 7 of the NORI Technical Report Summary.

Mineral resource estimate

The mineral resource was classified on the basis of the quality and uncertainty of the sample data and sample spacing, in accordance with the definitions of "inferred mineral resource," "indicated mineral resource" and "measured mineral resource" under the SEC Mining Rules.

Mineral resources were estimated using a two-dimensional block model. Estimates of nodule abundance and nickel, manganese, cobalt, and copper grades were performed using kriging. A variety of methods was used to validate the estimates, including conditional simulation. The estimates of nodule abundance were used to calculate the tonnage of the mineral resources.

The bathymetric mapping enabled the interpretation of parts of seafloor that are possibly too steep for recovery of nodules using the systems considered by the NORI Technical Report Summary. Seafloor areas with slopes steeper than 6° were excised from the mineral resource estimate.

The measured mineral resource was assigned to the area within NORI Area D where box-core sampling was conducted on a nominal 7 kilometers by 7 kilometers spacing and infilled with estimates of nodule abundance from seafloor photography to a spacing of 3.5 kilometers by 3.5 kilometers.

The indicated mineral resource was assigned to the area within NORI Area D where box-core sampling was conducted on a nominal spacing of 7 kilometers by 7 kilometers or 10 kilometers by 10 kilometers but without additional photo-estimates of nodule abundance.

The inferred mineral resource was assigned to the areas of abyssal plain in the southeast corner of NORI Area D that are largely unsampled. The volcanic high in the southeast corner was excluded from the mineral resource estimate due to the high level of uncertainty about nodule abundance and grades in this domain.

The mineral resource estimate for NORI Area D at a 4 kilogram/square meters abundance cut-off is set forth below. This cut-off is derived from the estimates of costs and revenues presented in the NORI Technical Report Summary, generalized as follows: 1.7 Mt minimum annual tonnage mined; $0.25 million/square kilometers for offshore operating costs; 1,036 square kilometers collected area processed; $95/dry tonne for transport costs; $119/dry tonne for processing costs; $15/dry tonne for corporate, general and administrative costs; $33/dry tonne for ISA and state royalties; 95% recovery of nickel at an assumed price of nickel metal $16,472/t; 86% recovery of copper at an assumed price of $6,872/t copper metal; 77% recovery of cobalt at an assumed price of $46,333/t cobalt metal; and 99% recovery of manganese at an assumed price of $4.50/dmtu manganese in manganese silicate. The method of calculation for the cut-off determines the minimum average nodule abundance needed during steady state operations such that the revenue minus costs (excluding capital) is greater than zero. Revenue includes metal pricing and metallurgical processing recoveries, and the costs include the collection, transport, processing, corporate costs and royalties.

The estimated mineral resources were determined in 2021 as of December 31, 2020 and also reflect the estimated mineral resources as of December 31, 2023, as none of the mineral resources in these areas were depleted by mining or any other activities.

NORI December 31, 2023 In-Situ Mineral Resource estimate for NORI Area D at 4 kg/m^2 abundance cut-off

NORI Area	Category	Tonnes (Mt (wet))	Abundance (wet kg/m^2)	Nickel (%)	Copper (%)	Cobalt (%)	Manganese (%)	Silicon (%)
D	Measured	4	18.6	1.42	1.16	0.13	32.2	5.13
D	Indicated	341	17.1	1.40	1.14	0.14	31.2	5.46
D	Measured + Indicated	345	17.1	1.40	1.14	0.14	31.2	5.46
D	Inferred	11	15.6	1.38	1.14	0.12	31.0	5.50

Note: Tonnes are quoted on a wet basis and grades are quoted on a dry basis, which is common practice for bulk commodities. Moisture content was estimated to be 24% w/w. These estimates are presented on an undiluted basis without adjustment for resource recovery.

Due to the extremely low variance in the grades and the high metal content of the nodules, a cut-off based on abundance is appropriate for determining the limits of economic exploitation. A cut-off of 4 kg/m^2 abundance was chosen for the NORI Contract Area, based on the estimates of costs and revenues presented in the initial assessment contained in the NORI Technical Report Summary. The metal prices assumed in the calculation of the cut-off were: nickel metal $16,472/t; copper metal $6,872/t; cobalt metal $46,333/t; cobalt in manganese in manganese silicate $4.50/dmtu. The price estimates are long term (2034 – 2046) forecasts provided in a report by CRU International Limited (CRU, October 23, 2020). The Qualified Person considered that this timeframe is reasonable in view of the likely time required to bring the majority of the NORI mineral resources into production.

Sampling of NORI Area D at a spacing of 10 kilometers by 10 kilometers during the 2019 campaign confirmed that the nodules have low variability and high continuity. The mineral resource estimate set forth above is 4 Mt Measured and 341 Mt indicated, and 11 Mt inferred mineral resources. Taking into account the conversion of the majority of inferred to indicated mineral resources, the remaining inferred mineral resource has decreased by 26 Mt as a result of excluding the Volcanic High domain in the south-eastern corner of NORI Area D, due to uncertainty about the occurrence of nodules in this area. The resource estimate is also slightly higher in abundance (5.4% higher), and nickel (6.1% higher), cobalt (5.4% higher) and manganese (2.2% higher) grades than the 2018 estimate.

Comparison of the area covered by inferred, indicated and measured mineral resource for the estimate and the same area in the 2018 model shows that nickel grade has increased by 6% (1.32% to 1.40% Ni) while abundance has increased by 6% (16.0 to 17.0 kg/m^2). Mineral resource tonnage has increased by 10% (from 10 to 11 Mt) in the inferred area and 7% (from 320 to 341 Mt) in the indicated area. The positive conversion rates arising from infilling the sampling grid with high-quality box core sample data (rather than extending the area sampled) are exceptionally high compared to the typical outcomes from infill sampling of terrestrial mineral deposits.

While the NORI Technical Report Summary focuses primarily on the exploration operations in NORI Area D, NORI holds another three areas in the CCZ under the same title. These areas (NORI Areas A, B and C) are estimated to contain inferred mineral resources of 510 Mt (wet) at 1.28% Ni, 0.21% Co, 1.04% Cu, 28.3% Mn, at an average abundance of 11 kg (wet)/m^2 at a 4 kg/m^2 abundance cut-off (effective date of December 31, 2020). The polymetallic nodule mineralization in NORI Areas A, B and C has similar characteristics to NORI Area D and it is reasonable to assume that the technology proposed in the NORI Technical Report Summary would be suitable for development of these additional areas.

The estimated mineral resources were determined in 2021 as of December 31, 2020 and also reflect the estimated mineral resources as of December 31, 2023, as none of the mineral resources in these areas were depleted by mining or any other activities.

NORI Area A, B and C December 31, 2023 In-Situ Mineral Resource estimate at 4 kg/m^2 abundance cut-off

NORI Area	Category	Nodule tonnage (Mt (wet))	Abundance (wet kg/m^2)	Ni (%)	Cu (%)	Co (%)	Mn (%)
A	Inferred	72	9.4	1.35	1.06	0.22	28.0
B	Inferred	36	11	1.43	1.13	0.25	28.9
C	Inferred	402	11	1.26	1.03	0.21	28.3

Note: Tonnes are quoted on a wet basis and grades are quoted on a dry basis, which is common practice for bulk commodities. Moisture content was estimated to be 24% w/w. These estimates are presented on an undiluted basis without adjustment for resource recovery.

Information concerning our mineral properties in the NORI Technical Report Summary and in this Annual Report includes information that has been prepared in accordance with the requirements of the SEC Mining Rules set forth in subpart 1300 of Regulation S-K. Under SEC standards, mineralization, such as mineral resources, may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time of the reserve determination. As used in this Annual Report, the terms "mineral resource," "measured mineral resource," "indicated mineral resource" and "inferred mineral resource" are defined and used in accordance with the SEC Mining Rules set forth in subpart 1300 of Regulation S-K. **You are specifically cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into mineral reserves, as defined by the SEC.**

You are cautioned that mineral resources do not have demonstrated economic value. Inferred mineral resources have a high degree of uncertainty as to their existence as to whether they can be economically or legally mined. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. A significant amount of exploration must be completed in order to determine whether an inferred mineral resource may be upgraded to a higher category. About 97% of the NORI Area D resource is defined in the measured and indicated categories. **Therefore, you are cautioned not to assume that all or any part of an inferred mineral resource exists, that it can be economically or legally mined, or that it will ever be upgraded to a higher category. Likewise, you are cautioned not to assume that all or any part of measured or indicated mineral resources will ever be upgraded to mineral reserves.**

Development plan

NORI proposes to implement the project in multiple phases that will allow the seafloor collection systems to be tested ("Collector Test") and then nodule collection to be gradually ramped up. The phased approach will facilitate de-risking of the project for relatively low initial capital investment. Additionally, this phased development will allow for an adaptive approach to environmental management providing learning at small-scale which would be applied as the development increases in scale. The development plan has been refined since the creation of the NORI Technical Report Summary.

The proposed seafloor development phases are as follows:

- The Collector Test was designed to perform proof of concept for the methods of collecting and lifting the nodules while acquiring sufficient data to design a commercial system. The Collector Test used a converted sixth generation drillship, the *Hidden Gem*. Nodules collected during the test were stored on the *Hidden Gem* and brought to shore for use in large scale process pilot testing. The test did not demonstrate the transshipment of nodules to a shore-based facility.

- Project Zero System would be an extension of the Collector Test using an upgrade of the *Hidden Gem* to produce a sufficient and continuous quantity of nodules to support commercial operation commencing at 1.3 Mtpa increasing in staged increments to 3.0 Mtpa of wet nodules delivered to a shore-based facility. This operation would demonstrate a more continuous collection operation at a larger scale than the Collector Test and would demonstrate the transshipment of nodules to a processing facility. It would also allow for the implementation and testing of adaptive management systems to ensure environmental compliance.

- Project Zero Plan of Work application contemplates that an increase in production is achieved via the introduction of another production vessel with the capacity of up to 3.0 Mtpa.

- The processing of the polymetallic nodules would also be ramped up in phases:

- In Project Zero, NORI proposes to toll-treat polymetallic nodules at existing RKEF smelters, utilizing excess industry capacity. NORI advises there is significant interest from many parties in China, Indonesia and Japan to utilize RKEF plants which may become stranded as a result of the Indonesian government nickel laterite ore export ban restricting supply of the nickel laterite feedstock that they currently utilize and the significant recent build-out of capacity in Indonesia which may have resulted in processing capacity oversupply. These RKEF plants were originally built to convert nickel laterite to nickel pig iron and could be converted to smelt polymetallic nodules with minor modifications.

- In Project One, a purpose-built process plant would be constructed, including pyrometallurgical (~50% of Project One production, with the other ~50% tolled through existing RKEF facilities) and hydrometallurgical circuits (100% of Project One production). Nodule production would be increased in phases by treatment in this new plant and existing RKEFs.

Collection methods

The main items of offshore infrastructure are the nodule collector vehicles, the riser, and three production support vessels ("PSV"): *Hidden Gem*; Drill Ship 2; and Collector Ship 1. Collector Ship 1 is intended to be supported by a collector support vessel.

The nodules are intended to be collected from the seafloor by self-propelled, tracked, collector vehicles. No rock cutting, digging, drill-and-blast, or other breakage will be required at the point of collection. The collectors are intended to be remotely controlled and supplied with electric power via umbilical cables from the PSV. The collectors are intended to traverse the seabed at a speed of approximately 0.5 m/s. Suction dredge heads on each collector are expected to recover a dilute slurry of nodules, sediment, and water from the seafloor. Each collector is expected to yield about 254 t/hr (dry) nodules. A hopper on each vehicle is expected to separate sediment and excess water, which is expected to pass out of the hopper overflow, from the nodules, which is planned to be pumped as a higher concentration slurry via flexible hoses to a riser.

The riser is a steel pipe through which nodules are planned to be transferred to the surface by means of an airlift. The riser is intended to consist of three main sections. The lower section is expected to carry the two-phase slurry of nodules and water from the collectors to the airlift injection point. The mid-section is expected to carry a three-phase mixture of slurry and air. This section will also include two auxiliary pipes: one to carry the compressed air for the airlift system, and one to return water from dewatering of the slurry to its subsea discharge point. The upper section of riser is expected to have a larger diameter to account for the expansion of air in the airlift.

The airlift is intended to work by lowering the average density of the slurry inside the riser to a level lower than seawater. The difference between the hydrostatic pressure of the seawater at depth and the pressure caused by the weight of the low-density three-phase slurry column inside the riser is expected to force the slurry column to rise. The energy to achieve the lift is planned to be supplied by compressors housed on the PSV, which are planned to be capable of generating very high air pressures — up to 15 MPa.

The PSVs are planned to each support a RALS and its handling equipment, and to house the airlift compressors, collector vehicle control stations, and material handling equipment. All power for offshore equipment, including the nodule collecting vehicles, is intended to be generated on the PSVs. The PSVs are intended to be equipped with controllable thrusters and to be capable of dynamic positioning (DP), which should allow the vessels and risers to track the collectors. The Collector Ship 1 PSV is expected to be similar in size to an Aframax or New Panamax class of tanker, displacing approximately 103,000 tonnes, and housing a crew of around 120 personnel. Nodules are planned to be discharged from the RALS to the PSVs, where they are expected to be dewatered and temporarily stored or transferred directly to a transport vessel.

A separate collector support vessel is expected to remain at sea to support Collector Ship 1. It is expected to be configured as a subsea support platform, as commonly used in the oil industry, with a displacement of around 17,250 t. The function of the collector support vessel will be to facilitate collector maintenance and repair.

The NORI Technical Report Summary assumes that transportation of nodules will be by chartered vessels, with deadweight capacities of 35,000 to 100,000 tonnes. The vessels are expected to require dynamic positioning capability to enable them to be loaded at sea alongside the PSV. Hydraulic offloading of the nodules from the PSV to the transport ships is assumed in the NORI Technical Report Summary, but future studies will confirm the offloading mechanism.

The overall nodule collector efficiency is estimated at 80%. The recovery value is based upon test work conducted in the 1970s. Nodule recovery efficiency is the product of nodule entrainment efficiency, subsea concentrator recovery, and dewatering system efficiency. The estimate of dewatering recovery used in the NORI Technical Report Summary is higher than indicated by the 1970s test work because data that has come to light recently suggests the amount of breakup during lifting the nodules up the RALS may be significantly less than previously assumed (Kennecott (1978), DRT (2015)).

Expected Mineral Resource modifying factors

Modifying factors	Value	Description
Resource area efficiency	92%	The resource area efficiency factor is defined as the width of the collector divided by the width of the collector path. A 0.5 m undisturbed strip is to be left either side of the collector. For a 12 m wide collector, the resource area efficiency is calculated as 12/13.
Collector pick-up efficiency	90%	This is the percentage of nodule mass passed over by the collector that is picked-up up by the collector head.
Collector underflow efficiency	95%	This is the percentage of nodule mass that is picked-up up that is passed to the collector underflow.
Nodule attrition	0%	This is the percentage of mass of nodule lost through attrition from the seafloor to trans-shipment. It is included in the trans-shipment efficiency.
Trans-shipment efficiency	93%	This is the percentage of nodule mass transferred from the production vessel to trans-shipment.
Overall collector efficiency	80%	This is the percentage of nodule mass passed over by the collector that is delivered to the transport vessel. It includes losses in the pick-up, overflow, attrition and trans-shipment (90%*95%*100%*93%).
Overall resource recovery factor	73%	Is the product of the resource area efficiency * collector pick-up efficiency * collector under flow efficiency * (1 — nodule attrition (%)), * trans-shipment efficiency (92%*90%*95%*100%*93%).

For more information on polymetallic nodule collection methods, see Section 13 of the NORI Technical Report Summary.

Mineral processing and metallurgical testing

A combined pyro-metallurgical and hydro-metallurgical flowsheet was evaluated for the initial assessment included in the NORI Technical Report Summary. Similar flowsheets were investigated at various times over the last several decades. NORI has undertaken bench-scale test-work and is in the process of completing pilot-scale testing of the proposed flowsheet. This work has confirmed or improved the flowsheet that was initially developed from extensive information available in the literature.

For Project Zero, NORI proposes to toll treat polymetallic nodules at existing RKEF smelters. During Project One, NORI proposes the progressive construction and expansion of a new pyrometallurgical and hydrometallurgical process plant for the recovery of battery-grade nickel and cobalt sulfate powder, copper cathode and manganese silicate, from polymetallic nodules. This is expected to allow for the proportion of toll treatment to be reduced.

Four RKEF lines and two hydrometallurgical refineries are expected to be required to meet our expected production demand.

The pyrometallurgical front-end of the plant is expected to use RKEF lines that calcine and smelt the nodules to form an alloy. The alloy is then expected to be sulphidized to form a matte and then partially converted in a Peirce-Smith converter operation to remove iron. The matte from the sulphidation step is planned to then be sent to the hydrometallurgical refinery. The pyrometallurgical process is expected to be similar to that successfully used to process some nickel laterite ores.

The hydrometallurgical refinery concept is based on a sulfuric acid leach flowsheet. A two-stage leach would be used to produce copper cathode and a pregnant leach solution rich in nickel and cobalt, while low in copper. Further processing of the pregnant leach solution is based on mixed-sulphide precipitate processing flowsheets employing solvent extraction. The final production of battery-grade nickel and cobalt sulfates is expected to use crystallization.

The pyrometallurgical process is expected to generate a manganese silicate stream that we believe could be sold to the manganese industry and small converter slag stream that we believe could be sold for industrial applications. No value has been ascribed to converter slag in the NORI Technical Report Summary. The hydrometallurgical plant is expected to produce an ammonium sulfate by-product for sale to the fertilizer industry. Thus, together with the ability to recycle other hydrometallurgical side-streams to the pyrometallurgical process, the flowsheet is planned to have neither tailings ponds nor permanent slag repositories and should not generate substantial waste streams.

The average targeted processing rate for the new processing plant at full capacity is expected to be 6.4 Mtpa of nodules (dry basis). The location and host country of the processing operation has not yet been determined. Engineering design has not yet been undertaken. Expected metallurgical recoveries are summarized in the table below.

Process Step	Nickel Recovery (%)	Cobalt Recovery (%)	Copper Recovery (%)
Final matte	94.6 %	77.4 %	86.5 %
Hydrometallurgical products before recycle	98.9 %	98.0 %	96.2 %
Recycled residue	94.6 %	77.4 %	86.5 %
Overall recovery	94.6 %	77.2 %	86.2 %

In addition to the above base metals, 98.9% of the manganese contained in the feed is expected to be recovered in the manganese silicate product, containing 52.6% MnO. Approximately 7.3 Mt of manganese silicate is expected to be produced per annum (from steady state operation from 2030 onwards).

For more information on mineral processing and metallurgical testing, see Section 14 of the NORI Technical Report Summary.

Environmental studies, permitting, community, or social impact

Historically, a significant amount of technical work has been undertaken within the CCZ by the contractors under the ISA and a significant body of information has been acquired during the past 40 years on the likely environmental impacts of collecting nodules from the seafloor.

NORI's offshore exploration campaigns have included sampling to support environmental studies, collection of high-resolution imagery and environmental baseline studies. Environmental campaigns in 2021 resulted in completion of the offshore environmental data collection required for the ESIA baseline studies.

NORI has commenced the ESIA process in support of an application for an exploitation contract for the commercial collection of deep-sea polymetallic nodules. A comprehensive program of metocean and biological data acquisition is largely complete, required to characterize the baseline conditions at a designated Collector Test site and control sites in the NORI Contract Area.

NORI intends to manage the project under the governance of an Environmental Management System ("EMS"), which is to be developed in accordance with the international EMS standard, ISO 14001:2004. The EMS will provide the overall framework for the environmental management and monitoring plans that will be required.

An EMMP will be required. The plan will specify the objectives and purpose of all monitoring requirements, the components to be monitored, frequency of monitoring, methods of monitoring, analysis required in each monitoring component, monitoring data management and reporting. The plan will be submitted to the ISA as part of the ISA Exploitation Contract application. This plan will involve an ecosystem approach incorporating an adaptive management system.

The social impacts of the offshore operation are expected to be positive. The CCZ is uninhabited by people, and there are no landowners associated with the CCZ. No significant commercial fishing is carried out in the area. The project is expected to provide a source of revenue to our sponsor country, Nauru, and the ISA.

The onshore environmental and social impacts are in the process of being evaluated as part of the feasibility being undertaken by PAMCO under the binding MoU signed in November 2023 for nodules that would be processed at their existing facility in Hachinohe, Japan. This is an existing facility that has processed laterite ores since the mid 1960's and has all the required operating permits to do so. PAMCO are working with Japanese authorities to ensure that the environmental impacts of treating nodules are minimized and can be undertaken within PAMCO existing permissions or ensuring appropriate permissions are issued if required.

It is likely that additional facilities beyond PAMCO will be required as production expands. This could involve processing through additional tolling facilities or potentially newly built facilities. The onshore environmental and social impacts of these facilities have not been assessed because the tolling facilities have not been identified or a new-build process plant has not been designed in detail, and the location and host country (and hence regulatory regime) not confirmed. The planned metallurgical process will not generate solid waste products, and the deleterious elements (for example, cadmium and arsenic) content of the nodules is very low, indicating that with careful management the environmental impacts of the processing operation could be very low.

For more information on environmental studies, permitting and social or community impact, see Section 17 of the NORI Technical Report Summary.

Economic analysis

We developed in-house a financial model based on estimates of future cash flows derived from extraction of nodules from the NORI Area D project. AMC reviewed the logic, input assumptions and integrity of the calculations and forecasts. The financial model is for NORI Area D only, which is at a preliminary level of planning and design. We do not believe there have been any material changes to this model since AMC's review.

For the initial assessment, the offshore cost estimates were developed based upon the guidelines of the AACE (Association for the Advancement of Cost Engineering) International Recommended Practice No. 18R-97. Based on engineering studies performed previously by Deep Reach Technology (DRT) for Deep Green Resources and the experience in trial mining of deep-sea nodules by DRT personnel, the cost estimate was considered to be a class 4. Offshore capital costs were estimated to accuracy levels of -30% +40%. Onshore capital costs were estimated according to an AACE Class 5 level of accuracy (–35% +50%). A contingency of 25% was applied to the offshore and onshore capital cost estimates. The collection plan considered in the NORI Technical Report Summary contemplates a 23-year production period. The expected production period is within the expected duration of a NORI Area D ISA Exploitation Contract which would be thirty (30) years (with possible extensions by periods of ten (10) years) as outlined in the current draft of the regulations for exploitation of mineral resources in the CCZ (ISBA/25/C/WP.1).

After the initial 23-year period, substantial resources will remain in the other NORI Areas that could support future collection (combined inferred mineral resource in NORI Areas A, B and C of 510 Mt (wet) at 1.28% Ni, 0.21% Co, 1.04% Cu, 28.3% Mn, at an average abundance of 11 kg (wet)/m^2). The proposed project schedule is shown in the Gantt chart in Figure 19.1 of the NORI Technical Report Summary.

In Project Zero, NORI expects to toll treat the nodules in third-party pyrometallurgical plants and sell the RKEF products into the alloy market. This will be expected to generate revenue while the pyrometallurgical and hydrometallurgical facilities are planned to be built.

In Project One, NORI expects to stage the construction of its multiple pyrometallurgical and hydrometallurgical lines to flatten out capital expenditure requirements. Nodule production is expected to be directed preferentially to the NORI pyrometallurgical plants as this is expected to be the lowest operating cost option. Whenever these facilities are at maximum capacity (particularly during the ramp-up phase), the surplus nodules are expected to be sent for toll treatment.

NORI expects that it will ensure that its own hydrometallurgical refineries are filled up to maximum capacity, as this is expected to produce the highest value products. Whenever its own hydrometallurgical refineries are at full capacity, NORI expects to sell the surplus product from its pyrometallurgical plant directly to the matte market. While the matte is not as valuable as the refined products from the hydrometallurgical plant (nickel sulfate, cobalt sulfate, and copper cathode), it still provides a consistent revenue stream and assists for periods when the refineries are at full capacity.

Some of the alloy production from toll treatment of NORI nodules are expected to be shipped to the NORI hydrometallurgical plants to make use of spare capacity. This will require the alloy from the third-party RKEF to be sulphidized prior to hydrometallurgical treatment.

Based on preliminary discussions with potential buyers, NORI believes that there is sufficient demand for the alloy and matte over the life of the project.

The analysis was performed on a 100% ownership basis and excludes consideration of financing costs and forward metal sales. The analysis assumes the economic parameters listed in the table below.

Assumed Economic Inputs

Parameters	Units	Values
Hydrometallurgical plant Ni recovery	%	94.6 %
Mn recovery	%	98.9 %
Hydrometallurgical plant Cu recovery	%	86.2 %
Hydrometallurgical plant Co recovery	%	77.2 %
Pyrometallurgical plant Ni recovery	%	96.8 %
Pyrometallurgical plant Cu recovery	%	93.3 %
Pyrometallurgical plant Co recovery	%	92.7 %
Mn silicate grade	%	40.0 %
Cu cathode grade	%	99.9 %
Payability of Cu content in cathode	%	100 %
Nodule moisture content	%	24 %
Onshore tax rate	% of taxable income	20 %
Average offshore tax (to ISA)	% of taxable income	6.7 %

Commodity Prices

Project revenues will come from the following sources:

- a nickel sulfate product;
- a copper cathode product;
- a cobalt sulfate product;
- a manganese silicate product;
- an ammonium sulfate product;
- a nickel alloy product containing copper and cobalt; and
- a matte product from the NORI pyrometallurgical plants containing nickel, copper and cobalt, which would be sold to the matte market.

NORI has used the following payable percentages for the alloy:

- Nickel: 80% of in-situ value in the alloy;
- Copper: 40% of in-situ value in the alloy; and
- Cobalt: 80% of in-situ value in the alloy.

The following estimates for treatment charges and refining charges for the alloy product were used in the NORI financial model:

- a refining charge of $1,697/tonne of contained nickel in the alloy;
- a refining charge of $800/tonne of contained nickel in the alloy;
- a refining charge of $6,700/tonne of contained nickel in the alloy; and
- a treatment charge $300/tonne of alloy.

For the matte product, NORI has used a payables figure of 83% of the market metal price of nickel, copper and cobalt. The metal recoveries for the matte and alloy are those from the pyrometallurgical plant, whilst the refined products (nickel sulfate, copper cathode and cobalt sulfate) are from the hydrometallurgical refinery metal recoveries.

The prices forecast by CRU and adopted for use in the economic analysis were derived from a report prepared by CRU dated October 23, 2020 and are listed in the table below. The Qualified Person considered the metal price assumptions underpinning the analysis to be reasonable.

Commodity prices

	2024 ($)	2025 ($)	2026 ($)	2027 ($)	2028 ($)	2029 ($)	2030 ($)	2031 ($)	2032 ($)	2033 ($)	2034 – 2046 ($)
Ni metal, LME cash (/t)	14,067	14,467	14,868	15,269	15,670	16,071	16,472	16,472	16,472	16,472	16,472
Ni Sulfate (/t)	15,610	16,027	16,443	16,860	17,269	17,678	18,087	18,087	18,087	18,087	18,807
SiMn, China import, 44% Mn (/dmtu)	4.80	4.70	4.70	4.60	4.60	4.50	4.50	4.50	4.50	4.50	4.50
Cu, Grade A cathode – LME cash (/t)	6,435	6,497	6,557	6,615	6,673	6,730	6,787	6,805	6,822	6,839	6,872
Co, EU Co 99.8% min (EXW) (/t)	52,881	39,914	38,204	41,526	45,137	49,062	51,106	50,600	49,126	47,695	46,333
Co Sulfate premium over Co metal (ex-China) (/t)	64,250	49,035	46,933	51,014	55,450	60,272	62,784	62,162	60,351	58,594	56,920

Production schedule

The production schedule on which the economic analysis is based was developed on an annual basis. The Qualified Person cautioned that a prefeasibility study has not been undertaken and that the seafloor production schedule is preliminary in nature and should not be interpreted as a mineral reserve. Approximately 96% of the mineral resource within NORI Area D is classified as indicated and a further 1% is classified as measured resource. The life of mine ("LOM") production sequence includes 6 Mt (wet) of nodules that are classified as inferred mineral resources. This is approximately 2% of the total LOM production.

The production schedule assumes staged operation initially of the *Hidden Gem*, then Drill Ship 2 and finally Collector Vessel 1, as outlined in Section 16.1 of the NORI Technical Report Summary.

The nodule metal grades and nodule abundance varying annually according to the LOM schedule. The grades and nodule abundance for the mine plan were derived from a preliminary production schedule developed by AMC as outlined in Section 16.7 of the NORI Technical Report Summary. The higher abundance areas were targeted by the production schedule. The metal grades and abundance used in the schedule (the "IA") are compared to the averages (of all mineral resource categories) for NORI Area D in the table below.

Comparison of IA mine plan to Mineral Resource for NORI Area D

	Mineral Resource in NORI Area D (all categories)	Seafloor production plan	Difference (%)
Tonnage (Mt wet)	356	254	71 %
Nodule abundance (kg/m^2)	17.0	16.9	99 %
Ni grade (%)	1.40	1.4	100 %
Mn grade (%)	31.2	31.0	99 %
Cu grade (%)	1.14	1.1	100 %
Co grade (%)	0.14	0.14	98 %

The production ramp-up discussed in Section 17 of the NORI Technical Report Summary was adopted for the production schedule. The Qualified Person considered the assumptions underpinning the initial assessment and economic analysis to be reasonable.

Capital and operating costs

The capital cost estimates for the Project are summarized below. Pre-project items include data gathering and studies that will occur prior to construction. Offshore project costs include the procurement and integration of the PSVs, the collector support vessel, the fabrication of the collectors, and the RALS. Onshore project costs consist principally of the construction of the minerals processing pyrometallurgical plant and hydrometallurgical refinery. Sustaining costs are for both onshore and offshore assets, and closure costs are principally for rehabilitation of the onshore minerals processing site.

Section	Cost estimate ($ million)
Pre-project costs	237
Project costs	
Offshore project costs	
Project Zero	204
Project One	2,244
Total	2,448
Onshore project costs	
Project One	4,786
Total	4,786
Total project costs	7,234
Sustaining capital costs (onshore and offshore)	2,637
Closure costs	500
Total	10,608

Operating costs have been estimated at $1.8 billion per annum during steady state production (from 2030 onwards). Expenditures of a total of $37.5 billion over the life of the project on operating costs is expected. Onshore processing is the most significant operating cost.

Average operating cost estimates during steady state operation (from 2030 onwards)

Section	Average Operating Cost over Life of Mine ($ million pa)	Average Unit Cost (/t – wet tonne nodules recovered)	Average Unit Cost (/t – dry tonne processed)
Offshore	$ 240.74	$ 19.31	$ 25.40
Shipping	$ 254.37	$ 20.40	$ 26.84
Onshore	$ 1,286.19	$ 103.14	$ 135.71
Other	$ 25.00	$ 2.00	$ 2.64
Total	$ 1,806.30	$ 144.85	$ 190.59

For more information on capital and operating costs, see Section 18 of the NORI Technical Report Summary.

Cash flows analysis

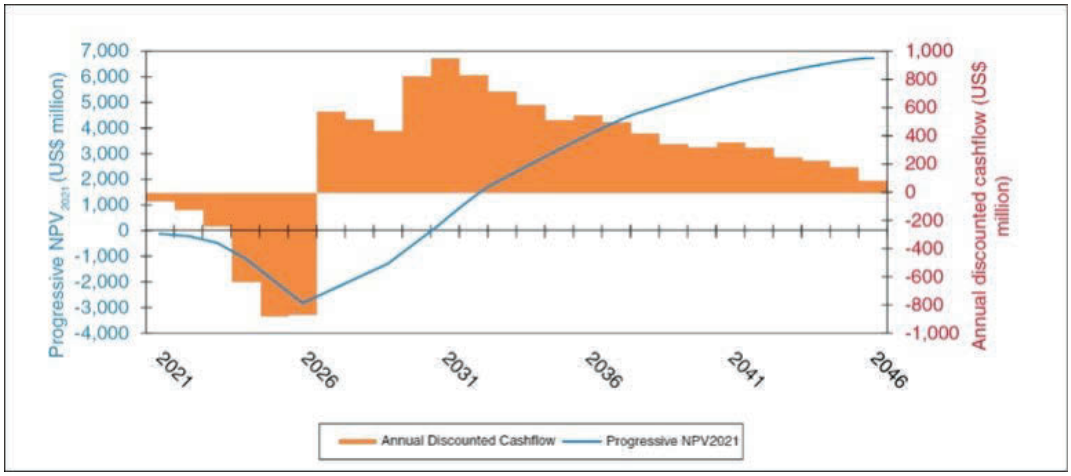
The economic analysis set forth in Section 19 of the NORI Technical Report Summary presents a post-tax, real (uninflated) cash flows analysis. The valuation date is January 1, 2021. The analysis was performed on a 100% ownership basis and excludes consideration of financing costs and forward metal sales. The initial assessment indicates a positive economic outcome. Undiscounted post-tax net cash flows of $30.6 billion is expected. An internal rate of return of 27% has been estimated from the financial model. Discounted cash flow analysis of unleveraged real cash flows, discounting at 9% per annum, indicates a pre-tax project net present value (NPV) of $11.2 billion and a post-tax project NPV of $6.8 billion, which includes the LOM production of polymetallic nodules that are presently classified as inferred mineral resources, representing approximately 2% of the total LOM production. Excluding the inferred mineral resources from the economic analysis, the post-tax project NPV is estimated at $6.7 billion, which is not a significant difference from the economic analysis that includes the inferred mineral resources. The project reaches its lowest cumulative undiscounted cash flow figure of $4.0 billion in 2026. Undiscounted payback period is 6.6 years after commencement of production.

The total cash flows are summarized below:

Cash flow item	Value ($ million)
Ni revenue	$ 44,106
Mn revenue	$ 26,785
Cu revenue	$ 12,685
Co revenue	$ 11,075
Ammonium sulfate revenue	$ 439
Total revenue	**$ 95,090**
Pre-project capital	$ 237
Offshore construction	$ 2,448
Onshore construction	$ 4,786
Offshore sustaining capital	$ 1,418
Onshore sustaining capital	$ 1,219
Closure costs	$ 500
Total capital	**$ 10,608**
Offshore operating costs	$ 5,154
Shipping costs	$ 5,266
Onshore operating costs	$ 26,544
Corporate costs	$ 560
Total operating costs	**$ 37,524**
Royalties	$ 7,195
Onshore tax	$ 9,123
Taxes and royalties	**$ 16,318**
Net undiscounted cash flow	**$ 30,640**

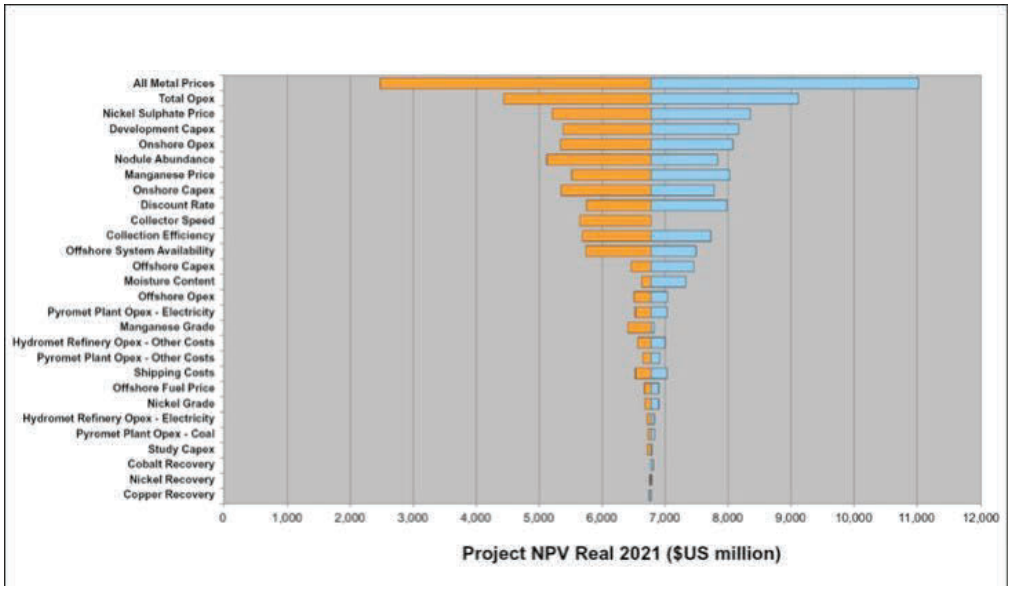
Project revenues are expected to come from the following sources: (a) a nickel sulfate product; (b) a copper cathode product; (c) a cobalt sulfate product; (d) a manganese silicate product; (e) an ammonium sulfate product; (f) a nickel alloy product containing copper and cobalt; and (g) a matte product from the NORI pyrometallurgical plants containing nickel, copper and cobalt which would be sold to the matte market.

The discounted cash flows and progressive NPVs are shown below:



The date of the investment decision, as outlined in the initial assessment contained in the NORI Technical Report Summary was expected to be on or around June 30, 2023. The analysis assumes NORI spending of $237 million on pre-project activities between 2021 (which were progressed in 2021) and 2024. The future value of the project on June 30, 2023 (after the pre-project expenditure is sunk and time has elapsed) is expected to be $8.6 billion and the initial rate of return from that point is expected to be 29%.

The sensitivity of project economics to changes in the main variables was tested by selecting high and low values that represent a likely range of potential operating conditions. The variables with the biggest negative impact on NPV are all metal prices, total OPEX, collector speed, nickel sulfate price and development capex. In general, revenue drivers have the biggest impact, followed by OPEX variables and then CAPEX variables.



Tornado diagram of NPV sensitivity to variables

The initial assessment is preliminary in nature, and further planning, engineering studies, design, cost estimation and seafloor tests are required before mineral resources can be converted to mineral reserves. There is no certainty that the proposals and results presented in the initial assessment will be realized. A prefeasibility study has not yet been undertaken. Mineral resources are not mineral reserves and do not have demonstrated economic viability.

The initial assessment included in the NORI Technical Report Summary indicates that the NORI Area mineral resource is potentially economic. The Qualified Person recommended that further data gathering, analysis, design and cost estimation be undertaken to advance the project.

Internal controls and data verification

The original assay sheets for the individual samples collected by the pioneer investors from within the NORI Area are not available for auditing against the values in the database. We, AMC and NORI have not had access to the original assay sheets for the individual samples that are within the CCZ, and the quality control procedures used by the laboratories and the ISA. However, the consistency between the abundance and grade data collected by the pioneer investors, as presented in Section 9.1 of the NORI Technical Report Summary, supports the contention that the quality of the pioneer investor data is satisfactory.

It is also reasonable to infer that the pioneer investor data are of sufficient quality for resource estimation because the ISA is an independent agency with significant accountability under the UNCLOS. Part of its mandate is the receipt and storage of seafloor sampling data suitable for the estimation of nodule resources and the legally binding award of licenses. It is reasonable to assume that a reasonable level of care was applied by the ISA.

Data collected by NORI is well-documented and was subject to satisfactory quality assurance/quality control processes. Documentation verified by the Qualified Person includes photographs, daily exploration reports, digital logging sheets and original assay reports. In the opinion of the Qualified Person, the NORI data was of high quality and suitable for estimation of measured mineral resources.

Assaying of nodules collected by NORI in 2012, 2013, 2018, and 2019 confirm the mean grades of the historical grab samples and support the contention that the quality of the pioneer investor data is satisfactory for inclusion in resource estimation. The main limitation with the pioneer investor data is the likelihood that some of the abundance values were too low, due to loss of nodules from the FFG. Estimates of abundance that include pioneer investor data are therefore likely to be conservative.

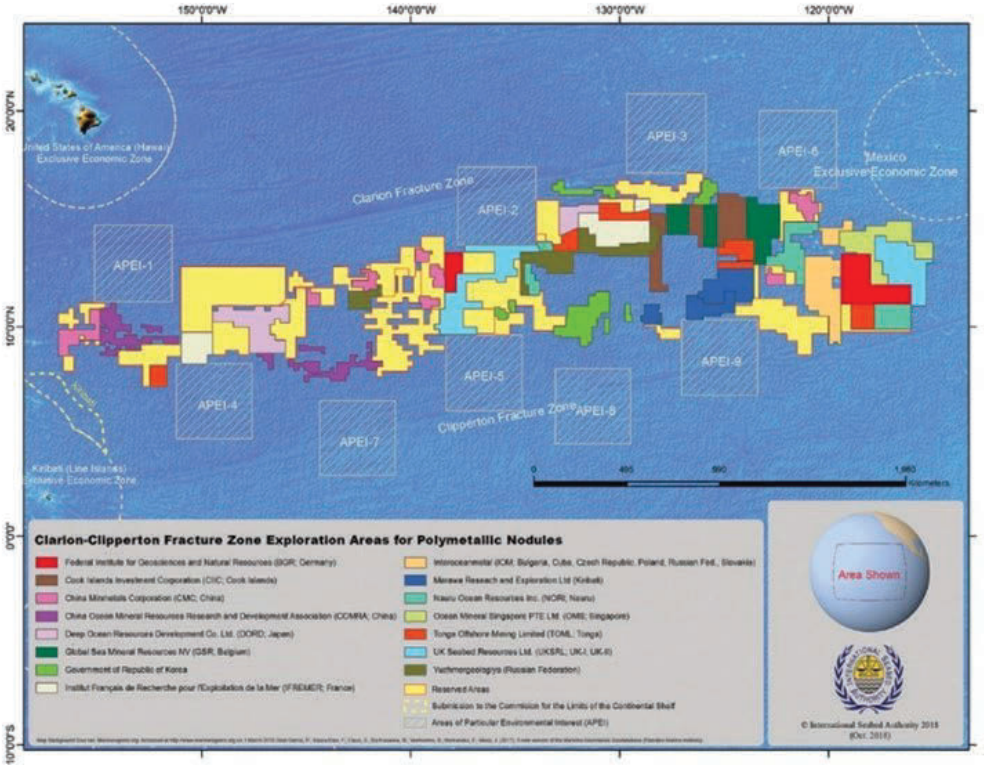
For more information about quality control/quality assurance and data verification, see Section 8 and Section 9 of the NORI Technical Report Summary.

TOML Contract Area

The information that follows relating to the TOML Contract Area of the CCZ is derived, for the most part, from, and in some instances is an extract from, the TOML Technical Report Summary prepared in compliance with the SEC Mining Rules. Portions of the following information are based on assumptions, qualifications and procedures which are not fully described herein. Reference should be made to the full text of the TOML Technical Report Summary, which has been incorporated by reference as exhibit 96.2 to this Annual Report. In the event that we determine that any of modifying factors, estimates and other scientific and technical information in the report materially change, we may update or file a new technical report in the future. The TOML Contract Area is an exploration stage property.

Location of the TOML Contract Area and access

The TOML Area is located within the CCZ of the northeast Pacific Ocean. The CCZ is located in international waters between Hawaii and Mexico. The western-end of the CCZ is approximately 1,000 kilometers south of the Hawaiian island group. From here, the CCZ extends over 4,500 kilometers east-northeast, in an approximately 600 kilomeers wide trend, with the eastern limits approximately 2,000 kilometers west of southern Mexico. The region is well-located to ship nodules to the American continent or across the Pacific to Asian markets. The TOML Contract Area comprises six separate blocks (A through F) in the CCZ with a combined area of 74,713 square kilometers.



TOML Contract Area extents

Area	Minimum Latitude (DD)	Maximum Latitude (DD)	Minimum Longitude (DD)	Maximum Longitude (DD)	Minimum UTM X (m)	Maximum UTM X (m)	Minimum UTM Y (m)	Maximum UTM Y (m)	UTM Zone
A	7.167 N	8.167 N	151.667 W	152.510 W	553972	647187	792205	902968	05N
B	13.580 N	14.667 N	132.000 W	133.200 W	694518	824685	1502009	1623605	08P
C	15.000 N	15.800 N	128.583 W	131.000 W	284947	544791	1658371	1747847	09P
D	13.125 N	14.083 N	123.583 W	125.333 W	247293	437022	1451031	1557860	10P
E	12.750 N	13.083 N	123.583 W	125.333 W	246693	436796	1409563	1447513	10P
F	9.895 N	11.083 N	117.817 W	118.917 W	289835	410804	1093917	1225828	11P

DD — Decimal degrees, UTM — Universal Transverse Mercator map projection

The CCZ lies between Hawaii and Mexico and is accessible by ship from various ports in the U.S. and South America. As the CCZ deposit does not include any habitable land and is not near coastal waters, there is no requirement to negotiate access rights from landowners for seafloor collection operations. All personnel and material will be transported to the project area by ship.

See Section 3 of the TOML Technical Report Summary for further specific information of the location of the TOML Contract Area.

Tenements and permits

See Business Regulations-The TOML Exploration Contract, Business Regulations-The TOML Sponsorship Agreement and Business Regulations- International Seabed Authority above for information related to tenements and permits in the TOML Contract Area

TOML obligations and sponsorship

See Business Regulations-The TOML Exploration Contract, Business Regulations-The TOML Sponsorship Agreement above for information related to this agreement in the TOML Contract Area.

Royalties and taxes

See Business Regulations-Royalties and taxes above for information with respect to our obligations for royalties and taxes in the TOML Contract Area.

History of previous exploration activities in the TOML Area

Prior to the implementation of UNCLOS, many offshore exploration campaigns were completed by international organizations and consortia. A number of at-sea trial collection operations were successfully carried out in the CCZ in the 1970s to test potential collection concepts. These system tests evaluated the performance of a self-propelled and several towed collection and collection devices, along with submersible pumps and airlift technology for lifting the nodules from the deep ocean floor to the support vessel. Certain pioneer investors include those entities that carried out substantial exploration in the CCZ prior to the entry into force of UNCLOS, as well as those entities that inherited such exploration data.

Exploration and development efforts in the CCZ started in the 1960s by state sponsored groups from Russia, France, Japan, Eastern Europe, China, Korea and Germany. Several commercial consortia also explored between the 1960s and the 1980s and in some instances their descendants are still involved to the present day. No commercial collection operations have yet been established in the CCZ. However, a variety of collectors, pick-up systems, and metallurgical processing flow sheets were tested, and several integrated “demonstration scale” systems operated in the CCZ for several months in the late 1970s. Processing test-work has encompassed a variety of hydrometallurgical and pyrometallurgical flow sheets, usually with good results.

Six exploration groups are known to have surveyed areas within the TOML Contract Area and collected samples of polymetallic nodules. Much of this work overlapped as it predated the signing of the Law of the Sea. These include the Japanese group (DORD), the South Korean group (KORDI), the Russian Federation group (Yuzhmorgeologiya), the French group (Ifremer), the German group (FIGNR or BGR), and the consortium, Ocean Minerals Company (OMCO). The timing and location (ISA, 2003) of the OMCO sampling is known but the results are not available outside of ISA published contour maps. Virtually all the samples in the TOML tenement area were obtained by FFG samplers, although a few results from box corers (BC) were also included.

See Section 5 of the TOML Technical Report Summary for further specific information of the history of previous exploration of the TOML Contract Area.

Geology and sampling

Seafloor polymetallic nodules occur in all oceans but the CCZ hosts a relatively high abundance of nodules. The CCZ seafloor forms part of the Abyssal Plains, which are the largest physiographic province on Earth. This mineral field is essentially a single mineral deposit almost 5,000 kilometers in length and up to 600 kilometers wide. The size and level of uniformity of mineralization is unmatched by any mineral deposit of similar value on land. The mechanism of formation of the nodules is interpreted to be essentially identical across the entire CCZ, with only minor local variations. Consequently, there is relatively little difference between the size, shape or metal content of the nodules from one area to another. Figure 6.9 to Figure 6.11 of the TOML Technical Report Summary illustrate the remarkable continuity of grades and abundances across the whole of the CCZ.

The morphological features of the seafloor are similar in the TOML and the NORI Areas, which all lie within the Abyssal Plains and are characterized by sub-parallel basaltic lava ridges called abyssal hills. The Areas are punctuated by typically extinct volcanic knolls and seamounts and scattered sediment drifts in which few nodules are preserved at the seafloor.

Seafloor polymetallic nodules rest on the seafloor at the seawater — sediment interface. Such nodules are composed of nuclei and concentric layers of manganese and iron hydroxides and are formed by precipitation of metals from the surrounding seawater and sediment pore waters. Nickel, cobalt and copper are also precipitated and occur within the structure of the manganese and iron minerals.

The specific conditions of the CCZ (water depth, latitude, and seafloor sediment type) are considered to be the key controls for the formation of polymetallic nodules. Nodules are typically 4 to 6 cm and up to 10 cm in diameter.

The exploration methods used to explore and delineate the mineral resources in the TOML and NORI areas were essentially the same. Multibeam echo-sounding system (MBES) was used to determine the depth of water (bathymetry) and the acoustic reflectance (backscatter) of the seabed. Nodule coverage was interpreted using the backscatter data. Physical sampling of the nodules was carried out initially using FFG samplers and in more recent years by BC samplers which provide a better-quality sample. Measurements of nodule abundance obtained from physical samples were supplemented with estimates of abundance made using the long-axis estimation ("LAE") method and high-resolution photographs of the seafloor.

Data collected by TOML in 2013 and 2015 supports the historical data but also is of sufficient quantity and quality to allow estimation of an indicated mineral resource for five sub areas within TOML Areas B, C, D and F called B1, C1, D1, D2 and F1. More detailed data collected by TOML has also allowed estimation of a measured mineral resource for a single sub area within TOML Area B.

The key data sets behind the inferred mineral resource estimate for TOML Areas A through E are surface samples obtained by free fall grab samplers, although a few results from box-corers were also included. Free fall grab samplers are the standard sampling method as they are the most productive tool available. They are believed to underestimate the actual abundance, as smaller nodules may escape some grabs during ascent and larger nodules around the edge of the sampler may be knocked or fall out during the sampling process. This may introduce some conservatism to the inferred mineral resource estimates.

The key data behind the inferred mineral resource estimate for TOML Area F and the indicated and measured mineral resources are box-corers and measured photographs. Box-corers take longer to collect than free fall grab samplers, but they are believed to have less bias. Photos cover a much greater area than either free fall grabs or box-corers. The weight of individual nodules can be accurately estimated from the length of their long or major axis; a relationship first discovered in the 1970s. Using the box-core samples as calibration devices, TOML was able to measure the size of nodules on several hundred photographs in Areas B and C. Abundance is shown to be related both to nodule coverage in photos and to acoustic response (backscatter) from regional survey. These data thus provide very detailed indications of nodule abundance and continuity.

Many of the records of the sampling procedures used by the pioneer contractors were not available to the Qualified Persons, but it is likely that all of the pioneer contractors followed similar procedures to that used by TOML. Nodule abundance (wet kg/m^2) was derived by dividing the weight of recovered nodules by the surface area covered by the open jaws of the sampler or corer (typically 0.25 to 0.75 m^2). A split of the nodules was dried, crushed and ground to enable grade determination via standard analytical methods (typically atomic absorption spectrometry, X-ray fluorescence or inductively coupled plasma methods), either on the vessel or back on shore. Specific nodule chemical standards were used for instrument calibration. TOML also present the results of field, submitted and laboratory duplicates of nodule samples.

Analysis of the data revealed that, as a consequence of their origin, nodule grades vary only slightly across the CCZ, with spatial continuity of the abundance, Mn, Ni, Co, and Cu grades often ranging from the order of several kilometers up to several tens of kilometers. Nodule abundance is sometimes less continuous than grade, as it is also subject to local changes in net sedimentation (a consequence of seafloor slope, slumping, erosion and local currents).

For more information about the TOML exploration campaigns in 2013 and 2015, see Section 7 of the TOML Technical Report Summary.

Mineral resource estimate

The mineral resource was classified on the basis of the quality and uncertainty of the sample data and sample spacing, in accordance with the definitions of "inferred mineral resource," "indicated mineral resource" and "measured mineral resource" under the SEC Mining Rules.

Estimation of tonnage and grade for the TOML Contract Area within the CCZ was undertaken using only sample data within the TOML Contract Area in the second quarter of 2016. The estimates are based on the historical box-core and free fall-grab nodule sampling (262 samples) supplemented with recently acquired TOML nodule box core (113 samples) and photo-profile data (20,857 frames over 587 line kilometers). Only sample data within the TOML Contract Area was used to inform the estimates.

Six block models were constructed using the geostatistical modelling programs Gstat 1.1-3 and R 3.2.5, one for each TOML Exploration Area (A to F), in three passes. The first pass used a parent block dimension of 1.75 kilometers by 1.75 kilometers and filled the areas defined as measured mineral resource. The second pass for indicated mineral resource used a parent block size of 3.5 kilometers by 3.5 kilometers while the third pass for inferred mineral resource used a parent block size of 7.0 kilometers by 7.0 kilometers.

The modelling methodology used for estimating the mineral resource was determined through careful consideration of the scale of deposit, mechanism of nodule formation, geological controls and nature of the sampling method. The approach involved estimating nodule abundance and grades into a two-dimensional block model with abundance used for calculating tonnage. Abundance and grades were estimated using Ordinary Kriging (OK) with comparison (not reported) estimates using Inverse Distance Weighting (IDW) and nearest neighbor. The modelling methodology is similar to the method applied by the ISA (2010) for its global estimate which was produced by a multi-disciplinary effort that involved recognized subject matter experts.

The historical nodule sample data is considered suitable for the purpose of estimating mineral resources to an inferred level of confidence. The Qualified Person also considered that the combination of the TOML and historical nodule sample data (physical samples and photo based long axis estimates) combined with detailed backscatter, photo profiling and geological interpretation is sufficient to estimate polymetallic nodule indicated mineral resources and, in one small especially data rich area, measured mineral resources.

Inferred mineral resource classification was based on sampling by pioneer contractors on a nominal spacing of 20 kilometers, the variation and uncertainty in the sample quality, and the likely presence of short-range variation to nodule abundance.

Indicated mineral resource classification was based on box core sampling by TOML on a nominal spacing of approximately 7 kilometers by 7 kilometers (including photo profiling in some cases at 7 kilometers by 3 kilometers), supplemented by sampling by pioneer contractors.

Measured mineral resource was based on box core sampling by TOML on a nominal spacing of approximately 7 km by 7 kilometers plus photo-profiling on a nominal spacing of 3.5 kilometers by 3.0 kilometers, supplemented by sampling by pioneer contractors.

The mineral resource estimate for the TOML Contract Area, and at a 4 kilogram/square meters abundance cut-off is set forth below. The estimated mineral resources were determined in 2021, as of December 31, 2020, and also reflect the estimated mineral resources as of December 31, 2023, as none of the mineral resources in these areas were depleted by mining or any other activities.

Mineral Resource Estimate December 31, 2023, In-Situ, for the TOML Contract Area within the CCZ at a 4 kg/m^2 nodule abundance cut-off

Mineral Resource Classification	Tonnes (x10^6 wet t)*	Abundance (wet kg/m^2)	Ni (%)	Cu (%)	Co (%)	Mn (%)
Measured	2.6	11.8	1.33	1.05	0.23	27.6
Indicated	69.6	11.8	1.35	1.18	0.21	30.3
Measured + Indicated	72.2	11.8	1.35	1.18	0.21	30.2
Inferred	696	11.3	1.29	1.14	0.20	29.0

Note: Tonnes are quoted on a wet basis and grades are quoted on a dry basis, which is common practice for bulk commodities. Moisture content was estimated to be 28% w/w. These estimates are presented on an undiluted basis without adjustment for resource recovery.

* Variations in totals are due to rounding of individual values. Mn, Ni, Cu and Co assays on samples dried at 105˚C

The TOML Contract Area has sufficient samples of adequate quality to define a mineral resource for Mn, Ni, Cu and Co. The estimate of abundance and hence tonnage for the inferred mineral resource for the TOML Contract Area may be biased low due to reliance on free fall grab samples in places.

The above mineral resource estimate (measured, indicated and inferred mineral resources), which was informed by data collected by TOML in 2013 and 2015, is presented in Table 11.9 of the TOML Technical Report Summary.

Due to the extremely low variance in the grades and the high metal content of the nodules, a cut-off based on abundance is appropriate for determining the limits of economic exploitation. A cut-off of 4 kg/m^2 abundance was chosen for the TOML Contract Area, based on the estimates of costs and revenues presented in the initial assessment contained in the NORI Technical Report Summary, generalized as follows: 1.7 Mt minimum annual tonnage mined; $0.25 million/square kilometers for offshore operating costs; 1,036 square kilometers collected area processed; $95/dry tonne for transport costs; $119/dry tonne for processing costs; $15/dry tonne for corporate, general and administrative costs; $33/dry tonne for ISA and state royalties; 95% recovery of nickel at an assumed price of nickel metal $16,472/t; 86% recovery of copper at an assumed price of $6,872/t copper metal; 77% recovery of cobalt at an assumed price of $46,333/t cobalt metal; and 99% recovery of manganese at an assumed price of $4.50/dmtu manganese in manganese silicate. The metal prices assumed in the calculation of the cut-off were: nickel metal $16,472/t; copper metal $6,872/t; cobalt metal $46,333/t; manganese in manganese silicate $4.50/dmtu. The price estimates are long term (2034 – 2046) forecasts provided in a report by CRU International Limited (CRU, 2020). The Qualified Person considered that this timeframe is reasonable in view of the likely time required to bring the majority of the TOML mineral resources into production.

The initial inferred mineral resource for the TOML Contract Area was reported on March 20, 2013 by Golder Associates. The changes in the above mineral resource estimate from 2013 for the TOML Contract Area are due to:

- the inclusion of Areas E and F for the first time, and high abundances and grades in Area F;
- additional nodule abundance sample information (from box core and photo profile) collected during the 2015 campaign;
- setting the abundance estimates within the no nodule domain to zero in areas covered by MBES (TOML Areas B, C, D, E, F);
- the use of ordinary kriging (rather than inverse distance weighting) supported by short-range variogram to estimate abundance; and
- changes in block model parent cell size related to improved sample spacing.

Comparison of the 2013 inferred mineral resource estimate and the above estimate shows that the additional data has increased the total mineral resource tonnage by 3%. In the areas with the newest data (the indicated and measured areas), abundance and grades are all higher in the new model than the 2013 model. These changes show that it is reasonable to expect that the majority of inferred mineral resources could be upgraded to indicated or measured resources with further exploration.

Information concerning our mineral properties in the TOML Technical Report Summary and in this Annual Report includes information that has been prepared in accordance with the requirements of the SEC Mining Rules set forth in subpart 1300 of Regulation S-K. Under SEC standards, mineralization, such as mineral resources, may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time of the reserve determination. As used in this Annual Report, the terms "mineral resource," "measured mineral resource," "indicated mineral resource" and "inferred mineral resource" are defined and used in accordance with the SEC Mining Rules set forth in subpart 1300 of Regulation S-K. **You are specifically cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into mineral reserves, as defined by the SEC.**

You are cautioned that mineral resources do not have demonstrated economic value. Inferred mineral resources have a high degree of uncertainty as to their existence as to whether they can be economically or legally mined. Under the SEC Mining Rules, estimates of inferred mineral resources may not form the basis of an economic analysis. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. A significant amount of exploration must be completed in order to determine whether an inferred mineral resource may be upgraded to a higher category. **Therefore, you are cautioned not to assume that all or any part of an inferred mineral resource exists, that it can be economically or legally mined, or that it will ever be upgraded to a higher category. Likewise, you are cautioned not to assume that all or any part of measured or indicated mineral resources will ever be upgraded to mineral reserves.**

Reasonable prospects for economic extraction

The morphological features of the seafloor are similar in the TOML and the NORI Areas, which all lie within the Abyssal Plains and are characterized by sub-parallel basaltic lava ridges called abyssal hills. The Areas are punctuated by typically extinct volcanic knolls and seamounts and scattered sediment drifts in which few nodules are preserved at the seafloor.

The exploration methods used to explore and delineate the mineral resources in the TOML and NORI areas were essentially the same. MBES was used to determine the depth of water (bathymetry) and the acoustic reflectance (backscatter) of the seabed. Nodule coverage was interpreted using the backscatter data. Physical sampling of the nodules was carried out initially using FFG samplers and in more recent years by BC samplers which provide a better- quality sample. Measurements of nodule abundance obtained from physical samples were supplemented with estimates of abundance made using the LAE method and high- resolution photographs of the seafloor.

The sample preparation and assaying procedures used in the TOML and NORI Areas were essentially the same. The pioneer investor data lacks some supporting information but all studies to date indicate that the pioneer investor data is reliable. In both Areas, high standards of quality assurance/quality control were applied to the exploration programs that were carried out by TOML and NORI. The assay data are supported by the results of certified reference materials, duplicate samples, blank samples, and duplicate analyses at a second laboratory. Sample security was of a high standard and the Qualified Persons considered that there was negligible risk of interference with the samples.

The development plan for commercial development of polymetallic nodule deposits in the CCZ were studied as described in the NORI Technical Report Summary. The commonality between the polymetallic nodule deposits in NORI Area D and the TOML Contract Area indicates that the methods proposed for the development of NORI Area D can reasonably be assumed to be equally relevant for future development in the TOML Contract Area.

Collection methods

Recovery and collection methods that could be employed for commercial development of polymetallic nodule deposits in the CCZ were studied as described in the NORI Technical Report Summary. The commonality between the polymetallic nodule deposits in NORI Area D and the TOML Contract Area indicates that the methods proposed for the development of NORI Area D can reasonably be assumed to be equally relevant for future development in the TOML Contract Area. This is discussed further in Section 11.9.4 of the TOML Technical Report Summary, which assessed the collection methods.

The main items of offshore infrastructure are the nodule collector vehicles, the riser, and three production support vessels (PSV).

The nodules are expected to be collected from the seafloor by self-propelled, tracked, collector vehicles. No rock cutting, digging, drill-and-blast, or other breakage will be required at the point of collection. The collectors are expected to be remotely controlled and supplied with electric power via umbilical cables from the PSV. Suction dredge heads on each collector are expected to recover a dilute slurry of nodules, sediment, and water from the seafloor. A hopper on each vehicle is expected to separate sediment and excess water, which is expected to pass out of the hopper overflow, from the nodules, which is expected to be pumped as a higher concentration slurry via flexible hoses to a riser.

The riser is a steel pipe through which nodules are expected to be transferred to the surface by means of an airlift. The riser is expected to consist of three main sections. The lower section is expected to carry the two-phase slurry of nodules and water from the collectors to the airlift injection point. The mid-section is expected to carry a three-phase mixture of slurry and air. This section is expected to also include two auxiliary pipes: one to carry the compressed air for the airlift system, and one to return water from dewatering of the slurry to its subsea discharge point. The upper section of riser is expected to have a larger diameter to account for the expansion of air in the airlift.

The airlift works by lowering the average density of the slurry inside the riser to a level lower than seawater. The difference between the hydrostatic pressure of the seawater at depth and the pressure caused by the weight of the low-density three-phase slurry column inside the riser forces the slurry column to rise. The energy to achieve the lift is expected to be supplied by compressors housed on the PSV, which is expected to be capable of generating very high air pressures.

The PSVs are expected to each support a RALS and its handling equipment, and are expected to house the airlift compressors, collector vehicle control stations, and material handling equipment. All power for offshore equipment, including the nodule collecting vehicles, is expected to be generated on the PSVs. The PSVs are expected to be equipped with controllable thrusters and are expected to be capable of dynamic positioning (DP), which are expected to allow the vessels and risers to track the collectors. Nodules are expected to be discharged from the RALS to the PSVs, where they are expected to be dewatered and temporarily stored or transferred directly to a transport vessel. A preliminary assessment of the transportation fleet for transfer of nodules from the CCZ to an existing deep-water industrial port equipped with bulk offloading facilities was examined. The TOML Technical Report Summary assumed that chartered vessels with 35,000 to 100,000 tonne deadweight capacities would be used to transport the dewatered nodules to the port of Lazaro Cardenas, Michoacan, Mexico, 960 nm from the NORI Area D reference site. The vessels are expected to be converted bulk mineral carriers with dynamic positioning (DP) to allow tracking behind the production support vessels during operations. The method of offloading, known as tandem offloading, is well established for offloading of oil production vessels in remote areas of the world.

Mineral processing and metallurgical testing

The polymetallic nodules in the TOML and NORI Areas have similar morphological, mineralogical, and grade characteristics. As noted in Section 10 of the TOML Technical Report Summary, all published historical work indicates that processing of nodules is technically feasible.

The commonality between the polymetallic nodule deposits in NORI Area D and TOML Contract Area indicates that the methods proposed for the development of NORI Area D can reasonably be assumed to be equally relevant for future development in the TOML Contract Area. This is discussed further in Section 11.9.5 of the TOML Technical Report Summary, which assessed the following mineral processing scenario.

The first part of the pyrometallurgical process is the RKEF process that is widely used in the nickel laterite industry. The second pyrometallurgical step (sulphidization of the alloy produced in the first step to form a matte and then partially conversion in a Peirce-Smith converter to remove iron), while not widely practiced, also has commercial precedent at the Doniambo plant of Societe Le Nickel in New Caledonia.

Sulfuric acid leaching of matte from the pyrometallurgical process has precedent in the platinum group minerals (PGM) industry. Although copper producers typically have a solvent extraction step before electrowinning of their copper, direct copper electrowinning is done in most PGM refineries, where nickel and cobalt are also significant pay-metals. This is to maximize nickel recovery and minimize operating expenses. The nickel and cobalt are expected to be purified using solvent extraction, ion exchange and precipitation, which are all commercially proven hydrometallurgical processes. Battery grade nickel and cobalt sulfate are expected to then be crystallized from the purified solutions.

The pyrometallurgical process is expected to form two byproducts as well as the matte for the hydrometallurgical refinery:

- an electric furnace slag containing silica and 53% MnO that is intended to be sold as feed to the Si-Mn industry; and
- a converter aisle slag that could be used for aggregate in road construction or other applications.

The hydrometallurgical refinery is expected to generate iron residues that would, for a stand-alone plant, require disposal. However, these streams can be recycled back to the pyrometallurgical plant for re-treatment and recovery of entrained pay metals.

Selection of ammonia as a principal reagent in the hydrometallurgical refinery means that an additional by-product — ammonium sulfate — may be generated. This could be sold into the fertilizer industry.

The copper cathode quality from direct electrowinning, without a solvent extraction step, is expected to be ≥99.9% Cu. Quality of the matte produced in the pyrometallurgical plant will have an impact on this, including the potential carryover of impurities beyond values assumed for the purpose of the IA.

The production of battery-grade nickel and cobalt sulfates is targeted instead of nickel or cobalt cathodes or other intermediate products.

In summary:

- All parts of the proposed process have commercial precedents in similar or analogous industries, however not as a whole continuous flowsheet.
- Pay-metals are recovered in the following forms:
  - Copper cathodes with an expected quality of ≥99.9% Cu.
  - Battery-grade nickel sulfate.
  - Battery-grade cobalt sulfate.
  - Rather than generating large waste streams, the process is expected to produce by-products including high manganese content furnace slag and ammonium sulfate.

The process assumptions used in this TOML Technical Report Summary will need to be verified as the project proceeds.

For more information on mineral processing and metallurgical testing, see Section 10 of the TOML Technical Report Summary.

Environmental studies, permitting, community, or social impact

Historically, a significant amount of technical work has been undertaken within the CCZ by contractors under the ISA and a significant body of information has been acquired during the past 40 years on the likely environmental impacts of collecting nodules from the seafloor.

TOML's offshore exploration campaigns have included sampling to support environmental studies, collection of high-resolution imagery and environmental baseline studies. A number of future campaigns are planned to collect data on ocean currents and water quality to assist plume modelling, environmental baseline studies, box core and multicorer sampling focused on benthic ecology and sediment characteristics.

The social impacts of the offshore operation are expected to be positive. The CCZ is uninhabited by people, and there are no landowners associated with the TOML Areas. No significant commercial fishing is carried out in the area. The project is expected to provide a source of revenue to the sponsor country, Tonga, and to the ISA.

The onshore environmental and social impacts have not yet been assessed because the process plant has not been designed in detail, and the location and host country (and hence regulatory regime) not confirmed. The planned metallurgical process is not expected to generate solid waste products.

For more information on environmental studies, permitting and social or community impact, see Section 17 of the TOML Technical Report Summary.

Internal controls and data verification

Data collected by TOML in 2013 and 2015 supports the historical data but also is of sufficient quantity and quality to allow estimation of an indicated mineral resource for five sub areas within TOML Areas B, C, D and F. More detailed data collected by TOML has also allowed estimation of a measured mineral resource for a single sub area within TOML Area B. Chain of custody, sample security, Quality Assurance and Quality Control were documented in detail for the TOML data.

The database provided by the ISA contains multiple independent datasets that were independently collected and sampled using similar methods (FFG or BC sampling) but with slightly different equipment and were assayed by different laboratories. Because the database contains multiple datasets the datasets can be compared with each other for the purpose of validating the internal consistency of the data. Additionally, there are a number of published summaries of data that have not been provided to the ISA but show similar mean grades to the data within the TOML Exploration Area.

The sample data are supported by independent third-party data, have been reviewed by the ISA LTC during the process of granting licenses to the Pioneer Contractors, and are maintained by the independent ISA.

The database includes all data submitted to the ISA that were collected in the Reserved Areas of the CCZ. The data were collected by parties completely independent of TOML or the previous owner of TOML and retained exclusively in the custody of the ISA prior to their transfer. The data sets were also subject to third-party review by the ISA's LTC, as part of the process of granting Pioneer Contractors Exploration Areas.

The original assay sheets from the laboratories for the individual nodule samples within the TOML Contract Area are not available. Neither are the quality control procedures used by the laboratories and the ISA. It is reasonable to infer that the historical data is of sufficient quality for an Inferred Mineral Resource estimate because:

- The ISA is an independent agency with significant accountability under the Law of the Sea. Part of its mandate is the receipt and storage of seafloor sampling data suitable for the estimation of nodule resources and the legally binding award of licenses. It is reasonable to assume that a reasonable level of care was applied by the ISA.

- Comparison of the six independent data sets from the CCZ shows a high level of consistency in abundance and grade and, conversely, provides no evidence of bias or systematic error in the TOML data.

- Recent TOML nodule sampling confirms the existence, and abundance and grade continuity of the polymetallic nodules within the TOML Exploration Areas.

The Qualified Person considered that the combination of the TOML historical nodule sample data (physical samples and photo based long axis estimates) combined with detailed backscatter, photo profiling and geological interpretation is sufficient to estimate polymetallic nodule indicated mineral resources and, in one small especially data rich area, measured mineral resources.

The primary characteristic of the polymetallic nodule deposit that separates this deposit from typical terrestrial manganese, nickel and copper deposits is that the nodules themselves can be accurately mapped through photo-profiles and backscatter acoustic response. The bulk of the polymetallic nodules sit on top of the seabed allowing them to be photographed. However, in some areas such as TOML Area D some nodules are partially covered by sediment making it more difficult to detect the presence and abundance of the nodules. The most accurate method for determining nodule abundance is through physical sampling by box-core or free fall-grab sampling. However, these methods are costly and result in wide sample spacing. Due to the fact that nodules are visible, photography can be used in many areas to estimate nodule abundance directly. The two methods for doing this are estimating the nodule percent coverage (percent of exposed nodule surface area within the photo) and measuring each individual nodule long-axis and then using these measurements to calculate abundance using variants of the formula defined by Felix (1980). The long-axis estimation (LAE) method is the most accurate and preferred method but comes at a cost in the time to manually process each photo — limiting the number of photos that can be used for estimating abundance. The benefit of using photographs is being able to demonstrate continuity between physical sample location and accurately quantify nodule abundance. TOML is developing an automated method of doing these measurements for future application.

The Qualified Person considered the abundance estimates derived from photographs to date from TOML Areas B and C, to be suitable for estimating nodule abundance for the mineral resource.

For more information about quality control/quality assurance and data verification, see Section 8 and Section 9 of the TOML Technical Report Summary.

Item 3. LEGAL PROCEEDINGS

Except as set forth below, we are not currently a party to any material legal proceedings.

On September 20, 2021, we commenced litigation in the New York Supreme Court, New York County against two investors who failed to fund their investment commitments in connection with the closing of the Business Combination. These actions are captioned Sustainable Opportunities Acquisition Corp. n/k/a TMC the metals company Inc. v. Ethos Fund I, LP, Ethos GP, LLC, Ethos DeepGreen PIPE, LLC, and Ethos Manager, LLC, Index No. 655527/2021 (N.Y. Sup. Ct.) and Sustainable Opportunities Acquisition Corp. n/k/a TMC the metals company Inc. v. Ramas Capital Management, LLC, Ramas Energy Opportunities I, LP, Ramas Energy Opportunities I GP, LLC, and Ganesh Betanabhatla, Index No. 655528/2021 (N.Y. Sup. Ct.). The operative complaints allege that the investors breached the relevant subscription agreement and that the investors' affiliates tortiously interfered with the subscription agreements by causing the investor not to fund its contractual obligations. We are seeking compensatory damages (plus interest), equitable relief, expenses, costs, and attorneys' fees. On December 17, 2021, the defendants at Ethos moved to dismiss the complaint which was unsuccessful. The matter is proceeding into the discovery phase. There can be no assurances, however, that we will be successful in our efforts against these investors.

On October 28, 2021, a shareholder filed a putative class action against us, one of our executive and former director in federal district court for the Eastern District of New York, captioned Caper v. TMC The Metals Company Inc. F/K/A Sustainable Opportunities Acquisition Corp., Gerard Barron and Scott Leonard. The complaint alleges that all defendants violated Section 10(b) of the Exchange Act of 1934 and Rule 10b-5 promulgated thereunder, and Messrs. Barron and Leonard violated Section 20(a) of the Exchange Act, by making false and/or misleading statements and/or failing to disclose information about our operations and prospects during the period from March 4, 2021 and October 5, 2021. On November 15, 2021, a second complaint containing substantially the same allegations was filed, captioned Tran v. TMC the Metals Company, Inc. These cases have been consolidated. On March 6, 2022, a lead plaintiff was selected. An amended complaint was filed on May 12, 2022, reflecting substantially similar allegations, with the Plaintiff seeking to recover compensable damages caused by the alleged wrongdoings. We deny any allegations of wrongdoing and filed and served the plaintiff a motion to dismiss on July 12, 2022 and intend to defend against this lawsuit. On July 12, 2023, an oral hearing on the motion to dismiss was held. The parties are currently awaiting a ruling. There is no assurance, however, that we or the other defendants will be successful in our defense of this lawsuit or that insurance will be available or adequate to fund any settlement or judgment or the litigation costs of this action. If the motion to dismiss is unsuccessful, there is a possibility that we may incur a loss in this matter. Such losses or range of possible losses either cannot be reliably estimated. A resolution of this lawsuit adverse to us or the other defendants, however, could have a material effect on our financial position and results of operations in the period in which the lawsuit is resolved.

In February 2022, we received letters from the SEC notifying us of an investigation and requesting the voluntary production of documents and information regarding our 2020 acquisition of Tonga Offshore Mining Limited from Deep Sea Mining Finance Ltd. and our Business Combination with SOAC. The Company is continuing to cooperate with the investigation and respond voluntarily to the SEC's requests.

On January 23, 2023, investors in the 2021 private placement from the Business Combination filed a lawsuit against us in the Commercial Division of New York Supreme Court, New York County, captioned Atalaya Special Purpose Investment Fund II LP et al. v. Sustainable Opportunities Acquisition Corp. n/k/a TMC The Metals Company Inc., Index No. 650449/2023 (N.Y. Sup. Ct.). We filed a motion to dismiss on March 31, 2023, after which the plaintiffs filed an amended complaint on June 5, 2023. The amended complaint alleges that we breached the representations and warranties in the plaintiffs' private placement Subscription Agreements and breached the covenant of good faith and fair dealing. The Plaintiffs are seeking to recover compensable damages caused by the alleged wrongdoings. We deny any allegations of wrongdoing and filed a motion to dismiss the amended complaint on July 28, 2023. On December 7, 2023, the Court granted our motion to dismiss the claim for breach of the covenant of good faith and fair dealing and denied our motion to dismiss the breach of the Subscription Agreement claim. We filed a notice of appeal regarding the Court's denial of our motion to dismiss the breach of the Subscription Agreement claim. There is no assurance that we will be successful in our defense of this lawsuit or that insurance will be available or adequate to fund any settlement or judgment or the litigation costs of this action. Such losses or range of possible losses cannot be reliably estimated.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our Common Shares and Public Warrants trade on The Nasdaq Global Select Market under the symbols "TMC" and "TMCWW," respectively.

Shareholders and Holders of Public Warrants

As of March 22, 2024, there were approximately 318,249,878 Common Shares issued and outstanding held of record by 106 holders, approximately 15,000,000 Public Warrants held of record by one holder exercisable for one Common Share at a price of $11.50 per share.

Such numbers do not include beneficial owners holding our securities through nominee names.

Unregistered Sales of Securities

None

Issuer Purchases of Equity Securities

We did not repurchase any of our equity securities during the quarter ended December 31, 2023.

Item 6. [RESERVED]

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of the financial condition and results of our operations should be read in conjunction with the financial statements and the notes to those statements appearing elsewhere in this Annual Report. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should read the risk factors set forth in Item 1A of this Annual Report for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a deep-sea minerals exploration company focused on the collection, processing and refining of polymetallic nodules found on the seafloor in international waters of the CCZ, about 1,500 miles south-west of San Diego, California.

The CCZ is a geological submarine fracture zone of abyssal plains and other formations in the Eastern Pacific Ocean, with a length of around 7,240 kilometers (4,500 miles) that spans approximately 4,500,000 square kilometers (1,700,000 square miles). Polymetallic nodules are discrete rocks that sit unattached to the seafloor, occur in significant quantities in the CCZ and have high concentrations of nickel, manganese, cobalt and copper in a single rock. These four metals contained in the polymetallic nodules are critical for the transition to low carbon energy. Our resource definition work to date shows that nodules in our contract areas represent the world's largest estimated undeveloped source of critical battery metals. If we are able to collect polymetallic nodules from the seafloor on a commercial scale, we plan to use such nodules to produce three types of metal products: (i) feedstock for battery cathode precursors (nickel, and cobalt sulfates, or intermediate nickel-copper-cobalt matte or nickel-copper-cobalt alloy) for EV and renewable energy storage markets, (ii) copper cathode for EV wiring, energy transmission and other applications and (iii) manganese silicate for manganese alloy production required for steel production. Our mission is to build a carefully managed shared stock of metal (a "metal commons") that can be used, recovered and reused for generations to come. Significant quantities of newly mined metal are required because existing metal stocks are insufficient to meet rapidly rising demand.

Exploration and exploitation of seafloor minerals in international waters is regulated by the ISA, an intergovernmental organization established pursuant to the 1994 Agreement Relating to the Implementation of the UNCLOS. The ISA grants contracts to sovereign states or to private contractors who are sponsored by a sovereign state. The ISA requires that a contractor must obtain and maintain sponsorship by a host nation that is a member of the ISA and signatory to UNCLOS, and such nation must maintain effective supervision and regulatory control over such sponsored contractor. The ISA has issued a total of 19 polymetallic nodule exploration contracts covering approximately 1.28 million square kilometers, or 0.4% of the global seafloor, 17 of which are in the CCZ. We hold exclusive exploration and commercial rights to three of the 17 polymetallic nodule contract areas in the CCZ; two based on ISA exploration contracts through our subsidiaries NORI and TOML, sponsored by Nauru and Tonga, respectively, and exclusive commercial rights through our subsidiary, DGE, and its arrangement with Marawa, a company owned and sponsored by Kiribati.

We have key strategic alliances with (i) Allseas, a leading global offshore contractor, which developed and tested a pilot collection system, which is expected to be modified into an initial smaller scale commercial production system and serve as the basis for the design of a full-scale commercial production system and (ii) Glencore which holds offtake rights to 50% of the NORI nickel and copper production. In addition, we have worked with an engineering firm Hatch and consultants KPM to develop a near-zero solid waste flowsheet. The primary processing stages of the flowsheet from nodule to NiCuCo matte intermediate were demonstrated as part of our pilot plant program at FLSmidth and XPS' facilities. The matte refining stages are being tested at SGS Lakefield. The near-zero solid waste flowsheet provides a design that is expected to serve as the basis for our onshore processing facilities. After several months of pre-feasibility work in 2022 on the possibility of building a processing facility in India for Project Zero, we decided to adopt a capital-light approach and focus on sourcing an existing processing facility requiring lower capital expenditures and which we believe may offer a lower risk solution to get Project Zero into production. In November 2022, we entered into a non-binding MoU with Pacific Metals Co Ltd (PAMCO) of Japan. In November 2023, we entered into a binding MoU with PAMCO whereby they must complete a feasibility study (expected to be completed during the third quarter of 2024) to toll treat 1.3 million tonnes of wet polymetallic nodules per year at its Hachinohe, Japan smelting facility expected to start in the second quarter of 2026, if we timely obtain an exploitation contract from the ISA. The toll treatment is intended to take place on a dedicated RKEF processing line and produce two products: nickel-copper-cobalt alloy, an intermediate product used as feedstock to produce Li-ion battery cathodes, and a manganese silicate product used to make silico-manganese alloy, a critical input into steel manufacturing. We expect this partnership to progress to a strategic alliance before the end of 2024, subject to successful evaluation study outcomes and agreement to mutually acceptable commercial terms. There can be no assurance that we will enter into such definitive strategic alliance in a particular time period, or at all, or on terms similar to those set forth in the binding MoU, or that if such definitive strategic alliance is entered into by us or that the existing facility will be able to successfully process nodules in a particular time period, or at all.

We are currently focused on preparing to submit our application to the ISA for our first exploitation for the NORI Area D contract area following the July 2024 meeting of the ISA.

We now expect to commence production offshore at the end of the first quarter of 2026, assuming an ISA review process of approximately one year on our application for an exploitation contract. This new estimated timeline to first production is based on:

- Refined assumptions following discussions with our strategic partner Allseas with respect to planned upgrades to the *Hidden Gem* (including an additional nodule collector vehicle and associated equipment) to increase maximum production capacity from 1.3mtpa to 3.0mtpa of wet nodules, to align with production ramp-up strategy based on precautionary principles. Upgrades to the *Hidden Gem's* capacity prior to mobilization to the CCZ and start of production can avoid a situation in which the expected ramp-up might otherwise lead to temporary production shutdowns.

- The latest ISA draft text of the rules, regulations and procedures ("RRPs" or the "Mining Code") issued on February 16, 2024, describe an estimated review process on an application for an exploitation contract of 344 days, compared to previous versions which described a review process of 315 days.

To reach our objective and initiate commercial production, we are: (i) defining our resource and project economics, (ii) developing a commercial offshore nodule collection system, (iii) assessing the environmental and social impacts of offshore nodule collection, and (iv) developing onshore technology to process collected polymetallic nodules into a manganese silicate product, and an intermediate nickel-copper-cobalt alloy or matte product and/or end-products like nickel and cobalt sulfates, and copper cathode.

We are still in the exploration phase and have not yet declared mineral reserves. In addition, we do not have the applicable environmental and other permits required to build and/or operate commercial scale polymetallic nodule processing and refining plants on land.

2023 Highlights

Below are a few of the developments that occurred in 2023.

NORI Area D Project Advancements

Update on Application Timeline and Costs, Increased Production Capacity

In August 2023, we provided a corporate update on our expected project development timeline, production capacity and application costs for our NORI Area D Nodule Project following the recent ISA Council decisions on a roadmap to deliver final rules, regulations and procedures, also known as the Mining Code. Our wholly-owned subsidiary NORI intends to submit an application to the ISA for an exploitation contract for NORI Area D following the July 2024 meeting of the ISA. Assuming an approximate one-year review process, NORI expected to be in commercial production at the end of 2025 (now estimated for the end of the first quarter of 2026) if the application is approved. NORI and strategic partner Allseas plan for an increased production capacity for the Project Zero Offshore Nodule Collection System, using the *Hidden Gem* vessel, from an estimated 1.3 million wet tonnes to up to an estimated 3.0 million wet tonnes per annum, a potential increase of 130%.

Extensive Deep-sea Environmental Data Submission to the ISA

In March 2023, we announced that NORI had begun the process of submitting data collected during 17 offshore resource definition and environmental baseline campaigns in NORI Area D to the DeepData platform, an open database of contractor data managed by the ISA. Collected using a suite of high-tech equipment, the dataset submitted to the ISA includes over 1,400 biological samples from extensive boxcore and multicore sampling, and over 8,000 images analysed for benthic megafauna captured by remotely operated vehicles from two offshore campaigns. This first submission of benthic data, which includes over 270,000 occurrences, will provide a significant expansion to the biological holdings contained within the DeepData platform.

Publication of NORI Area D data to Ocean Biodiversity Information System

In July 2023, we announced that data from two offshore environmental research campaigns conducted by NORI had been published by the ISA to the Ocean Biodiversity Information System (OBIS), the world's largest scientific knowledge base on the diversity, distribution and abundance of marine organisms. NORI is now the single largest contributor of biological occurrence data to the OBIS ISA-node, providing approximately 60% of all records. With much more data to be submitted, we expect NORI Area D will be one of the most highly characterized deep-sea areas in the region that hosts approximately 90% of all nodule exploration.

Benchmark LCA of NORI Area D Project

In March 2023, we announced that leading lithium-ion battery supply chain research firm, Benchmark Mineral Intelligence ("Benchmark"), had completed an independent third-party lifecycle assessment ("LCA") of the environmental impacts of our NORI Area D project, comparing the production of key energy transition metals (nickel, cobalt and copper) from the NORI Area D project to key land-based production routes for the same metals. Benchmark's LCA shows the NORI Area D project model performed better in almost every impact category analysed than all the land-based routes chosen by Benchmark for comparison.

Forest ecosystems play a critical role in the carbon cycle, yet mining's impacts on their carbon sequestration services often goes unaccounted for in studies. In 2023, we commissioned Benchmark to address some of these gaps in information in a follow-up study by looking at mining in the top nickel and cobalt producing regions of Sulawesi, Indonesia and Katanga, DRC. When accounting for forest removal, the lifecycle global warming potential (GWP) per kilogram of nickel mined in Indonesia; Benchmark's earlier LCA would increase by between 7-49% per kilogram of Indonesian nickel (depending on production routes) and by 35% per kilogram of cobalt mined in DRC.

Publication of 2022 Impact Report

In October 2023, we published our second annual Impact Report which provides an update on key milestones achieved in our assessment of the environmental and social impacts of seafloor nodule collection and those impacts relative to land-based alternatives, and the efforts we are undertaking to eliminate or reduce such impacts. As part of the Impact Report, we also introduced our Sustainability Approach highlighting our thought processes about how we intend to fully align our activities to environmental, social and governance (ESG) principles.

NORI Area D Testing and Monitoring

NORI Shares Preliminary Findings on Environmental Impacts of Test Mining Campaign

In November 2023, our subsidiary NORI began sharing emerging data on the impacts of seafloor sediment plumes which show that the plume forms a gravity-driven turbidity current that hugs the contours of the seafloor and does not loft up into the water column where it could possibly be transported longer distances by ocean currents. A key component to understanding our environmental impacts, the data builds upon earlier laboratory predictions and in-field verifications from prior collector tests.

Conclusion of Key Offshore Research Campaign

In December 2023, we announced the conclusion of our latest offshore scientific research campaign to assess seafloor impacts and recovery rates twelve months after the pilot nodule collection system test conducted by our NORI subsidiary. NORI's latest offshore scientific research campaign successfully gathered crucial environmental data on ecosystem recovery and functioning to further support our application for a commercial exploitation contract. The preliminary qualitative assessments are encouraging, and we look forward to sharing the data and results in 2024.

Next Phase of Adaptive Management System Development Announced

Following the delivery of a prototype Digital Twin from Kongsberg Digital in 2022 and its deployment during the collector tests in 2022, we announced in September 2023 that we had entered into the next phase of our relationship with Kongsberg Digital to further develop the Digital Twin which will integrate multiple data streams from our future production system and is designed to enable 3D visualization of our deep-sea operating environment, providing 'eyes and ears' to the regulator and stakeholders. The Digital Twin is a core component of our broader Adaptive Management System (AMS) which is designed to utilise AI and hybrid machine learning capabilities of the Digital Twin with expert analysis to ensure operations remain within environmental impact thresholds, a system with potential applications for resource operations at sea and on land.

New Partnerships

MoUs with PAMCO to Evaluate Nodule Processing at Existing Facility

In March 2023, we announced that we had entered into a non-binding MoU with PAMCO of Japan, to evaluate the toll treatment and conversion of polymetallic nodules into battery metal feedstock at PAMCO's Hachinohe, Japan smelting facility.

This announcement was followed with the signing of a binding MoU with PAMCO in November 2023 for a feasibility study to process 1.3 million tonnes of wet polymetallic nodules per year at their existing smelting facility in Hachinohe, Japan. The agreement underscores our stated capital-light strategy to get into initial commercial production swiftly and with lower upfront capital by re-using existing onshore production assets.

Engagement with Bechtel Australia Pty Ltd. to Support NORI's Commercial Contract Application

In March 2023, we announced that our wholly-owned subsidiary DeepGreen Engineering Pty. Ltd. had entered into an agreement with Bechtel Australia Pty Ltd. ("Bechtel"), a global leader in engineering, procurement and construction, to collect and compile the techno-economic studies prepared by various consultants required for NORI to lodge its application for an exploitation contract for its NORI Area D project with the ISA.

Investment in Low Carbon Royalties

In February 2023, we and our wholly-owned subsidiary, NORI, entered into a strategic partnership with Low Carbon Royalties Inc. ("LCR"), a private corporation formed under the laws of British Columbia, Canada to finance low carbon emitting energy production and technologies (natural gas, nuclear, renewables), transition metals and minerals required for energy storage and electrification (Cu, Li, Ni, Co, Mn), and the evolving environmental markets (the "Partnership"). We agreed with LCR to a purchase and sale agreement whereby LCR acquired a 2.0% gross overriding royalty on our NORI project area in the CCZ of the Pacific Ocean ("NORI Royalty"). In consideration for the NORI Royalty, we received $5,000,000 cash and an initial 35.0% equity interest in LCR. We retain the right to repurchase up to 75% of the NORI royalty at a capped return. If both repurchase transactions are executed, the NORI Royalty will be reduced to 0.5%.

Developments with our Allseas Partnership

In the fourth quarter of 2022, we successfully tested the pilot nodule collection system in NORI Area D. As a result of lifting to the production vessel, Hidden Gem, of more than 3,000 tonnes of wet nodules during these tests, Allseas and NORI believe that they can upgrade the pilot nodule collection system, including the Hidden Gem, into the first production system, which we refer to as the Project Zero Offshore Nodule Collection System.

In August 2023, we announced that Allseas and NORI are now executing on a plan designed to increase the maximum production capacity of the Project Zero Offshore Nodule Collection System from the previous estimate of 1.3 million wet tonnes per annum to up to an estimated 3.0 million wet tonnes per annum in stepped increments based on Allseas' estimates – a potential increase of 130%. The upgrades are expected to include the addition of a second 15-meter collector vehicle, the use of a wider diameter riser pipe from the seafloor to the surface, implementation of a larger compressor spread and improvements to the system designed to further mitigate its environmental impacts. Capacity is expected to be increased over time as production and experience milestones are met, which we believe will help manage operational risk, minimize up-front capital expenditure requirements and allow for staged increases in capacity as environmental review thresholds are met. Most of these capacity improvements are expected to occur after NORI's application for an exploitation contract over NORI Area D is ready for submission to the ISA.

In furtherance of our non-binding term sheet entered into in March 2022 with Allseas, we continue our discussions with Allseas regarding these upgrades and the development of the Project Zero Offshore Nodule Collection System and anticipate reaching a definitive agreement with Allseas before the end of 2024. The definitive agreement is expected to include further detail on pre-production system development and post-production costs. There can be no assurances, however, that we will enter into a definitive agreement(s) with Allseas in a particular time period, or at all, or on terms similar to those currently expected, or that if such definitive agreement(s) is entered into that the Project Zero Offshore Nodule Collection System will be successfully developed or operated.

In addition, on August 1, 2023, we entered into an Exclusive Vessel Use Agreement with Allseas pursuant to which Allseas will give exclusive use of the *Hidden Gem* to us in support of the development of the Project Zero Offshore Nodule Collection System until the system is completed or December 31, 2026, whichever is earlier. In consideration of the exclusivity term, we will issue 4.15 million Common Shares to Allseas. We expect that the definitive agreement with Allseas discussed above will extend the exclusive use of the *Hidden Gem*.

Financing

Registered Direct Offering

On August 14, 2023, we entered into a securities purchase agreement with certain investors, pursuant to which we agreed to sell and issue, in a registered direct offering (the "Registered Direct Offering") 12,461,540 Common Shares and issue Class A Warrants to purchase 6,230,770 Common Shares for expected gross proceeds to us of $24.9 million and expected net proceeds to us of $23.6 million, after deducting underwriting discounts and commissions and other offering expenses payable by us. The Common Share and the accompanying Class A Warrant to purchase 0.5 of a Common Share were sold at a price of $2.00 per unit. The exercise price of the Class A Warrants is $3.00, subject to adjustment as provided in the warrant agreement. The Registered Direct Offering initially closed in August 2023, with the final receipt of gross proceeds received in January 2024.

Extension of Credit Facility with Allseas Affiliate

On July 31, 2023, the Company entered into the Amendment to the Unsecured Credit Facility with Argentum Credit Virtuti GCV (the "Lender"), the parent of Allseas Investments S.A. and an affiliate of Allseas, to extend the credit facility to November 30, 2024. The Credit Facility was then further amended in March 2024 as described below.

Developments Subsequent to December 31, 2023

Amendment to Credit Facility with Allseas Affiliate

On March 22, 2024, we entered into the Second Amendment to the Unsecured Credit Facility with the Lender, an affiliate of Allseas, to further extend the Credit Facility to August 31, 2025 and to provide that the underutilization fee thereunder shall cease to be payable after the date on which we or the Lender gives notice of termination of the agreement (as amended by this amendment and the July 2023 amendment, the "Credit Facility"). Under the Credit Facility, we may borrow from the Lender up to $25,000,000 in the aggregate through August 31, 2025.

Credit Facility with* ERAS *Capital LLC and Gerard Barron

On March 22, 2024, we entered into an Unsecured Credit Facility (the "2024 Credit Facility") with Gerard Barron, our Chief Executive Officer and Chairman, and ERAS Capital LLC, the family fund of our director, Andrei Karkar (collectively, the "2024 Lenders"), pursuant to which, we may borrow from the 2024 Lenders up to $20,000,000 in the aggregate ($10,000,000 from each of the 2024 Lenders), from time to time, subject to certain conditions. All amounts drawn under the 2024 Credit Facility will bear interest at the 6-month Secured Overnight Funding Rate (SOFR), 180-day average plus 4.0% per annum payable in cash semi-annually (or plus 5% if paid-in-kind at maturity, at our election) on the first business day of each of June and January. We will pay an underutilization fee equal to 4.0% per annum payable semi-annually for any amounts that remain undrawn under the 2024 Credit Facility. We have the right to pre-pay the entire amount outstanding under the 2024 Credit Facility at any time, before the 2024 Credit Facility's maturity of September 22, 2025. The 2024 Credit Facility also contains customary events of default. The 2024 Credit Facility will terminate automatically if we or any of our subsidiaries raise at least USD $50,000,000 in the aggregate (i) through the issuance of any of our or our subsidiaries' debt or equity securities, or (ii) in prepayments under an off-take agreement or similar commercial agreement.

Exploration Contracts

We currently hold exclusive exploration rights to certain polymetallic nodule areas in the CCZ through our subsidiaries NORI and TOML, sponsored by the Republic of Nauru and the Kingdom of Tonga, respectively, and exclusive commercial rights through our subsidiary's (DGE), arrangement with Marawa, a company owned and sponsored by the Republic of Kiribati.

NORI. NORI our wholly-owned subsidiary, holds exploration rights to four blocks (NORI Area A, B, C, and D, the "NORI Contract Area") covering 74,830 square kilometers in the CCZ that were granted by the ISA in July 2011. NORI is sponsored by Nauru pursuant to a certificate of sponsorship signed by the Government of Nauru on April 11, 2011. The D block of the NORI area ("NORI Area D") is the seafloor parcel where we have performed the most resource definition and environmental work to date. NORI commissioned AMC Consulting Ltd, a leading mining consulting firm (AMC), to undertake a preliminary economic assessment ("PEA") of the mineral resource contained in NORI Area D and to compile a technical report compliant with Canadian National Instrument (NI 43-101), which was completed in March 2021. AMC subsequently compiled the NORI Technical Report Summary, dated March 2021, which included an initial assessment and an economic analysis of NORI Area D prepared in accordance with the SEC's Modernization of Property Disclosures for Mining Registrants set forth in subpart 1300 of Regulation S-K (the "SEC Mining Rules"). The NORI Technical Report Summary is filed as Exhibit 96.1 to this Annual Report.

TOML. TOML our wholly-owned subsidiary which we acquired in March 2020, holds exploration rights to an area covering 74,713 square kilometers in the CCZ that were granted by the ISA in January 2012 (the "TOML Contract Area"). On March 8, 2008, Tonga and TOML entered into a sponsorship agreement formalizing certain obligations of the parties in relation to TOML's exploration application to the ISA (subsequently granted) for the TOML Contract Area. The sponsorship agreement was updated on September 23, 2021. TOML commissioned a Technical Report Summary by AMC, dated March 2021, which is filed as Exhibit 96.2 to this Annual Report.

Marawa. DGE, our wholly-owned subsidiary, entered into agreements with Marawa and Kiribati which provide DGE with exclusive exploration rights to an area covering 74,990 square kilometers in the CCZ (the "Marawa Contract Area"). The exploration contract between Marawa and the ISA (the "Marawa Exploration Contract") was signed on January 19, 2015. To date, limited offshore marine resource definition activities in the Marawa Contract Area have occurred. We are collaborating with Marawa to assess the viability of any potential project in the Marawa Contract Area, although the timing of such assessment is uncertain. Marawa has delayed certain of its efforts in the Marawa Contract Area while it determines how it will move forward with additional assessment work.

Key Trends, Opportunities and Uncertainties

We are currently a pre-revenue company and we do not anticipate earning revenues until at least 2026 and only if NORI receives an exploitation contract from the ISA and we are able to successfully collect and process polymetallic nodules into saleable products on a commercial scale. We believe that our performance and future success pose risks and challenges, including those related to: finalization of ISA regulations to allow for commercial exploitation, approval of an application for the ISA exploitation contract, development of environmental regulations associated with our business and development of our technologies to collect and process polymetallic nodules. These risks, as well as other risks, are discussed in Item 7A entitled "*Quantitative and Qualitative Disclosures About Market Risk*" and Item 1A entitled "*Risk Factors*" included in this Annual Report.

Impact of Climate Change

We are committed to adopting the Task Force on Climate-Related Financial Disclosures recommendations. In our inaugural Impact Report published in May 2022, we provided climate-related disclosure and shared how we believe our mission is aligned with supporting the global energy transition and contributing to a circular metals economy. We recognize that climate change may have a meaningful impact on our financial performance over time, and we have begun the process of consolidating key risks and corresponding action plans to mitigate their negative impact of climate change on our operations.

Our climate related transition risks and opportunities are likely to be driven by changes in regulation, public policy, and technology as well as risk of business disruptions due to climate related events.

Regulatory risks

Regulations related to emissions limits, such as cap and trade schemes and carbon taxes, would likely increase our future cost of operations, energy purchase, and equipment selection in addition to costs associated with potential carbon tax and/or purchase of carbon offsets. It is difficult to estimate the impact of potential future regulations on future operations.

We are working on a plan for continuous reduction of emissions and aiming to develop operations with near zero emissions. When selecting the location of our onshore plant, one of our requirements is access to renewable energy as our metallurgical process will be the most energy intensive step in our operations. In addition, we are seeking to replace metallurgical coal used as reductant during calcining of nodules and have tested potential renewable alternatives. We are also identifying the best approach for decarbonizing our offshore operations. To date, we have not experienced any material impact to our business related to potential regulations but will continue to evaluate and monitor future developments.

Public policy risks

Awareness of climate change related impacts and commitments made by companies and governments to achieve net zero emissions, continues to grow. We support the ambition of the U.S. to achieve net zero greenhouse gas emissions by no later than 2050 and to reach half of all new vehicles sales to be EVs by 2030. We are committed to achieving zero emissions and are reviewing and designing technologies to achieve this goal. The location of our onshore plant will be key, and we will be working on science-based targets and scenario analysis.

To support the EV and battery storage value chain, we are seeking to close the emerging supply gap of critical battery metals needed for the transition to renewable energy and adoption of EVs. We plan to take advantage of this opportunity to supply lower carbon battery metals, avoid deforestation, and help reduce the cost of batteries.

Technology risks

The timing and deployment of technologies to support the transition to a lower carbon economy can be uncertain. Investments in assets with long lifespans require the selection of not only the proper technology, but also the proper timing to retain the ability to adapt to future developments. There are also risks associated with the additional costs of lower emissions technology and transition to renewables. To mitigate this risk, we based our flowsheet development on existing proven technology, while retaining sufficient flexibility to be able to retrofit processes with new lower carbon technology as they become available.

Physical risks

Our main activity currently consists of offshore exploration campaigns for research and testing purposes, and technology development at partner facilities. However, once a location is selected for our onshore metallurgical plant, we will assess the risks associated with hurricanes, floods, and extreme weather.

Impact of Global Inflation

The global inflation rate rose sharply in 2021 and 2022, and though inflation softened in 2023, marine fuel prices and vessel day rates remained high and have increased our exploration expenses beyond what was originally expected. Additionally, we are experiencing higher offshore labor costs through our contractors.

As a pre-revenue company, persistent inflation may affect our ultimate cash requirements prior to our ability to begin commercial production.

Basis of Presentation

We currently conduct our business through one operating segment. As a pre-revenue company with no commercial operations, our activities to date have been limited. Our results are reported under Generally Accepted Accounting Principles in the United States ("U.S. GAAP") and in U.S. dollars.

Components of Results of Operations

We are an exploration-stage company with no revenue to date and a net loss of $73.8 million for the year ended December 31, 2023, compared to a net loss of $171 million in the prior year. We have an accumulated deficit of approximately $548.9 million from inception through December 31, 2023.

Our historical results may not be indicative of our future results for reasons that may be difficult to anticipate. Accordingly, the drivers of our future financial results, as well as the components of such results, may not be comparable to our historical or projected results of operations.

Revenue

To date, we have not generated any revenue. We do not expect to generate revenue until at least 2026 and only if NORI receives an exploitation contract from the ISA and we are able to successfully collect and process polymetallic nodules into saleable products on a commercial scale. Any revenue from initial production is difficult to predict.

Exploration and Evaluation Expenses

We expense all costs relating to exploration and development of mineral claims. Such exploration and development costs include, but are not limited to, ISA contract management, geological, geochemical and geophysical studies, environmental baseline studies, process development and payments to Allseas for the PMTS. Our exploration expenses are impacted by the amount of exploration work conducted during each period. The acquisition cost of ISA polymetallic nodule exploration contracts will be charged to operations as amortization expense on a unit-of-production method based on proven and probable reserves should commercial production commence in the future.

General and Administrative Expenses

General and administrative ("G&A") expenses consist primarily of compensation for employees, consultants and directors, including wages and salaries, share-based compensation, consulting fees, investor relations expenses, expenses related to advertising and marketing functions, insurance costs, office and sundry expenses, professional fees (including legal, audit and tax fees), travel expenses and transfer and filing fees.

Share-based compensation costs from the issuance of stock options and restricted share units ("RSUs") is measured at the grant date based on the fair value of the award and is recognized over the related service period. Share-based compensation costs are charged to exploration expenses and general and administrative expenses depending on the function fulfilled by the holder of the award. In instances where an award is issued for financing related services, the costs are included within equity as part of the financing costs. We recognize forfeiture of any awards as they occur.

Interest Income/Expense

Interest income consists primarily of interest income earned on our cash and cash equivalents.

Foreign Exchange Loss

The foreign exchange income or loss for the periods primarily relates to our cash held in Canadian dollars and to the settlement of costs incurred in foreign currencies, depending on either the strengthening or weakening of the U.S. dollar.

Change in Fair Value of Warrants Liability

The change in fair value of warrants liabilities primarily consists of the change in the fair value of the 9,500,000 warrants issued to Sustainable Opportunities Holdings LLC concurrently with SOAC's initial public offering (the "Private Warrants"). For accounting purposes, the Company was considered to have issued the Private Warrants as part of the Business Combination, and we are required to re-measure the fair value of our Private Warrants at the end of each reporting period.

Results of Operations

Comparison of the periods ended December 31, 2023 and 2022

(Dollar amounts in thousands, except as noted)	For the Three Months Ended December 31,			For the Year Ended December 31,		
	2023	2022	% Change	2023	2022	% Change
Exploration and evaluation expenses	$ 26,677	$ 104,259	(74)%	$ 49,849	$ 144,599	(66)%
General and administrative expenses	6,582	7,016	(6)%	22,540	29,518	(24)%
Equity-accounted investment loss	96	—	N/A	571	—	N/A
Change in fair value of warrants liability	(228)	(1,251)	82 %	986	(2,143)	146 %
Foreign exchange loss	244	35	597 %	310	24	1,192 %
Interest income	(205)	(567)	(64)%	(1,297)	(1,111)	17 %
Fees and interest on credit facility	252	—	N/A	781	—	N/A
Tax expense	41	77	(47)%	41	77	(47)%
Loss for the period, after tax	$ 33,459	$ 109,569	(69)%	$ 73,781	$ 170,964	(57)%

Full Year 2023 compared to Full Year 2022

Exploration and Evaluation Expenses

Exploration and evaluation expenses for the year ended December 31, 2023 were $49.8 million, compared to $144.6 million for the same period in 2022. The decrease of $94.8 million was primarily due to the recognition of cost representing the fair value of Allseas Warrant of $69.9 million, a reduction of $21.6 million on environmental studies as the collector test was completed in 2022 partially offset by the monitoring work on the NORI Area D collector test which was carried out in the fourth quarter of 2023, a reduction of $17.8 million on the PMTS and a reduction of $3.5 million in share based compensation cost as the cost of the LTIP options with specific market capitalization vesting conditions was fully amortized in 2022 in addition to the decrease in the amortization cost of STIP sign-up options granted in 2021, and reduced exploration activities in 2023. This was partially offset by an increase in mining, technological and process development of $13.0 million due to engineering work which commenced in the fourth quarter of 2022, an increase of $2.2 million in exploration labor costs mainly attributable to an increase in headcount, an increase of $1.9 million on Sponsorship, Training and Stakeholder Engagement cost and an increase of $1.3 million on prefeasibility work.

General and Administrative ("G&A") Expenses

G&A expenses for the year ended December 31, 2023 were $22.5 million compared to $29.5 million for the same period in 2022. The decrease of $7.0 million in G&A expenses was mainly the result of lower share-based compensation in the 2023 period as the cost of the LTIP options with specific market capitalization vesting conditions was fully amortized in 2022 in addition to the decrease in the amortization cost of STIP sign-up options granted in 2021 and a decrease in communication and investor relations costs incurred during the first quarter of 2023. This decrease was partially offset by higher G&A expenses in the first quarter of 2023, reflecting an increase in personnel, legal, and other expenses.

Interest Income

During 2023, we earned interest of $1.3 million, as compared to $1.1 million in 2022, mainly from the investment of our cash on hand.

Change in Fair Value of Warrants Liability

The change in fair value of warrants liability primarily consists of the change in the fair value of the 9,500,000 Private Warrants. The credit recorded in both years reflects the decrease in the market price of our warrants.

Liquidity and Capital Resources

Our primary sources of financing have come from private placements and public offerings of Common Shares and warrants, and the issuance of convertible debentures. As of December 31, 2023, we had cash on hand of $6.8 million.

In light of the significant deficit in expected funding following the closing of the Business Combination in September 2021, we adopted what we call a "capital-light" strategy whereby we removed any allocation of funds to capital expenditures that were not deemed necessary to support the submission of an application for an exploitation contract for the NORI Area D, and by negotiating the settlement of program expenditures with our equity whenever possible.

We have yet to generate any revenue from our business operations. We are an exploration-stage company and the recovery of our investment in mineral exploration contracts and attainment of profitable operations is dependent upon many factors including, among other things, the development of commercial production system for collecting polymetallic nodules from the seafloor as well as the development of our processing technology for the metallurgical treatment of such nodules, the establishment of mineable reserves, the demonstration of commercial and technical feasibility of seafloor polymetallic nodule collection and processing systems, metal prices, and securing ISA exploitation contracts or provisional approvals. While we have obtained financing in the past, there is no assurance that such financing will continue to be available on favorable terms, in sufficient amounts, or at all.

We expect to incur significant expenses and operating losses for the foreseeable future, particularly as we advance towards our application to the ISA for an exploitation contract and preparation for potential commercialization. Based on our cash balance and availability of borrowing under our credit facility with Allseas and credit facility with ERAS Capital LLC and Gerard Barron, when compared with our forecasted cash expenditures, we believe we will have sufficient funds to meet our obligations that become due within the next twelve months. Our estimates used in reaching this conclusion are based on information available as at the date of filing this Annual Report. Accordingly, actual results could differ from these estimates and resulting variances may result in our need for additional funding in an amount greater or earlier than expected, due to changes in business conditions or other developments, including, but not limited to, deferral of approvals, capital and operating cost escalation, currently unrecognized technical and development challenges, our ability to pay certain vendors or suppliers in our Common Shares or changes in external business environment.

In addition, we will however need and are seeking additional financing to fund our continued operations over time. These financings could include additional public or private equity, debt financings, equity-linked financings or other sources of financing, including through non-dilutive asset, royalty or project-based and/or asset-based financings. If these financing or other financing sources are not available, or if the terms of financing are less desirable than we expect, or if in insufficient amounts, we may be forced to delay our exploration and/or exploitation activities or further scale back our operations, which could have a material adverse impact on our business and financial prospects.

We continue to expect that we will require approximately $35 to $45 million of cash in addition to the $6.8 million cash on hand as of December 31, 2023 and the committed funding from an affiliated investor of $9 million which was received on January 31, 2024 as part of our previously announced Registered Direct Offering, assuming no exercise of the Class A warrants issued in the offering (but not including potential drawdown on our credit facility with Allseas or our credit facility with ERAS Capital LLC and Gerard Barron) to submit a high-quality application for an exploitation contract for NORI Area D following the July 2024 meeting of the ISA. This estimate includes, among other things, the expected costs of:

- the environmental and social impact assessment (ESIA), including the post-collection test monitoring campaign described above;
- pre-feasibility studies;
- regulatory and legal; and
- payroll and other general corporate matters.

This estimate is exclusive of costs expected to be spent subsequent to the submission of the application for an exploitation contract, on more detailed feasibility estimates and to progress the Project Zero Offshore Nodule Collection System development as described above. We expect to refine our expected cash needs to prepare for potential commercialization following the time we submit our application to the ISA for an exploitation contract and after we finalize our planned definitive agreement with Allseas discussed above.

On September 16, 2022, we filed a registration statement on Form S-3 with the SEC, which the SEC declared effective on October 14, 2022, to sell up to $100 million of securities, which includes the $30 million that may be sold under the At-the-Market Equity Distribution Agreement discussed below and the Common Shares and shares underlying the Class A Warrants issued in the Registered Direct Offering. In addition, on November 30, 2023, we filed an additional registration statement on Form S-3 with the SEC, which the SEC declared effective on December 8, 2023, to sell up to an additional $100 million of securities. Securities that may be sold under the registration statements include common shares, preferred shares, debt securities, warrants and units. Any such offering, if it does occur, may happen in one or more transactions. Specific terms of any securities to be sold will be described in supplemental filings with the SEC.

On December 22, 2022, we entered into an At-the-Market Equity Distribution Agreement (the "Sales Agreement") with Stifel, Nicolaus & Company, Incorporated ("Stifel") and Wedbush Securities Inc., as sales agents, allowing us, from time to time, to issue and sell Common Shares with an aggregate offering price of up to $30 million. On December 21, 2023, we amended the Sales Agreement to remove Stifel as a sales agent. The offer and sales of the shares are made under our effective "shelf" registration statement on Form S-3 filed with the SEC on September 16, 2022, which the SEC declared effective on October 14, 2022. As of the date of this Annual Report, no sales of Common Shares have been made under this offering.

On March 22, 2023, we entered into a Credit Facility with Argentum Credit Virtuti GCV, the parent of Allseas Investments S.A. and an affiliate of Allseas, which was amended on July 31, 2023 and March 22, 2024, pursuant to which, we may borrow from the Lender up to $25 million in the aggregate, from time to time, subject to certain conditions. All amounts drawn under the Credit Facility will bear interest at the 6-month Secured Overnight Funding Rate (SOFR), 180-day average plus 4.0% per annum payable in cash semi-annually (or plus 5% if paid-in-kind at maturity, our election) on the first business day of each of June and January. We will pay an underutilization fee equal to 4.0% per annum payable semi-annually for any amounts that remain undrawn under the Credit Facility. We have the right to pre-pay the entire amount outstanding under the Credit Facility at any time, before the Credit Facility's maturity of August 31, 2025. The Credit Facility also contains customary events of default. As of the date of this Annual Report, no amounts have been drawn under this Credit Facility.

On August 14, 2023, we entered into a securities purchase agreement for a Registered Direct Offering of our Common Shares and Class A Warrants. The purchase price for each Common Share and Class A Warrant to purchase 0.5 Common Shares was $2.00 per unit. The exercise price to purchase one Common Share under the Class A Warrants is $3.00, subject to adjustment as provided in the warrant agreement. No investor elected to exercise its right to purchase additional Common Shares and accompanying Class A Warrants on or before September 15, 2023 under the terms of the securities purchase agreement. As of December 31, 2023, we had received gross proceeds of $15.9 million (approximately $14.6 million net of transaction fees) in the Registered Direct Offering. We received the remaining $9 million of gross proceeds on January 31, 2024, from an investor affiliated with us.

On March 22, 2024, we entered into an Unsecured Credit Facility (the "2024 Credit Facility") with Gerard Barron, our Chief Executive Officer and Chairman, and ERAS Capital LLC, the family fund of our director, Andrei Karkar (collectively, the "2024 Lenders"), pursuant to which, we may borrow from the 2024 Lenders up to $20,000,000 in the aggregate ($10,000,000 from each of the 2024 Lenders), from time to time, subject to certain conditions. All amounts drawn under the 2024 Credit Facility will bear interest at the 6-month Secured Overnight Funding Rate (SOFR), 180-day average plus 4.0% per annum payable in cash semi-annually (or plus 5% if paid-in-kind at maturity, at our election) on the first business day of each of June and January. We will pay an underutilization fee equal to 4.0% per annum payable semi-annually for any amounts that remain undrawn under the 2024 Credit Facility. We have the right to pre-pay the entire amount outstanding under the 2024 Credit Facility at any time, before the 2024 Credit Facility's maturity of September 22, 2025. The 2024 Credit Facility also contains customary events of default. The 2024 Credit Facility will terminate automatically if we or any of our subsidiaries raise at least USD $50,000,000 in the aggregate (i) through the issuance of any of our or our subsidiaries' debt or equity securities, or (ii) in prepayments under an off-take agreement or similar commercial agreement.

We may receive up to approximately $281.8 million in aggregate gross proceeds from cash exercises of the Public Warrants and the Private Warrants, based on the per share exercise price of such warrants. However, the exercise price for the outstanding Public Warrants and Private Warrants is $11.50 per common share and there can be no assurance that such warrants will be in the money prior to their expiration, and as such, such warrants may expire worthless. Based on the current trading price of our Common Shares we do not expect to receive any proceeds from the exercise of the Public Warrants and Private Warrants unless there is a significant increase in the price of our Common Shares. In certain circumstances, the Public Warrants and Private Warrants may be exercised on a cashless basis and the proceeds from the exercise of such warrants will decrease. Furthermore, even if the warrants will be in the money, the holders of the warrants are not obligated to exercise their warrants, and we cannot predict whether holders of the warrants will choose to exercise all or any of their warrants. In addition, the exercise price to purchase one Common Share under the outstanding Class A Warrants is $3.00 (subject to customary adjustments) and there can be no assurance that such warrants will be exercised prior to their expiration, and as such, such warrants may expire and we will not receive any proceeds from the excise thereof.

Cash Flows Summary

Comparison of the Periods Ended December 31, 2023 and December 31, 2022

The following table summarizes our sources and uses of cash for the three and twelve months ended December 31, 2023 and December 31, 2022.

Presented below is a summary of our operating, investing and financing cash flows:

	For the Three Months Ended December 31,		For the Year Ended December 31,	
(thousands)	2023	2022	2023	2022
Net cash (used in) operating activities	$ (15,214)	$ (19,843)	$ (59,573)	$ (66,603)
Net cash (used in) provided by investing activities	$ (403)	$ (210)	$ (578)	$ (1,169)
Net cash (used in) provided by financing activities	$ (150)	$ (52)	$ 20,066	$ 29,722
Increase (decrease) in cash	$ (15,767)	$ (20,105)	$ (40,085)	$ (38,050)

Full Year 2023 compared to Full Year 2022

Cash flows used in Operating Activities

For the year ended December 31, 2023, major operating activities over this period involved the continuation of environmental work following the NORI integrated collector test which was concluded in November 2022, as well as advanced work on engineering and pre-feasibility studies as we advance towards our application to the ISA for an exploitation contract and prepare for potential future commercial production. Net cash used in operating activities in the year ended December 31, 2023 amounted to $59.6 million, and consisted mainly of $32.2 million on various environmental work, $2.8 million spent on engineering and pre-feasibility studies, $9.3 million on personnel costs, $4.4 million on legal costs, $3.2 million for sponsorship, training, and stakeholder engagement support, $1.9 million on communication and business development and additional payments of $5.8 million for various expenses.

For the year ended December 31, 2022, operating activities focused mainly on the preparation and execution of the NORI integrated collector test which concluded in November 2022. Net cash used in operating activities in the year ended December 31, 2022 amounted to $66.6 million, consisting mainly of $33.2 million on various environmental work, $10.3 million for work on the PMTS, $8.1 million on personnel costs, $8.5 million on legal costs and other corporate activities, $2.0 million for communication and business development, $1.4 million for sponsorship, training, and stakeholder engagement support and additional payments of $3.1 million for various expenses.

Cash flows used in/provided by Investing Activities

Net cash used in investing activities in the year ended December 31, 2023 was $0.6 million, representing the purchase of equipment. In the comparative year ended December 31, 2022, cash used in investing activities was $1.2 million for the purchase of equipment.

Cash flows provided by Financing Activities

Net cash provided by financing activities in the year ended December 31, 2023 was $20.1 million, compared to $29.7 million in 2022. The results for the year ended December 31, 2023 represent the net proceeds received from the Registered Direct Offering announced in August 2023 and cash received of $5 million on the closing of our investment in Low Carbon Royalties, while the year ended December 31, 2022 results represent the net proceeds from the PIPE financing announced in August 2022.

Contractual Obligations and Commitments

NORI Exploration Contract

As part of the NORI Exploration Contract with the ISA, NORI submitted a periodic review report to the ISA in 2021, covering the 2017-2021 period. The periodic review report, which included a proposed work plan and estimated budget for 2022 to 2026, has been reviewed by and agreed with the ISA, and we are implementing this five-year plan. The cost of NORI's estimated work plan for 2024 onwards is contingent on the ISA's approval of the NORI Area D exploitation application. Should the approval of NORI's exploitation application for NORI Area D be delayed or rejected, NORI intends to revise its estimated future work plan in respect of its NORI Area. Work plans are reviewed annually by us, agreed with the ISA and may be subject to change depending on our progress to date.

Marawa Option Agreement and Services Agreement

As part of DGE's Marawa's Exploration Contract, Marawa last submitted periodic review report to the ISA included a proposed work plan and estimated budget for the 2020-2024 five-year period. The five-year estimated expenditure is indicative and subject to change, Marawa will review the program regularly and Marawa will inform the ISA of any changes through its annual reports. To date, limited offshore marine resource definition activities in the Marawa Contract Area have occurred. We are collaborating with Marawa to assess the viability of any potential project in the Marawa Contract Area, although the timing of such assessment is unclear. Marawa has delayed certain of its efforts in the Marawa Contract Area while it determines how it will move forward with additional assessment work.

TOML Exploration Contract

As part of the TOML Exploration Contract, TOML submitted a periodic review report to the ISA in 2021, covering the 2017-2021 period. The periodic review report included a summary of work completed over the five-year period and a program of activities and estimated budget for the next five-year period. On December 23, 2022, the ISA accepted TOML's proposed program of activities for the 2022-2026 five-year period, which included an estimated five-year expenditure of up to $44 million. The five-year estimated expenditure is indicative and subject to change, TOML will review the program regularly and TOML will inform the ISA of any changes through its annual reports.

Regulatory Obligations Relating to Exploration Contracts

Both TOML and NORI require sponsorship from their host sponsoring nations, Tonga and Nauru, respectively. Each company has been registered and incorporated within the applicable host nation's jurisdiction. The ISA requires that a contractor must obtain and maintain sponsorship by a host nation that is a member of the ISA and such state must maintain effective supervision and regulatory control over such sponsored contractor. Each of TOML and NORI is subject to the registration and incorporation requirements of these nations. In the event the sponsorship is otherwise terminated, such subsidiary will be required to obtain new sponsorship from another state that is a member of the ISA. Failure to obtain such new sponsorship would have a material impact on the operations of such subsidiary and us.

Sponsorship Agreements

On July 5, 2017, Nauru, the Nauru Seabed Minerals Authority and NORI entered into the NORI Sponsorship Agreement formalizing certain obligations of the parties in relation to NORI's exploration and potential exploitation of the NORI Area. Upon reaching the minimum recovery level within the exploitation contract area, NORI will pay Nauru a seabed mineral recovery payment based on the polymetallic nodules recovered from the exploitation contract area. In addition, NORI will pay an administration fee each year to Nauru for such administration and sponsorship, which is subject to review and increase in the event NORI is granted an ISA exploitation contract. NORI has begun discussions with the Government of Nauru to renegotiate the existing sponsorship agreement and has also committed to ensuring NORI pays corporate income tax within Nauru, assuming our future operations are ultimately profitable.

On March 8, 2008, Tonga and TOML entered into the TOML Sponsorship Agreement formalizing certain obligations of the parties in relation to TOML's exploration and potential exploitation of the TOML Area. On September 23, 2021, Tonga updated the TOML Sponsorship Agreement harmonizing the terms of its engagement with TOML with those held by NORI with Nauru. TOML expects to renegotiate the existing sponsorship agreement with Tonga prior to entering into operations in the TOML Area and has committed to paying corporate income tax within Tonga, assuming our future operations are ultimately profitable.

Allseas Agreements

On March 29, 2019, we entered into a strategic alliance with Allseas to develop a system to collect, lift and transport nodules from the seafloor to shore and agreed to enter into a nodule collection and shipping agreement whereby Allseas would provide commercial services for the collection of the first 200 million metric tonnes of polymetallic nodules on a cost plus 50% profit basis. In furtherance of this agreement, on July 8, 2019, we entered into a Pilot Mining Test Agreement with Allseas ("PMTA"), which was amended on five occasions through February 2023, to develop and deploy a PMTS, successful completion of which is a prerequisite for our application for an exploitation contract with the ISA. Under the PMTA, Allseas agreed to cover the development cost of the project in exchange for a payment from us upon successful completion of the pilot trial of the PMTS in NORI Area D.

On March 16, 2022, NORI and Allseas entered into a non-binding term sheet for the development and operation of a commercial nodule collection system. The pilot nodule collection system developed and tested by Allseas is expected to be upgraded to a commercial system with an expanded targeted production capacity of up to an estimated 3.0 million tonnes of wet nodules per year, to be delivered in stepped increments, with expected production readiness in the first quarter of 2026. NORI and Allseas intend to equally finance all costs related to developing and getting the first commercial system into production. Once in production, NORI is expected to pay Allseas a nodule collection and transshipment fee and, as Allseas scales up production to up to an estimated 3.0 million wet tonnes of nodules per year, it is expected that unit costs will be reduced. Following the successful completion of the NORI Area D pilot collection system trials in November 2022 and subsequent analysis of pilot data, the parties are reviewing Project Zero Offshore Nodule Collection System production targets, system design and cost estimates and intend to enter into a binding Heads of Terms by the end of 2024. The parties expect to further detail their relationship in three separate definitive agreements for engineering, conversion/build and commercial operations phase, respectively. Subject to the necessary regulatory approvals, Allseas and NORI also intend to investigate acquiring a second production vessel similar to the *Hidden Gem*, another Samsung 10000, with the potential for an additional production rate of three million tonnes of wet nodules per year and lower associated per tonne production cost. There can be no assurances, however, that we will enter into definitive agreements with Allseas contemplated by the non-binding term sheet in a particular time period, or at all, or on terms similar to those set forth in the non-binding term sheet, or that if such definitive agreements are entered into by us that the proposed commercial systems and second production vessel will be successfully developed or operated in a particular time period, or at all.

Through December 31, 2023, we have made the following payments to Allseas under the PMTA: (a) $10 million in cash in February 2020, (b) $10 million through the issuance of 3.2 million Common Shares valued at $3.11 per share in February 2020, (c) issued Allseas a warrant to purchase 11.6 million Common Shares at a nominal exercise price per share in March 2021, (d) $10 million in cash in October 2021, following the closing of the Business Combination and meeting certain progress targets on the PMTS and (e) on February 23, 2023 issued 10.85 million Common Shares to Allseas, as described below. On August 9, 2023, 11,578,620 common shares were issued to Allseas upon the exercise of the warrant that was granted to Allseas in March 2021, and receipt of the exercise fee of $115.8 thousand. The warrant vested and became exercisable on successful completion of the PMTS in November 2022.

On November 11, 2022, our board of directors approved the successful completion and testing of the PMTS in the NORI Area D and payment of the third milestone amounting to $10 million and additional costs owed to Allseas under the PMTA by issuing 10.85 million Common Shares to Allseas priced at $1.00 per share on February 23, 2023.

On August 1, 2023, we entered into an Exclusive Vessel Use Agreement with Allseas pursuant to which Allseas will give us exclusive use of the vessel ("*Hidden Gem*") in support of the development of the Project Zero Offshore Nodule Collection System until the system is completed or December 31, 2026, whichever is earlier. In consideration of the exclusivity term, on August 14, 2023, we issued 4.15 million Common Shares to Allseas.

Offtake Agreement

On May 25, 2012, DGE and Glencore entered into a copper offtake agreement and a nickel offtake agreement. DGE has agreed to deliver to Glencore 50% of the annual quantity of copper and nickel produced by a DGE-owned facility from nodules derived from the NORI Area at London Metal Exchange referenced market pricing with allowances for product quality and delivery location. Either party may terminate the agreement upon a material breach or insolvency of the other party. Glencore may also terminate the agreement by giving twelve months' notice.

Credit Facility with Allseas Affiliate

As described above, on March 22, 2023 we entered into the Credit Facility with Argentum Credit Virtuti GCV, an affiliate of Allseas, under which we may borrow up to $25 million pursuant to the terms and conditions of the Credit Facility, which as amended has a maturity date of August 31, 2025.

Credit Facility with ERAS Capital LLC and Gerard Barron

As described above, on March 22, 2024, we entered into the 2024 Credit Facility with ERAS Capital LLC and Gerard Barron under which we may borrow up to $20 million pursuant to the terms and conditions of the 2024 Credit Facility through its maturity on September 22, 2025.

Off-balance sheet arrangements

We are not party to any off-balance sheet arrangements.

Critical Accounting Policies and Significant Judgments and Estimates

Our financial statements have been prepared in accordance with U.S. GAAP. In the preparation of these financial statements, we are required to use judgment in making estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the date of the financial statements, as well as the reported expenses incurred during the reporting periods.

We consider an accounting judgment, estimate or assumption to be critical when (1) the estimate or assumption is complex in nature or requires a high degree of judgment and (2) the use of different judgments, estimates and assumptions could have a material impact on the consolidated financial statements. Our significant accounting policies are described in Note 2 to our audited consolidated financial statements included in this Annual Report. We have the critical accounting policies and estimates which are described below.

Value of Common Share-Based Payments

We recognize the cost of share-based awards granted to employees and directors based on the estimated grant-date fair value of the awards. We determine the fair value of stock options using the Black-Scholes option pricing model, which is impacted by the following assumptions:

- Fair Value of Common Shares on the Date of the Grant — We used the price of the most recent offerings of our Common Shares to assess the value of our shares on the date of the grant of incentive stock options.
- Expected Term — We used the term of the award when calculating the expected term due to insufficient historical exercise data.
- Expected Volatility — As our Common Shares were not actively traded, the volatility is based on a benchmark of comparable companies within the mining industry.
- Expected Dividend Yield — The dividend rate used is zero as we have never paid any cash dividends on our Common Shares and do not anticipate doing so in the foreseeable future.
- Risk-Free Interest Rate — The interest rates used are based on the implied yield available on Canadian Treasury zero-coupon issues with an equivalent remaining term equal to the expected life of the award.

This valuation approach involves the use of estimates, judgments and assumptions that are subjective, such as those regarding the probability of future events. Changes in these estimates and assumptions impact our valuation as of the valuation date and may have a material impact on the valuation of our Common Shares. Changes in these assumptions used to determine the fair value of incentive stock options, including the vesting timeline of granted stock options, could have a material impact on our loss and comprehensive loss.

Valuation of Warrants Liability

We re-measure the fair value of the Private Warrants at the end of each reporting period. The fair value of the Private Warrants is estimated using a Black-Scholes option pricing model whereby the expected volatility is estimated by using a blended volatility calculated by assigning equal weights to both implied volatility of the Company's Public Warrants and the historical volatility of the Company's common share price. The expected volatility was estimated using a binomial model based on consideration of the implied volatility from the Company's Public Warrants, adjusted to account for the call feature of the Public Warrants at prices above $18.00 during 20 trading days within any 30-trading-day period and historical volatility of the share price of our Common Shares.

Evaluation of Going Concern

We assess quarterly whether the Company has the ability to meets its committed cash requirements for the next twelve months and continue to operate as a going concern. This assessment requires the use of forecasts of our business activities and related estimates of future cost obligations which can be subject to change. Changes in these assumptions could have a material impact on our assessment and related disclosures.

Recent Accounting Pronouncements

See Note 3 to the audited consolidated financial statements included in this Annual Report for more information about recent accounting pronouncements, the timing of their adoption, and our assessment, to the extent we have made one, of their potential impact on our financial condition and our results of operations and cash flows.

Emerging Growth Company Status

Section 102(b)(1) of the Jumpstart Our Business Startups ("JOBS") Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can choose not to take advantage of the extended transition period and comply with the requirements that apply to non-emerging growth companies, and any such election to not take advantage of the extended transition period is irrevocable.

We are an "emerging growth company" as defined in Section 2(a) of the Securities Act and have elected to take advantage of the benefits of the extended transition period for new or revised financial accounting standards. Following the closing of the Business Combination, we expect to remain an emerging growth company at least through the end of the 2024 fiscal year and we expect to continue to take advantage of the benefits of the extended transition period at least through the end of the 2024 fiscal year, although we may decide to early adopt such new or revised accounting standards to the extent permitted by such standards. This may make it difficult or impossible to compare our financial results with the financial results of another public company that is either not an emerging growth company or is an emerging growth company that has chosen not to take advantage of the extended transition period exemptions because of the potential differences in accounting standards used.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to a variety of markets and other risks including the effects of change in interest rates, inflation and foreign currency translation and transaction risks as well as risks to the availability of funding sources, hazard events specific asset risks, regulatory risks, public policy risks and technology risks. We also expect to be exposed to commodity risks if and when we commence commercial production.

Interest Rate Risk and Credit Risk

Interest rate risk is the risk that the fair value of our future cash flows and our financial instruments will fluctuate because of changes in market interest rates.

Our current practice is to invest excess cash in investment-grade short-term deposit certificates issued by reputable Canadian financial institutions with which we keep our bank accounts and management believes the risk of loss to be remote. We periodically monitor the investments we make and are satisfied with the credit ratings of our banks. Due to the current high cash need of our operating plan, we have kept our funds readily available, placed in secure, highly liquid interest-bearing investments, as at December 31, 2023.

Credit risk is a risk of loss that may arise on outstanding financial instruments should a counter party default on its obligation. Our receivables consist primarily of general sales tax due from the Federal Government of Canada and as a result, the risk of default is considered to be low. Once we commence commercial production, we expect our credit risk to rise with our increased customer base.

Foreign Currency Risk

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. Our exposure to the risk of changes in foreign exchange rates relates our transactions in foreign currencies, primarily in the Canadian dollar, the Australian dollar, the Great British Pound and the Euro. We primarily hold our cash in U.S. dollars and settle our foreign currency payables soon after the receipt of invoices thereby minimizing the foreign currency exposure.

Once we commence commercial production, we expect to be exposed to both currency transaction and translation risk. To date, we have not had material exposure to foreign currency fluctuations and have not hedged such exposure, although we may do so in the future.

Commodity Price Risk

We expect to engage in the collection, transport, processing and sale of products containing nickel, copper, manganese and cobalt from the polymetallic nodules collected from our contract areas of the CCZ. Accordingly, we expect the principal source of future revenue to be the sale of products containing nickel, copper, manganese and cobalt. A significant and sustained decrease in the price of these metals from current levels could have a material and negative impact on our business, financial condition and results of operations.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

TMC THE METALS COMPANY INC.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of TMC the metals company Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of TMC the metals company Inc. (the "Company") as of December 31, 2023 and 2022, the related consolidated statements of loss and comprehensive loss, changes in equity and cash flows for each of the two years in the period ended December 31, 2023, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for the two years then in the period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (the "PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2012.
Vancouver, Canada
March 25, 2024

TMC the metals company Inc.
Consolidated Balance Sheets
(in thousands of US Dollars, except share amounts)

ASSETS	Note	As at December 31, 2023	As at December 31, 2022
Current			
Cash	2	$ 6,842	$ 46,876
Receivables and prepayments	2,6	1,978	2,726
		8,820	49,602
Non-current			
Exploration contracts	10	43,150	43,150
Equipment	7	2,776	2,025
Right-of-use asset	8	5,721	—
Investment	9	8,429	—
		60,076	45,175
TOTAL ASSETS		**$ 68,896**	**$ 94,777**
LIABILITIES			
Current			
Accounts payable and accrued liabilities		31,334	41,614
		31,334	41,614
Non-current			
Deferred tax liability		10,675	10,675
Royalty liability	9	14,000	—
Warrants liability	13	1,969	983
TOTAL LIABILITIES		**$ 57,978**	**$ 53,272**
EQUITY			
Common shares *(unlimited shares, no par value – issued: 306,558,710 (December 31, 2022 – 266,812,131))*		438,239	332,882
Special Shares		—	—
Additional paid in capital		122,797	184,960
Accumulated other comprehensive loss		(1,216)	(1,216)
Deficit		(548,902)	(475,121)
TOTAL EQUITY		**10,918**	**41,505**
TOTAL LIABILITIES AND EQUITY		**$ 68,896**	**$ 94,777**

Nature of Operations *(Note 1)*
Commitments and Contingent Liabilities *(Note 19)*
Subsequent Events *(Note 23)*

The accompanying notes are an integral part of these consolidated financial statements.

TMC the metals company Inc.
Consolidated Statements of Loss and Comprehensive Loss
(in thousands of US Dollars, except share and per share amounts)

	Note	For the year ended December 31, 2023	For the year ended December 31, 2022
Operating expenses			
Exploration and evaluation expenses	10	$ 49,849	$ 144,599
General and administrative expenses	11	22,540	29,518
Operating loss		**72,389**	**174,117**
Other items			
Equity-accounted investment loss	9	571	—
Change in fair value of warrants liability	13	986	(2,143)
Foreign exchange loss		310	24
Interest income		(1,297)	(1,111)
Fees and interest on credit facility	8	781	—
Loss and comprehensive loss for the year, before tax		**$ 73,740**	**$ 170,887**
Tax expense	21	41	77
Loss and comprehensive loss for the year, after tax		**$ 73,781**	**$ 170,964**
Loss per share - basic and diluted	16	**$ 0.26**	**$ 0.71**
Weighted average number of Common Shares outstanding – basic and diluted		**288,643,700**	**239,867,019**

The accompanying notes are an integral part of these consolidated financial statements.

TMC the metals company Inc.
Consolidated Statements of Changes in Equity
(in thousands of US Dollars, except share amounts)

For the year ended December 31, 2023	Common Shares Shares	Common Shares Amount	Special Shares	Additional Paid in Capital	Accumulated Other Comprehensive Loss	Deficit	Total
December 31, 2022	**266,812,131**	**$ 332,882**	**$ —**	**$ 184,960**	**$ (1,216)**	**$ (475,121)**	**$ 41,505**
Shares issued to Allseas (Note 8)	15,000,000	15,910	—	—	—	—	15,910
Exercise of warrant by Allseas (Note 8 and 13)	11,578,620	70,016	—	(69,900)	—	—	116
Issuance of shares and warrants under Registered Direct Offering, net of expenses (Note 12)	7,961,540	11,420	—	3,179	—	—	14,599
Conversion of restricted share units, net of shares withheld for taxes (Note 15)	4,912,747	7,720	—	(7,690)	—	—	30
Shares purchased under Employee Share Purchase Plan (Note 15)	173,672	147	—	(45)	—	—	102
Exercise of stock options (Note 15)	120,000	144	—	(67)	—	—	77
Share-based compensation and Expenses settled with equity (Note 15)	—	—	—	12,360	—	—	12,360
Loss for the year	—	—	—	—	—	(73,781)	(73,781)
December 31, 2023	**306,558,710**	**$ 438,239**	**$ —**	**$ 122,797**	**$ (1,216)**	**$ (548,902)**	**$ 10,918**

For the year ended December 31, 2022	Common Shares Shares	Common Shares Amount	Special Shares	Additional Paid in Capital	Accumulated Other Comprehensive Loss	Deficit	Total
December 31, 2021	**225,432,493**	**$ 296,051**	**$ —**	**$ 102,073**	**$ (1,216)**	**$ (304,157)**	**$ 92,751**
Vesting of Allseas Warrant	—	—	—	69,900	—	—	69,900
Issuance of shares under PIPE financing - net of expenses (Note 12)	38,266,180	29,621	—	—	—	—	29,621
Conversion of restricted share units, net of shares withheld for taxes	2,877,068	6,875	—	(6,945)	—	—	(70)
Exercise of stock options	118,461	142	—	(66)	—	—	76
Shares purchased under Employee Share Purchase Plan	117,929	193	—	(79)	—	—	114
Share-based compensation and Expenses settled with equity	—	—	—	20,077	—	—	20,077
Loss for the year	—	—	—	—	—	(170,964)	(170,964)
December 31, 2022	**266,812,131**	**$ 332,882**	**$ —**	**$ 184,960**	**$ (1,216)**	**$ (475,121)**	**$ 41,505**

The accompanying notes are an integral part of these consolidated financial statements.

TMC the metals company Inc.
Consolidated Statements of Cash Flows
(in thousands of US Dollars)

	Note	For the year ended December 31, 2023	For the year ended December 31, 2022
Cash provided by (used in)			
Operating activities			
Loss for the year		$ (73,781)	$ (170,964)
Items not affecting cash:			
Amortization		360	418
Lease expense	8	795	—
Share-based compensation and Expenses settled with equity	15	12,360	20,077
Equity-accounted investment loss	9	571	—
Change in fair value of warrants liability	13	986	(2,143)
Vesting of Allseas Warrant	8	—	69,900
Unrealized foreign exchange movement		(51)	(53)
Changes in working capital:			
Receivables and prepayments	2	748	960
Accounts payable and accrued liabilities		(1,561)	15,202
Net cash used in operating activities		**(59,573)**	**(66,603)**
Investing activities			
Acquisition of equipment	7	(578)	(1,169)
Net cash used in investing activities		**(578)**	**(1,169)**
Financing activities			
Proceeds from Registered Direct Offering	12	15,923	—
Expenses paid for Registered Direct Offering	12	(1,182)	—
Proceeds from PIPE financing	12	—	30,399
Expenses paid for PIPE financing	12	—	(797)
Proceeds from employee share purchase plan	15	102	114
Proceeds from exercise of stock options	15	77	76
Proceeds from exercise of warrants by Allseas	8 & 13	116	—
Proceeds from issuance of shares		30	—
Proceeds from Low Carbon Royalties investment	9	5,000	—
Taxes withheld and paid on share-based compensation		—	(70)
Net cash provided by financing activities		**20,066**	**29,722**
Decrease in cash		**$ (40,085)**	**$ (38,050)**
Impact of exchange rate changes on cash		**51**	**53**
Cash - beginning of year		**46,876**	**84,873**
Cash - end of year		**6,842**	**$ 46,876**

The accompanying notes are an integral part of these consolidated financial statements.

TMC the metals company Inc.
Notes to Consolidated Financial Statements
(in thousands of US Dollars, except share, per share amounts and unless otherwise stated)

1. Nature of Operations

TMC the metals company Inc. ("TMC" or the "Company") was incorporated as a Cayman Islands exempted company limited by shares on December 18, 2019 and continued as a corporation under the laws of the province of British Columbia, Canada on September 9, 2021. On September 9, 2021, the Company completed its business combination (the "Business Combination") with DeepGreen Metals Inc. ("DeepGreen"). The Company's corporate office, registered address and records office is located at 10th floor, 595 Howe Street, Vancouver, British Columbia, Canada, V6C 2T5. The Company's common shares and warrants to purchase common shares are listed for trading on the Nasdaq Global Select Market ("Nasdaq") under tickers "TMC" and "TMCWW", respectively.

The Company is a deep-sea minerals exploration company focused on the collection and processing of polymetallic nodules found on the seafloor in international waters of the Clarion Clipperton Zone in the Pacific Ocean ("CCZ"), located approximately 1,300 nautical miles southwest of San Diego, California. These nodules contain high grades of four metals (nickel, copper, cobalt, manganese) which can be used as (i) feedstock for battery cathode precursors (nickel, cobalt and manganese sulfates, or intermediate nickel-copper-cobalt matte) for electric vehicles ("EV") and renewable energy storage markets, (ii) copper cathode for EV wiring, energy transmission and other applications and (iii) manganese silicate for manganese alloy production required for steel production.

Exploration and exploitation of seabed minerals in international waters is regulated by the International Seabed Authority ("ISA"), an intergovernmental organization established pursuant to the 1994 Agreement Relating to the Implementation of the United Nations Convention on the Law of the Sea. The ISA grants contracts to sovereign states or to private contractors who are sponsored by a sovereign state. The Company's wholly owned subsidiary, Nauru Ocean Resources Inc. ("NORI"), was granted an exploration contract (the "NORI Exploration Contract") by the ISA in July 2011 under the sponsorship of the Republic of Nauru ("Nauru") giving NORI exclusive rights to explore for polymetallic nodules in an area covering 74,830 square kilometers in the CCZ ("NORI Area"). On March 31, 2020, the Company acquired Tonga Offshore Mining Limited ("TOML"), which was granted an exploration contract (the "TOML Exploration Contract") by the ISA in January 2012 under the sponsorship of the Kingdom of Tonga ("Tonga") and has exclusive rights to explore for polymetallic nodules covering an area of 74,713 square kilometers in the CCZ ("TOML Area"). Marawa Research and Exploration Limited ("Marawa"), an entity owned and sponsored by the Republic of Kiribati ("Kiribati"), was granted rights by the ISA to polymetallic nodules exploration in an area of 74,990 square kilometers in the CCZ ("Marawa Area"). In 2013, the Company through its subsidiary DeepGreen Engineering Pte. Ltd. ("DGE") entered into an option agreement (the "Marawa Option Agreement") with Marawa which granted DGE exclusive rights to manage and carry out all exploration and exploitation in the Marawa Area in return for a royalty payable to Marawa. The Company is working with its strategic partner and investor, Allseas Group S.A. ("Allseas"), to deliver a system to collect, lift and transport nodules from the seafloor to shore that meets the requirements of an early commercial production system (Note 8).

The realization of the Company's assets and attainment of profitable operations is dependent upon many factors including, among other things: financing being arranged by the Company to continue operations, development of a nodule collection system for the recovery of polymetallic nodules from the seafloor as well as development of processing technology for the treatment of polymetallic nodules at commercial scale, the establishment of mineable reserves, the commercial and technical feasibility of seafloor polymetallic nodule collection and processing, metal prices, and regulatory approvals and environmental permitting for commercial operations. The outcome of these matters cannot presently be determined because they are contingent on future events and may not be fully under the Company's control.

2. Basis of Presentation

Statement of Compliance

These consolidated financial statements have been prepared in accordance with Generally Accepted Accounting Principles in the United States ("U.S. GAAP") and include the accounts of TMC and its wholly-owned subsidiaries.

Comparative figures reported in the Consolidated Balance Sheet, for cash, receivables and prepayments, and figures reported in the Consolidated Statements of Cash Flows, for Expenses settled with equity and changes in working capital have been reclassified to conform to the current year's presentation.

Basis of Measurement

These consolidated financial statements have been prepared under the historical cost convention, except for warrants liability that has been measured at fair value and are presented in United States ("US") dollars.

Consolidation

These consolidated financial statements include the financial statements of the Company and its subsidiaries. The principal subsidiaries of the Company, their activities, and their geographic locations as at December 31, 2023 were as follows:

Subsidiary	Principal Activity	Location	Proportion of Interest Held by the Company
DeepGreen Engineering Pte. Ltd.	Mineral exploration	Singapore	100%
DeepGreen Metals ULC	Mineral exploration	Canada	100%
DeepGreen Resources, LLC	Holding Company	USA	100%
DeepGreen TOML Holding 1 Ltd.	Holding Company	British Virgin Islands	100%
DeepGreen TOML Holding 2 Ltd.	Holding Company	British Virgin Islands	100%
DeepGreen TOML Singapore Pte. Ltd.	Mineral exploration	Singapore	100%
Koloa Moana Resources Ltd.	Holding Company	Canada	100%
Nauru Education and Training Foundation Inc. ("NEAT")	Holding Company	Republic of Nauru	100%
Nauru Health and Environment Foundation Inc. ("NHEF")	Holding Company	Republic of Nauru	100%
Nauru Ocean Resources Inc.	Mineral exploration	Republic of Nauru	100%
Offshore Minerals Pty. Ltd.	Mineral exploration	Australia	100%
The Metals Company Australia Pty Ltd	Holding Company	Australia	100%
TMC The Metals Company UK Limited	Holding Company	United Kingdom	100%
Tonga Offshore Mining Ltd.	Mineral exploration	Kingdom of Tonga	100%

All intra-group balances have been eliminated on consolidation.

3. Significant Accounting Policies

i. Foreign Currencies

The functional currency is the currency of the primary economic environment in which the entity operates. The functional currency of the Company and all its subsidiaries is the U.S. Dollar, except for NEAT and NHEF, whose functional currency is the Australian Dollar.

At the end of each reporting period, monetary assets and liabilities that are denominated in foreign currencies are translated into the functional currency at the rates prevailing at that date. Non-monetary assets and liabilities carried at fair value that are denominated in currencies other than the U.S. Dollar are translated at rates prevailing at the date when the fair value was determined. All gains and losses on translation of these foreign currency transactions are included in the statements of loss and comprehensive loss. Non-monetary items that are measured at historical cost in a foreign currency are not retranslated.

For consolidation purposes, the assets and liabilities of entities with functional currencies other than the US Dollar are translated at the period end rates of exchange, and the results of their operations are translated at average rates of exchange for the period. The resulting changes are recognized in accumulated other comprehensive loss within equity as currency translation differences.

ii. Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts in the consolidated financial statements and the notes thereto. Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to, the evaluation of going concern, the valuation of share-based payments, including valuation of incentive stock options (Note 15), as well as the valuation of warrants liability (Note 13), and the valuation of the investment in Low Carbon Royalties Inc. ("Low Carbon Royalties") (Note 9). Actual results could differ materially from those estimates.

iii. Loss Per Share

Basic loss per share is computed by dividing loss available to common shareholders by the weighted average number of common shares outstanding during the year. The computation of diluted loss per share assumes the conversion, exercise or contingent issuance of securities only when such conversion, exercise or issuance would have a dilutive effect on the loss per share. The dilutive effect of convertible securities is reflected in the diluted loss per share by application of the "if converted" method. The dilutive effect of outstanding options and their equivalents is reflected in the diluted loss per share by application of the treasury stock method.

iv. Financial Instruments

Financial assets and liabilities are recognized when the Company becomes a party to the contractual provisions of the instrument. Financial assets are derecognized when the rights to receive cash flows from the assets have expired, or have been transferred, and the Company has transferred substantially all risks and rewards of ownership. A financial liability is derecognized when the obligation specified in the contract is discharged, cancelled, or expires.

The Company's financial instruments consists of cash and cash equivalents, receivables, accounts payable and accrued liabilities, and deferred acquisition costs which are recorded at amortized cost as well as warrants to acquire common shares of the Company which are measured at fair value.

v. Fair Value of Financial Instruments

Fair value estimates of financial instruments are made at a specific point in time, based on relevant information about financial markets and specific financial instruments. As these estimates are subjective in nature, involving uncertainties and matters of significant judgment, they cannot be determined with precision. Changes in assumptions can significantly affect estimated fair value.

The Company measures fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the reporting date. In accordance with U.S. GAAP, the Company utilizes a three-tier hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value:

- ***Level 1*** - Valuations based on quoted prices in active markets for identical assets or liabilities that an entity has the ability to access.

- ***Level 2*** - Valuations based on quoted prices for similar assets or liabilities, quoted prices for identical assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable data for substantially the full term of the assets or liabilities.

- ***Level 3*** - Valuations based on inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

In some circumstances, the inputs used to measure fair value might be categorized within different levels of the fair value hierarchy. In those instances, the fair value measurement is categorized in its entirety in the fair value hierarchy based on the lowest level input that is significant to the fair value measurement.

There were no transfers between fair value measurement levels during the years ended December 31, 2023 and 2022.

As at December 31, 2023 and 2022, the carrying values of cash, receivables, accounts payable and accrued liabilities approximate their fair values due to the short-term nature of these instruments. The financial instruments also include warrants which are valued at fair value as disclosed in Note 13.

vi. Cash and Cash Equivalents

Cash include cash on hand and term deposits with a remaining term to maturity at acquisition of three months or less. As at December 31, 2023 and 2022, the Company had no cash equivalents.

vii. Equipment

Equipment are stated at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, when it is probable that future economic benefits from such assets will flow to the Company and the cost of such assets can be measured reliably. The carrying amount of an asset is derecognized when it is replaced or taken out of service. Repairs and maintenance costs are charged to the statement of loss and comprehensive loss during the period they are incurred.

The major categories of equipment are amortized on a declining balance basis as follows:

Exploration and other equipment	30 %
Office equipment	30 %

The Company allocates the amount initially recognized to each asset's significant components and depreciates each component separately. Amortization methods and useful life of the assets are reviewed at each financial period end and adjusted on a prospective basis, if required.

Gains and losses on disposals of equipment are determined by comparing the proceeds with the carrying amount of the asset and are included in the statement of loss and comprehensive loss.

viii. Exploration Contracts

The Company is in the exploration stage with respect to its investment in exploration contracts and follows the practice of capitalizing costs related to the acquisition of such exploration contracts. The cost of exploration contracts will be charged to operations using a unit-of-production method based on proven and probable reserves once commercial production commences in the future.

ix. Exploration and Evaluation Expenses

While in the exploration phase, the Company expenses all costs related to exploration and development of exploration contracts. Such exploration and development costs include, but are not limited to, exploration contract management, geological, geochemical and geophysical studies, environmental studies and process development.

x. Share-Based Compensation

Share-based compensation is measured at the grant date based on the fair value of the award and is recognized over the requisite service period. Share-based compensation costs are charged to exploration and evaluation expenses or general and administrative expenses in the statement of loss and comprehensive loss. The Company recognizes forfeiture of any awards as they occur. The Company records share-based compensation from the issuance of stock options and restricted share units ("RSUs") to employees with service-based conditions using the accelerated attribution method.

For stock options and restricted share units issued with performance conditions (Note 15), the Company recognizes share-based compensation cost when the specific performance targets become probable of being achieved using the accelerated attribution method. When these costs relate to equity financing, they are netted against share capital as a share issuance cost. The fair value of stock option awards with only service and/or performance conditions is estimated on the grant date using a Black-Scholes option-pricing model.

For stock options issued with market conditions (Note 15), the Company recognizes share-based compensation cost over the expected achievement period for the related market capitalization milestone determined on the grant date. If the related market capitalization milestone is achieved earlier than its expected achievement period, then any unamortized share-based compensation cost for that milestone is recognized at that time. The fair value of market-based stock option awards is estimated on the grant date using Monte-Carlo simulations.

The Company at times grants common shares, stock options or RSUs in lieu of cash to certain vendors for their services to the Company. The Company recognizes the associated cost in the same period and manner as if the Company paid cash for the services provided.

xi. Warrants Liability

The Company evaluates all of its financial instruments, including issued share purchase warrants, to determine if such instruments are derivatives or contain features that qualify as embedded derivatives, pursuant to U.S. GAAP Accounting Standard Coding ("ASC") 480, Distinguishing Liability from Equity ("ASC 480"), and ASC 815, Derivatives and Hedging ("ASC 815"). The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is re-assessed at the end of each reporting period.

The Company accounts for the Public Warrants and Private Warrants (as defined below) in accordance with the guidance contained in ASC 815 (Subtopic 40), Derivative and Hedging – Contracts in Entity's Own Equity ("ASC 815-40"), and the U.S. Securities and Exchange Commission ("SEC") Division of Corporation Finance's April 12, 2021 Public Statement, Staff Statement on Accounting and Reporting Considerations for Warrants Issued by Special Purpose Acquisition Companies ("SEC Statement"), under which the 15,000,000 common share warrants issued by SOAC as part of the units offered in its initial public offering ("Public Warrants") were determined to meet the criteria for equity classification, while the 9,500,000 private placement common share warrants issued by SOAC in a private placement simultaneously with the closing of the initial public offering ("Private Warrants") did not meet the criteria for equity classification and were recorded as liabilities. Specifically, the terms of the Private Warrants provide for potential changes to the settlement amounts dependent upon the characteristics of the warrant holder, and, because the holder of a Private Warrant is not an input into the pricing of a fixed-for-fixed option on equity shares, such provision would preclude the Private Warrants from being classified in equity and should be classified as a liability. Accordingly, the Company classified the Private Warrants as liabilities measured at fair value and adjusts the Private Warrants to their fair value at the end of each reporting period. Fair value changes in the Private Warrants are recognized in the Company's statement of loss and comprehensive loss.

The Company granted warrants to Allseas on March 4, 2021 to acquire 11.6 million TMC common shares at a nominal value (the "Allseas Warrant"). The Allseas Warrant vested and became exercisable upon successful completion of the PMTS in the fourth quarter of 2022, and had been accounted for as equity, since the warrants do not meet the criteria to be classified as liability as defined in ASC Topic 480, Distinguishing Liabilities from Equity.

The Company issued Class A Warrants under the Registered Direct Offering (Note 12) in the third quarter of 2023. The Class A Warrants issued met the criteria for equity classification and were recorded under additional paid in capital (Note 13).

xii. Income Taxes

Income tax expense represents the sum of current tax expense and deferred tax expense.

Current tax expense is based on taxable profit for the year and includes any adjustments to tax payable in respect of previous years. Taxable profit differs from accounting profit or loss as reported in the consolidated income statement because it excludes (i) items of income or expense that are taxable or deductible in other years and (ii) items that are never taxable or deductible. The Company's liability for current tax is calculated using tax rates that have been enacted by the balance sheet date. The Company's policy is to account for income tax related interest and penalties in income tax expense in the accompanying statements of loss and comprehensive loss.

Deferred tax income taxes are accounted for using the asset and liability method. Deferred income tax assets and liabilities are based on temporary differences, which are differences between the accounting basis and tax basis of assets and liabilities, non-capital loss, capital loss, and tax credits carryforwards and are measured using the enacted tax rates and laws expected to apply when these differences reverse. Deferred tax benefits, including non-capital loss, capital loss, and tax credit carryforwards are recognized to the extent that realization of such benefits is considered more likely than not. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the consolidated income statement in the period that enactment occurs. When realization of deferred income tax assets does not meet the more likely than not criterion for recognition, a valuation allowance is provided.

Significant Accounting Policies Adopted during the year

i. Leases

The Company records leases in accordance with ASC 842, *Leases*, and determines if an arrangement contains a lease at inception. Specifically, a contract is or contains a lease when (1) the contract contains an explicitly or implicitly identified asset and (2) we obtain substantially all of the economic benefits from the use of that underlying asset and direct how and for what purpose the asset is used during the term of the contract in exchange for consideration. If an arrangement contains a lease, the Company performs a lease classification test to determine if the lease is an operating lease or a finance lease. Right-of-use ("ROU") assets represent the right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease.

Lease liabilities are recognized on the commencement date of the lease based on the present value of the future lease payments over the lease term. The discount rate used to calculate the present value of lease payments is the rate implicit in the lease. Lease liabilities due within the subsequent 12 months of the reporting date are classified as current lease liabilities and are included in accounts payable and accrued liabilities on the Company's condensed consolidated balance sheet. Lease liabilities payable after the subsequent 12 months of the reporting date are classified as non-current lease liabilities and are presented as non-current lease liability in the condensed consolidated balance sheet.

ROU assets are valued at the initial measurement of the lease liability, plus any indirect costs or rent prepayments, and reduced by any lease incentives and any deferred lease payments. ROU assets are recorded as Right-of-use assets, net of any amortization on the condensed consolidated balance sheet. Operating ROU assets are amortized on a straight-line basis over the lease term, whereas Finance ROU assets are amortized on a front-loaded basis. Depending on the nature of the ROU asset, the amortization expense is either included in exploration and evaluation expenses or in general and administrative expenses.

The Company subsequently measures the ROU assets for an operating lease at the amount of the remeasured lease liability (i.e. the present value of the remaining lease payments), adjusted for the remaining balance of any lease incentives received, any cumulative prepaid or accrued rent if the lease payments are uneven throughout the lease term and any unamortized initial direct costs. The ROU assets for a finance lease are subsequently measured by amortizing them on a straight-line basis over the shorter of the lease term or useful life and also adjustment for any impairments.

In the third quarter of 2023, the Company entered into an Exclusive Vessel Use Agreement with Allseas (Note 8) which was recognized as a lease agreement in accordance with accounting standards.

ii. Investments

The Company consolidates investments over which it has control in accordance with ASC 810, *Consolidation* ("ASC 810"). Where the Company does not have control over the investment, but has significant influence, the Company records the investment in accordance with ASC 323, *Investments-Equity Method and Joint Ventures* ("ASC 323") whereby, after recording the initial investment, the Company recognizes its proportional share of results of operations of the affiliate in its consolidated financial statements. The value of the equity method investments is impaired if it is determined that there is an other-than-temporary decline in value. Investments over which the Company does not have control nor significant influence are recorded at cost.

The Company and its wholly-owned subsidiary, NORI, entered into an investment with Low Carbon Royalties on February 21, 2023 (Note 9).

4. Significant Accounting Estimates and Judgements

The preparation of financial statements in accordance with U.S. GAAP requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgments about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

Significant management judgments and estimates were applied to the following areas:

i. Evaluation of Going Concern

The Company evaluates its ability to operate as a going concern at each reporting period. This evaluation requires the Company to estimate its cash flow commitments over a forecast period of twelve months and whether it has the financial ability to pay for such commitments. Changes in these estimates and assumptions may have a material impact on this assessment.

ii. Valuation of Share-Based Payments

The fair market value of share-based awards granted to employees, non-employees and directors is based on the closing market price of the Company's shares, on the date these were granted (Note 15).

This valuation approach involves the use of estimates, judgments and assumptions that are subjective, such as those regarding the probability of future events. Changes in these estimates and assumptions impact the Company's valuation as of the valuation date and may have a material impact on the valuation of the Company's common shares. Changes in these assumptions used to determine the fair value of incentive stock options, including the vesting timeline of granted stock options, could have a material impact on the Company's loss and comprehensive loss.

iii. Valuation of Warrants Liability

The Company re-measures the fair value of the Private Warrants at the end of each reporting period (Note 13). The fair value of the Private Warrants was estimated using a Black-Scholes option pricing model whereby the expected volatility was estimated using a binomial model based on consideration of the implied volatility from the Company's Public Warrants adjusted to account for the call feature of the Public Warrants at prices above $18.00 during 20 trading days within any 30-trading-day period.

During the year the Company issued Class A warrants as a part of the Registered Direct Offering (Note 12 & Note 13). The warrants were valued using a Monte Carlo simulation by running 250,000 trials. The model assumed that the Company's share price follows geometric Brownian motion which is a standard assumption used in Monte Carlo univariate pricing models. The valuation was calculated under a risk-neutral framework using a zero-coupon risk-free interest rate derived from the Treasury Constant Maturities yield curve for a term until the expiry of the Warrants. The Company's share price was simulated up to the expiration date using a blended volatility, calculated by assigning equal weights to both implied volatility of the Company's Public Warrants and the historical volatility of the Company's share price.

iv. Valuation of Royalty Liability

The Company re-measures the fair value of its royalty liability at each reporting date. As NORI is in an advanced exploration stage and pre-production, the fair value of the royalty liability is measured by using a market approach which entails examining recent royalty transactions prior to the reporting date, focusing on those transactions that involve similar metals as contained in NORI's polymetallic nodules. The Company compares the specific characteristics of these transactions to estimate the fair value of its royalty liability at the reporting date.

5. Recent Accounting Pronouncements Issued and Adopted

There were no recent accounting pronouncements applicable to the Company during the year.

6. Receivables and Prepayments

The amounts of outstanding receivables and prepayments at December 31, 2023 and 2022 are as follows:

	December 31 2023	December 31 2022
Taxes and other receivables	**$ 467**	$ 117
Prepayments	**1,511**	2,609
	$ 1,978	**$ 2,726**

7. Equipment

The movements in the Company's capital equipment are as follows:

Cost	Exploration and other equipment	Office equipment	Total
December 31, 2021	$ 2,800	$ 21	$ 2,821
Additions	1,026	—	1,026
December 31, 2022	**$ 3,826**	**$ 21**	**$ 3,847**
Additions	**1,111**	**—**	**1,111**
December 31, 2023	**$ 4,937**	**$ 21**	**$ 4,958**
Accumulated depreciation			
December 31, 2021	$ (1,386)	$ (19)	$ (1,405)
Amortization for the year	(416)	(1)	(417)
December 31, 2022	**$ (1,802)**	**$ (20)**	**$ (1,822)**
Amortization for the year	**(359)**	**(1)**	**(360)**
December 31, 2023	**$ (2,161)**	**$ (21)**	**$ (2,182)**
Net book value			
As at December 31, 2022	$ 2,024	$ 1	$ 2,025
As at December 31, 2023	**$ 2,776**	**$ —**	**$ 2,776**

8. Strategic Alliance with Allseas and Affiliates

Pilot Mining Test Project

On March 29, 2019, the Company and Allseas entered into a Strategic Alliance Agreement ("SAA") with the objective to develop and operate commercial nodule collection systems in the Company's contract areas. The SAA included the intent to develop and deploy a Pilot Mining Test System ("PMTS"), the successful completion of which would support the Company's application for an exploitation contract with the ISA. Allseas committed to a fixed price development contract and would own all intellectual property used and generated in the development of the PMTS. Under the terms of the SAA, Allseas subscribed for and ultimately received 6.7 million common shares for a total of $20.0 million paid in cash to the Company.

On July 8, 2019, as contemplated by the SAA, the Company and Allseas entered into the Pilot Mining Test Agreement ("PMTA") which governs the terms, design specifications, procedures, and timetable under which Allseas agreed to complete a pilot trial of the PMTS in NORI Area D. Under the PMTA, in exchange for Allseas' development efforts, upon successful delivery of the pilot trial of the PMTS in NORI Area D by Allseas, the Company agreed to pay Allseas:

- First milestone payment: $10 million within 10 business days of the closing of the Business Combination and Allseas providing confirmation of placing an order for certain equipment and demonstrating certain progress on construction of the PMTS;
- Second milestone payment: $10 million on the later of (i) January 1, 2022, and (ii) confirmation of successful completion of the North Sea drive test;
- Third milestone payment: $10 million upon successful completion of the pilot trial of the PMTS in NORI Area D; and
- 11.6 million warrants which would vest and become exercisable upon successful completion of the PMTS.

On November 11, 2022, the Board approved the successful completion of the PMTS in NORI Area D and payment of the third milestone amounting to $10 million by issuing 10 million common shares as agreed with Allseas. Accordingly in relation to the third milestone payment, the Company has recorded an expense equal to $8.7 million based on the fair market value of the Company's shares on November 11, 2022.

On February 13, 2023, the Company entered into a Fifth Amendment to the Pilot Mining Test Agreement (the "PMTA") and Third Amendment to the Strategic Alliance Agreement (together with the PMTA, the "Amendments"), which was effective as of February 8, 2023, with DGE, DeepGreen Metals ULC. and Allseas. The Amendments relate to the Company's settlement of the third and final payment of $10 million due to Allseas upon successful completion of the trial of the PMTS in NORI Area D and certain other costs due to Allseas under the PMTA through the issuance of 10,850,000 common shares to Allseas, priced at $1.00 per share. On February 23, 2023, the Company settled the third milestone payment of $10 million and additional PMTS overage charges amounting to $0.9 million by issuing 10.85 million of its common shares to Allseas.

On August 9, 2023, 11,578,620 common shares were issued to Allseas upon the exercise of the Allseas Warrant granted in March 2021, and receipt of the exercise fee of $115.8 thousand. The warrant vested and became exercisable on successful completion of the PMTS in November 2022 (refer Allseas Warrant, Note 13).

Development of Project Zero Offshore Nodule Collection System

On March 16, 2022, NORI and Allseas entered into a non-binding term sheet for the development and operation of a commercial nodule collection system. During the year ended December 31, 2023, in relation to the development of the commercial nodule collection system, Allseas provided the Company with engineering, project management and vessel use services consisting of lay-up and transit costs totaling $12.1 million, recorded as mining, technological and process development within exploration and evaluation expenses (Note 10). For the year ended December 31, 2022, Allseas managed and delivered the PMTS project, with services totaling $15.7 million, recorded as PMTS within exploration and evaluation expenses (Note 10).

Exclusive Vessel Use Agreement with Allseas

On August 1, 2023, the Company entered into an Exclusive Vessel Use Agreement with Allseas pursuant to which Allseas will give exclusive use of the vessel ("*Hidden Gem")* to the Company in support of the development of the Project Zero Offshore Nodule Collection System until the system is completed or December 31, 2026, whichever is earlier. In consideration of the exclusivity term, the Company, on August 14, 2023, issued 4.15 million common shares to Allseas. Allseas can terminate the agreement if the Company ceases normal operations, assigns assets to creditors, initiates bankruptcy proceedings, or faces unresolved bankruptcy-related actions.

The Company concluded that the agreement was a lease, as the Hidden Gem was considered an identified asset and the Company had the right to direct the use of the *Hidden Gem* for the development of the Project Zero System and obtain substantially all of the economic benefits from its use. The lease was determined to be an operating lease given that ownership of the vessel remained with Allseas, the duration of the lease is considerably shorter than the vessel's economic life and the present value of lease payments is significantly lower than the fair value of the vessel.

The Company recorded a lease liability and right-of-use asset of $6.5 million, which represents the fair value of 4.15 million common shares issued to Allseas on August 14, 2023, as consideration, and equal to the present value of the lease payments. As the entire lease liability was settled within 14 days of the commencement of the lease, the discount rate for calculating the present value of lease payments was determined to be insignificant.

For the year ended December 31, 2023, the Company has recognized $0.8 million as lease expense recorded as exploration and evaluation expense.

As at December 31, 2023, the net amount of the lease liability and right-of-use asset is as follows:

	Lease Liability
Balance as at August 1, 2023	$ 6,515
Payments made during the year by issuing 4.15 million common shares	6,515
Balance as at December 31, 2023	**$ —**

	Right-of-use Asset
Balance as on August 1, 2023	$ 6,515
Lease expense during the year	794
Balance as at December 31, 2023	**$ 5,721**

Credit Facility with Allseas Affiliate

On March 22, 2023, the Company entered into an Unsecured Credit Facility Agreement, which was amended on July 31, 2023 ("Credit Facility"), with Argentum Credit Virtuti GCV (the "Lender"), the parent of Allseas Investments S.A. and an affiliate of Allseas, pursuant to which, the Company may borrow from the Lender up to $25 million in the aggregate, from time to time, subject to certain conditions. All amounts drawn under the Credit Facility will bear interest based on the 6-month Secured Overnight Financing Rate, 180-day average plus a margin of 4.0% per annum payable in cash semi-annually (or plus 5% if paid-in-kind at maturity, at the Company's election) on the first business day of each of June and January. The Company will pay an underutilization fee equal to 4.0% per annum payable semi-annually for any amounts that remain undrawn under the Credit Facility. The Company has the right to pre-pay the entire amount outstanding under the Credit Facility at any time before the Credit Facility's maturity. The Company has the ability to settle the drawn credit facility, the interest on the drawn credit facility and underutilitzation fee in cash or in equity at discretion of the Company. On March 22, 2024, the maturity date of this Credit Facility was extended to August 31, 2025. The Credit Facility also contains customary events of default.

During the year ended December 31, 2023, the Company had not drawn any amount from the Credit Facility and had incurred $0.8 million as underutilization fees, which would be payable only in the event the Credit Facility is not drawn down upon at the time such fees are payable.

As at December 31, 2023, the amount payable to Allseas and its affiliates was $13.8 million (December 31, 2022: $10.2 million).

Other Activity

As a part of the Registered Direct Offering in August 2023 (Note 12), Allseas purchased 3,500,000 common shares and accompanying Class A Warrants to purchase 1,750,000 Common Shares (Note 13) for a total purchase price of $7 million.

As at December 31, 2023, Allseas and its affiliates owned 53.8 million TMC common shares (2022: 23.7 million TMC common shares) which constituted 17.6% (December 31, 2022: 8.9%) of total common shares outstanding.

9. Investment in Low Carbon Royalties

On February 21, 2023 (the "Closing Date"), the Company and its wholly-owned subsidiary, NORI, entered into an investment agreement (the "Royalty Agreement") with Low Carbon Royalties, a private corporation formed under the laws of British Columbia, Canada, to finance low carbon emitting energy production and technologies (natural gas, nuclear, renewables), transition metals and minerals required for energy storage and electrification (Cu, Li, Ni, Co, Mn), and the evolving environmental markets (the "Partnership"). In connection with the Royalty Agreement, NORI contributed a 2% gross overriding royalty (the "NORI Royalty") on the Company's NORI project area in the CCZ in which NORI currently holds exclusive exploration rights for polymetallic nodules from the ISA to Low Carbon Royalties. The Company retained the right to repurchase up to 75% of the NORI Royalty at an agreed capped return, exercisable in two transactions, between the second and the tenth anniversaries of the Partnership. If both repurchase transactions are executed, the NORI Royalty will be reduced to 0.5%. At the Closing Date, Low Carbon Royalties also owned a 1.56% gross overriding royalty on a producing natural gas field in Latin America (the "LCR-owned Royalty"). In consideration of the NORI Royalty, TMC received 35.0% of the common shares issued by Low Carbon Royalties and $5 million in cash, as of the Closing Date. In connection with the Royalty Agreement the Company entered into an Investor Rights Agreement with Low Carbon Royalties and a shareholder of Low Carbon Royalties, pursuant to which the Company and this shareholder each have a right, subject to certain percentage maintenance, to nominate a director to Low Carbon Royalties' board of directors, along with registration and information rights.

As a condition of closing the Royalty Agreement, the parties entered into an agreement with Low Carbon Royalties to mitigate risks associated with the potential termination of the exploitation license granted for one of the royalty-producing natural gas fields in Latin America (the "Exploitation License"). As per the agreement, 5 million contingent value rights ("CVR") were issued to NORI. The CVR would convert into 5 million additional shares of Low Carbon Royalties being issued to NORI, in the event the Exploitation License is found, in a final decision, to be invalid by the Colombian National Agency of Hydrocarbons prior to the earlier of (1) five years from the issuance of the CVR and (2) the date Low Carbon Royalties becomes a publicly listed entity.

Although the Company does not control Low Carbon Royalties (as per ASC 810), it does however exercise significant influence and therefore the equity method of accounting is applied (as per ASC 323).

On March 21, 2023, Low Carbon Royalties acquired additional gross overriding royalties on natural gas fields in Latin America, increasing its total gross overriding royalty on the existing first license block from 1.56% to 3.13% and acquiring a new gross overriding royalty of 1.44% on a second license block. The royalty acquisitions were financed through the issuance of Low Carbon Royalties common shares to the third-party vendor of such royalties, thereby reducing the Company's ownership in the Partnership to 32% from 35%.

Based on the fair value of the NORI Royalty granted and the cash received, the Company recorded $9 million as investment in Low Carbon Royalties on the Closing Date. For the year ended December 31, 2023, the Company's share of the net loss generated by the Low Carbon Royalties was $ 0.6 million.

		Investment
Fair value of NORI Royalty	$	14,000
Cash received	$	(5,000)
Cost of Investment on Closing Date	$	9,000
Equity-accounted investment loss for the year		(571)
Investment as at December 31, 2023	**$**	**8,429**

The NORI Royalty was recorded as a royalty liability in the consolidated Balance Sheet as this represented a sale of future revenues which falls within the scope of ASC 470, Debt ("ASC 470"). The Company elected to account for the royalty liability at fair value through profit and loss. The fair value was determined using a market approach which entails examining recent royalty transactions prior to the reporting date, focusing on those transactions that involve similar metals as contained in NORI's polymetallic nodules. The Company compares the specific characteristics of these transactions to estimate the fair value. The fair value of the royalty liability as at December 31, 2023, remained unchanged at $14 million.

Financial results of Low Carbon Royalties are summarized below:

For the year ended	December 31 2023
Current Assets	$ 1,091
Non-Current Assets	26,315
Current Liabilities	131
Royalty Income	$ 399
Total Revenue	480
Comprehensive Income (Loss) for the year	$ (1,747)

10. Exploration Contracts

Significant Exploration Agreements

NORI Exploration Contract:

The Company's wholly-owned subsidiary, NORI, was granted the NORI Exploration Contract on July 22, 2011 under the sponsorship of Nauru. The contract application fee of $0.3 million, provides NORI with exclusive rights to explore for polymetallic nodules in the NORI Area for an initial term of 15 years (renewable for successive five-year periods) subject to complying with the exploration contract terms (Note 19) and provides NORI with the priority right to apply for an exploitation contract to collect polymetallic nodules in the same area.

NORI has a right to renounce, without penalty, in whole or part of its rights in the NORI Area at any time and therefore does not have a fixed commitment with relation to the NORI Exploration Contract (Note 19).

Marawa Agreements:

Marawa executed the Marawa Exploration Contract with the ISA on January 19, 2015. The Marawa Exploration Contract provides Marawa with exclusive rights to explore for polymetallic nodules in the Marawa Area for an initial term of 15 years (subject to renewal for successive five-year periods) subject to complying with the exploration contract terms and the priority right to apply for an exploitation contract to collect polymetallic nodules in the same area.

On March 17, 2012, the Company's wholly-owned subsidiary, DeepGreen Engineering Pte. Ltd. ("DGE"), entered into an Option Agreement ("Marawa Option Agreement") with Marawa and Kiribati. DGE has the right to terminate the Marawa Services Agreement at its sole discretion by giving written notice to Marawa and Kiribati, and such termination shall take effect two months following the date of the termination notice, provided that DGE shall pay to the ISA on behalf of Marawa the fees or payments legally owed to the ISA by Marawa (including the annual ISA exploration fee and ISA royalties and taxes) that are outstanding at the date of termination or that are incurred within 12 months after the date of such termination.

TOML Exploration Contract:

TOML was granted the TOML Exploration Contract on January 11, 2012 under the sponsorship of Tonga. The TOML Exploration Contract provides TOML with exclusive rights to explore for polymetallic nodules in the TOML Area for an initial term of 15 years (renewable for successive five-year periods) subject to complying with the exploration contract terms and a priority right to apply for an exploitation contract to collect polymetallic nodules in the same area.

On March 31, 2020, the Company entered into an acquisition agreement with Deep Sea Mining Finance Ltd. to acquire TOML and other related entities in the group (the "TOML Acquisition"). Total purchase price of the TOML Acquisition, before transaction costs, was $32.0 million comprising of $42.7 million for exploration contracts offset by $10.7 million for deferred tax liability. TOML holds an ISA exploration contract in the CCZ ("TOML Exploration Contract") and some exploration related equipment.

Reconciliation – Exploration Contracts

A reconciliation of the Company's capitalized exploration contracts is as follows:

	NORI Contract	Marawa Option Agreement	TOML Contract	Total
December 31, 2022	$ 250	$ 199	$ 42,701	$ 43,150
December 31, 2023	**$ 250**	**$ 199**	**$ 42,701**	**$ 43,150**

Exploration and Evaluation Expenses

The detail of exploration and evaluation expenses is as follows:

For the year ended December 31, 2023	NORI Exploration Contract	Marawa Option Agreement	TOML Exploration Contract	Total
Environmental Studies	**$ 16,421**	**$ —**	**$ —**	**$ 16,421**
Exploration Labor	**7,268**	**227**	**711**	**8,206**
Share-Based Compensation *(Note 15)*	**4,444**	**146**	**443**	**5,033**
Mining, Technological and Process Development	**13,694**	**—**	**1,262**	**14,956**
Prefeasibility Studies	**1,345**	**—**	**—**	**1,345**
Sponsorship, Training and Stakeholder Engagement [(1)]	**2,248**	**202**	**996**	**3,446**
Other	**433**	**—**	**9**	**442**
	$ 45,853	**$ 575**	**$ 3,421**	**$ 49,849**

(1) Sponsorship, Training and Stakeholder Engagement include $80 thousand of equity (RSU) settled expenses in 2023 (2022: $ nil)

For the year ended December 31, 2022	NORI Exploration Contract	Marawa Option Agreement	TOML Exploration Contract	Total
Environmental Studies	$ 38,022	$ —	$ —	$ 38,022
Exploration Labor	4,420	758	842	6,020
Share-Based Compensation *(Note 15)*	6,086	1,167	1,235	8,488
Mining, Technological and Process Development	1,823	47	118	1,988
PMTS	15,603	670	1,546	17,819
Allseas Warrant *(Note 13)*	62,910	—	6,990	69,900
Sponsorship, Training and Stakeholder Engagement	891	194	476	1,561
Other	706	16	79	801
	$ 130,461	**$ 2,852**	**$ 11,286**	**$ 144,599**

11. General and Administrative Expenses

	For the year ended December 31, 2023	For the year ended December 31, 2022
Professional and consulting fees[1]	**$ 6,584**	$ 6,795
Investor relations [2]	**1,547**	1,514
Office and sundry	**3,503**	4,926
Salaries and wages	**4,995**	5,921
Director fees	**774**	788
Share-based compensation	**4,122**	8,596
Transfer agent and filing fees	**363**	378
Travel expenses	**609**	600
Other expenses	**43**	—
General and Administrative Expenses	**$ 22,540**	$ 29,518

(1) Professional and consulting fees include $0.4 million of equity (RSU) settled expenses in 2023 (2022: $1 million).

(2) Investor relations include $nil million of equity (RSU) settled expenses in 2023 (2022: $0.3 million).

12. Financing Activity

Registered Direct Offering

On August 14, 2023, the Company entered into a securities purchase agreement with certain investors, pursuant to which the Company agreed to sell and issue, in a registered direct offering (the "Registered Direct Offering") 12,461,540 common shares and issue Class A Warrants to purchase 6,230,770 common shares (Note 13). Each common share and accompanying Class A Warrant were sold at a price of $2.00 per unit. The exercise price to purchase one common share under the Class A warrants is $3.00, subject to adjustment as provided in the warrant agreement. The aggregate gross proceeds to the Company from the Registered Direct Offering were expected to be approximately $24.9 million, before deducting fees payable to financial advisors and other estimated offering expenses payable by the Company ($23.6 million net of fees).

As at December 31, 2023, 7,961,540 common shares and Class A Warrants to purchase 3,980,770 common shares had been issued and the Company received gross proceeds amounting to $15.9 million. The Company incurred $1.3 million as offering expenses, resulting in net proceeds received of $14.6 million. Out of the total net proceeds received of $14.6 million, the net proceeds attributable to common shares were $11.4 million and the net proceeds attributable to Class A Warrants were $3.2 million.

On January 30, 2024, the Company received the remaining committed funding of $9 million (representing 4,500,000 common shares and 2,250,000 warrants) from an investor affiliated with the Company. The common shares and warrants were issued on January 31, 2024.

PIPE Financing

On August 12, 2022, the Company entered into three securities purchase agreements for the private placement of an aggregate of 37,978,680 of the Company's common shares. As at December 31, 2022, all of the 37,978,680 shares were issued and the Company received gross proceeds amounting to $30.4 million. The Company incurred $1.0 million as placement agent fees and offering expenses out of which expenses amounting to $0.2 million were settled by issuing 287,500 shares at an issue price of $0.80 per share.

13. Warrants

Public Warrants

Each whole Public Warrant entitles the holder to purchase one TMC common share at a price of $11.50 per share beginning on October 9, 2021, subject to restrictions described below. As at December 31, 2023, 15,000,000 Public Warrants were outstanding. Public Warrants may only be exercised for a whole number of shares. No fractional Public Warrants will be issued upon separation of the units and only whole Public Warrants will trade. The Public Warrants will expire on September 9, 2026 or earlier upon redemption or liquidation. Public Warrant holders do not have the rights or privileges of holders of common shares nor any voting rights until they exercise their warrants and receive common shares.

The Company will not be obligated to deliver any common shares pursuant to the exercise of a Public Warrant and will have no obligation to settle such warrant exercise unless a registration statement under the Securities Act of 1933, as amended ("Securities Act") with respect to the common shares underlying the Public Warrants is then effective and a prospectus relating thereto is current, subject to the Company satisfying its obligations with respect to registration, or a valid exemption from registration is available. No Public Warrants will be exercisable and the Company will not be obligated to issue a common share upon exercise of a Public Warrant unless the common share issuable upon such warrant exercise has been registered, qualified or deemed to be exempt under the securities laws of the state of residence of the registered holder of the warrants. In the event that the conditions in the two immediately preceding sentences are not satisfied with respect to a Public Warrant, the holder of such warrant will not be entitled to exercise such warrant and such warrant may have no value and expire worthless. In no event will the Company be required to net cash settle any Public Warrants. In the event that a registration statement is not effective for the exercised Public Warrants, the purchaser of a unit containing such warrant will have paid the full purchase price for the unit solely for the common share underlying such unit. The Company may call the Public Warrants for redemption:

- in whole and not in part;
- at a price of $0.01 per warrant;
- upon a minimum of 30 days' prior written notice of redemption; and
- if, and only if, the closing price of the common shares equals or exceeds $18.00 per share (as adjusted for share subdivisions, share capitalizations, reorganizations, recapitalizations and the like) for any 20 trading days within a 30-day trading period ending on the third trading day prior to the date on which the Company sends the notice of redemption to the warrant holders.

If the Company calls the Public Warrants for redemption in certain circumstances, management will have the option to require all holders that wish to exercise the Public Warrants to do so on a cashless basis, by surrendering the Public Warrants for a number of common shares per warrant equal to the lesser of:

- the quotient obtained by dividing (x) the product of the number of common shares underlying such warrant, multiplied by the excess of the average reported closing price of common shares for the ten trading days ending on the third trading day prior to the date on which the notice of redemption is sent to the holders ("Fair Market Value") over the warrant price by (y) the Fair Market Value, and
- 0.365.

Private Warrants

As at December 31, 2023, 9,500,000 Private Warrants were outstanding. The Private Warrants (including the common shares issuable upon exercise of the Private Warrants) were not transferable, assignable or salable until October 9, 2021, except to permitted transferees. The Private Warrants are identical to the Public Warrants, except that so long as they are held by the Sponsor or any of its permitted transferees:

(i) the Private Warrants are exercisable for cash or on a cashless basis, at the holder's option, and
(ii) the Private Warrants are not redeemable by the Company.

The Private Warrants are subject to the Company's redemption option at the price of $0.01 per warrant, if not held by the Sponsor or any of its permitted transferees, provided that the other conditions of such redemption are met, as described above. If holders of the Private Warrants elect to exercise the warrants on a cashless basis, the holder would pay the exercise price by surrendering their Private Warrants for a number of common shares equal to:

- the quotient obtained by dividing (x) the product of the number of common shares underlying the warrants, multiplied by the excess of the average reported closing price of the common shares for the ten trading days ending on the third trading day prior to the date on which the notice of warrant exercise is sent to the warrant agent ("fair market value") over the exercise price of the warrants by (y) the fair market value.

If the Private Warrants are held by a holder other than the Sponsor or any of its permitted transferees, the Private Warrants are redeemable by the Company in all redemption scenarios applicable to the Public Warrants and exercisable by such holders on the same basis as the Public Warrants.

The Company evaluated the Private Warrants under ASC 815-40, in conjunction with the SEC Statement, and concluded that they do not meet the criteria to be classified in shareholders' equity. Specifically, the terms of the warrants provide for potential changes to the settlement amounts dependent upon the characteristics of the warrant holder, and, because the holder of a warrant is not an input into the pricing of a fixed-for-fixed option on equity shares, such provision would preclude the warrant from being classified in equity and thus the warrants should be classified as a liability.

The Private Warrants were valued using a Black-Scholes model, which resulted in a Level 3 fair value measurement. The primary unobservable input utilized in determining the fair value of the Private Warrants was the expected volatility of the Company's common shares. As the Company's shares reached their two-year trading anniversary on September 9, 2023, the Company changed its approach in calculating volatility from solely the implied volatility of the Company's Public Warrants to now include an equal weight blend of the Public Warrants volatility and the historical volatility of the Company's share price. The expected volatility was estimated using a binomial model based on consideration of the implied volatility from the Company's Public Warrants adjusted to account for the call feature of the Public Warrants at prices above $18.00 during 20 trading days within any 30-day trading period and historical volatility of the share price of the common shares.

As at December 31, 2023, the fair value of outstanding Private Warrants of approximately $2 million is recorded as warrants liability. The following table presents the changes in the fair value of warrants liability:

	Private Warrants
Warrants liability as at December 31, 2022	$ 983
Increase in fair value of warrants liability	986
Warrants liability as at December 31, 2023	$ **1,969**

As at December 31, 2023, the fair value of the Private Warrants was estimated using the following assumptions:

	December 31, 2023	December 31, 2022
Exercise price	$ **11.50**	$ 11.50
Share price	$ **1.10**	$ 0.77
Volatility[1]	**105.34 %**	88.05 %
Term	**2.69 years**	3.69 years
Risk-free rate	**3.98 %**	4.04 %
Dividend yield	**0.0 %**	0.0 %

1. The Company used a blended volatility approach to calculate the fair value of the warrants on December 31, 2023 by assigning equal weights to both implied volatility of the Company's Public Warrants and the historical volatility of the share price. The volatility used in calculating the fair value of the warrants as at December 31, 2022 comprised only of the implied volatility of the Company's Public Warrants.

There were no exercises or redemptions of the Public Warrants or Private Warrants during the year ended December 31, 2023.

Allseas Warrant

The Allseas Warrant that was granted on March 4, 2021, vested and became exercisable for 11.6 million common shares upon successful completion of the PMTS in November 2022. The Company recognized a charge of $69.9 million in the fourth quarter of 2022, representing the fair market value of the Allseas Warrant on the date it was granted.

On July 26, 2023, the Allseas Warrant was exercised resulting in the issuance of 11,578,620 common shares of the Company on August 9, 2023, once the exercise amount of $115.8 thousand was received from Allseas (Note 8).

Class A Warrants

As a part of the Registered Direct Offering (Note 12), the Company issued 3,980,770 Class A Warrants for the purchase of common shares at an exercise price of $3.00 per share. The Class A Warrants expire on December 31, 2027. The valuation of these Class A Warrants was determined using a Monte Carlo simulation.

The Class A Warrants were valued on August 14, 2023, at a fair value of $0.80 per warrant. The fair value of the Class A Warrants was estimated using the following assumptions:

	August 14, 2023
Exercise price	$ 3.00
Share price	$ 1.41
Call price threshold	$ 6.50
Volatility	107.08 %
Term (years)	4.38
Risk-free rate	4.32 %
Dividend yield	0.0 %

The Class A Warrants contain a call provision under which if the Volume Weighted Average Price "VWAP" for 30 consecutive trading days exceeds $6.50, and the warrant holder does not possess material non-public information provided by the Company, the Company may call for cancellation of the unexercised warrants, offering $0.0001 per Warrant Share. If conditions for the call are met, the unexercised portion of these warrants will be cancelled ten Trading Days after the call notice is received.

The Class A Warrants were not determined to be liabilities under ASC 480 as they were not required to be redeemed. The Company classified the Class A Warrants as equity (per ASC 815), as the warrants entailed physical settlement and were also considered to be indexed to the Company's share, wherein, upon exercise, a fixed number of common shares would be issued on payment of a fixed exercise price. As at December 31, 2023, the Company recorded $3.2 million as additional paid in capital.

On January 31, 2024, the Company issued the remaining 2,250,000 Class A Warrants, after receiving the remaining committed funding from the Registered Direct Offering of $9 million (Notes 12 and 22).

14. Common Shares

Authorized and Issued

As at December 31, 2023, the authorized, issued and outstanding common shares and Special Shares of the Company are as follows:

	Authorized	Issued and Outstanding
Common shares	Unlimited, with no par value	306,558,710
Class A Special Shares	5,000,000, with no par value	4,448,259
Class B Special Shares	10,000,000, with no par value	8,896,399
Class C Special Shares	10,000,000, with no par value	8,896,399
Class D Special Shares	20,000,000, with no par value	17,792,922
Class E Special Shares	20,000,000, with no par value	17,792,922
Class F Special Shares	20,000,000, with no par value	17,792,922
Class G Special Shares	25,000,000, with no par value	22,241,179
Class H Special Shares	25,000,000, with no par value	22,241,179
Class I Special Shares	500,000, with no par value	500,000
Class J Special Shares	741,000, with no par value	741,000

The holders of the Company's common shares are entitled to one vote for each common share held.

Each class of Special Shares do not have voting rights and do not participate in earnings. The Special Shares automatically convert to TMC common shares if TMC common shares trade at a price on any 20 trading days within any 30-trading day period that is greater than or equal to the specific trigger price for the respective class of Special Share.

Below is a summary of the Special Shares and their respective vesting thresholds, assuming the full amount of Special Shares from Rollover Options are issued:

Special Share Class	A	B	C	D	E	F	G	H	I	J
Share Trigger price ($)	15	25	35	50	75	100	150	200	50	12
Special Shares (million)	5	10	10	20	20	20	25	25	0.5	0.7

As the Special Shares meet the indexation and equity classification criteria under ASC 815-40, the Special Shares have been classified as equity instruments at issuance.

Common Share Continuity

Common shares	Number	Amount
December 31, 2021	225,432,493	$ 296,051
Issuance of shares under PIPE financing *(Note 12)*	38,266,180	29,621
Exercise of stock options *(Note 15)*	118,461	142
Conversion of restricted share units	2,877,068	6,875
Share purchase under Employee Stock Purchase Plan *(Note 15)*	117,929	193
December 31, 2022	**266,812,131**	**$ 332,882**
Issuance of shares under Registered Direct Offering *(Note 12)*	7,961,540	11,420
Exercise of warrant by Allseas *(Note 13)*	11,578,620	70,016
Shares issued to Allseas *(Notes 8)*	15,000,000	15,910
Exercise of stock options *(Note 15)*	120,000	144
Conversion of restricted share units *(Note 15)*	4,912,747	7,720
Share purchase under Employee Stock Purchase Plan *(Note 15)*	173,672	147
December 31, 2023	**306,558,710**	**$ 438,239**

15. Share-Based Compensation

The Company's 2021 Incentive Equity Plan (the "Plan") provides that the aggregate number of common shares reserved for future issuance under the Plan as of December 31, 2023, is 44,372,170 common shares, including 10,672,485 shares added to the Plan in January 2023 pursuant to the Plan's automatic annual increase provision, provided that 2,243,853 of the outstanding common shares shall only be available for awards made to non-employee directors of the Company. On the first day of each fiscal year beginning in 2022 to the tenth anniversary of the closing of the Business Combination, the number of common shares that may be issued pursuant to the Plan is automatically increased by an amount equal to the lesser of 4% of the number of outstanding common shares or an amount determined by the board of directors.

Stock options

Pursuant to the Company's stock option plan, directors may, from time to time, authorize the issuance of stock options to directors, officers, employees, and consultants of the Company and its subsidiaries. The board of directors grants such options with vesting periods and exercise prices determined at its sole discretion.

As at December 31, 2023, there were 15,074,240 stock options outstanding under the Company's Short-Term Incentive Plan ("STIP") and 9,783,922 stock options outstanding under the Company's Long-Term Incentive Plan ("LTIP"). The Company makes awards under the STIP and LTIP under its equity incentive plans in effect at the time of the award, which is currently the Plan.

No new stock options were granted by the Company under the STIP or LTIP plans during 2023 and 2022.

Outstanding under STIP plan:

A continuity schedule summarizing the movements in the Company's stock options under the STIP plan is as follows:

	Number of Options Outstanding	Weighted average exercise price per option	Aggregate intrinsic value of stock options	Weighted average contractual life (years)
Outstanding – December 31, 2021	15,503,748	$ 1.40	$ 17,415	6.33
Cancelled/Forfeited	(28,947)	2.60	—	—
Exercised	(118,461)	0.65	—	—
Outstanding – December 31, 2022	**15,356,340**	**$ 1.40**	**$ 1,582**	**5.11**
Granted	—	—	—	—
Expired	(162,100)	0.87	—	—
Cancelled/Forfeited	—	—	—	—
Exercised	(120,000)	0.65	—	—
Outstanding – December 31, 2023	**15,074,240**	**$ 1.41**	**$ 5,425**	**4.18**
Vested and exercisable – December 31, 2023	**14,804,073**	**$ 1.28**	**$ 5,425**	**4.17**

A summary of the Company's stock options granted and outstanding under the Company's STIP as at December 31, 2023 is as follows:

Expiry Date	Exercise price	Weighted average life to expiry (years)	Number of Options Outstanding	Number of Options Exercisable
March 31, 2024	$ 0.65	0.25	73,811	73,811
December 31, 2025	$ 0.65	2.00	11,578	11,578
January 27, 2026	$0.52 - $2.59	2.08	975,229	975,229
February 2, 2026	$ 0.65	2.09	57,893	57,893
February 17, 2026	$0.22 - $0.52	2.13	431,494	431,494
June 1, 2028	$0.65 - $8.64	4.42	12,829,518	12,559,351
June 30, 2028	$ 2.59	4.50	694,717	694,717
			15,074,240	**14,804,073**

The total grant date fair value of STIP stock options that vested during the year ended December 31, 2023, was $1.5 million. As at December 31, 2023, total unrecognized share-based compensation expense of $47 thousand is expected to be recognized over a weighted-average recognition period of approximately one year.

As at December 31, 2023, the closing market price of the Company's common shares was $1.10 per share which was considered to be the fair value of the Company's common share used to determine the intrinsic value of outstanding stock options.

The aggregate intrinsic value of stock options exercised during the year ended December 31, 2023 was $188 thousand.

Outstanding under LTIP plan:

On March 4, 2021, the Company granted 9,783,922 stock options under its LTIP. These stock options have an exercise price of $0.65 per option and expire on June 1, 2028.

The LTIP awards vest as follows:

(1) Tranche 1 - 25% when the Company's market capitalization equals $3 billion;
(2) Tranche 2 - 35% when the Company's market capitalization equals $6 billion;
(3) Tranche 3 - 20% upon the date that the ISA grants an exploitation contract to the Company; and
(4) Tranche 4 - 20% upon the commencement of the first commercial production following the grant of the exploitation contract.

Tranche 1 and Tranche 2 vest based on the Company's market capitalization of $3 billion and $6 billion, respectively. Accordingly, these options are determined to be market-based awards for which the Company has calculated fair value and derived a service period through which to expense the related fair value. The options included in Tranche 1 and Tranche 2 had a grant date fair value of $5.59 per share and $5.42 per share and derived service periods of 0.33 years and 1.41 years, respectively. The Company will expense these awards ratably over the remaining service period.

Tranche 3 and Tranche 4 of the LTIP stock options vest based on the date the ISA grants an exploitation contract and the commencement of commercial production. These options are determined to be performance-based awards. The Company will recognize compensation costs for the performance-based awards if and when the Company concludes that it is probable that the performance conditions will be achieved. As at December 31, 2023, no compensation expense related to the performance based awards was recorded as the awarding of an ISA contract is outside the control of the Company. The Company will reassess the probability of the vesting of the performance-based awards at each reporting period and adjust the compensation cost when determined to be probable.

The aggregate intrinsic value of LTIP stock options as at December 31, 2023 was $4.4 million. None of the LTIP stock options were exercisable on December 31, 2023. The Company expects LTIP options to vest as and when the market and performance milestones described below are achieved. As at December 31, 2023, total unrecognized share-based compensation expense for the LTIP stock options was $23 million.

During the year ended December 31, 2023, the Company recognized $0.5 million of share-based compensation expense for stock options (originally issued under STIP and LTIP plans) in the statement of loss and comprehensive loss (2022: $9.5 million).

Share-based compensation expense for stock options totaling $0.3 million related to general and administration matters were charged to the statement of loss and comprehensive loss for the year ended December 31, 2023 (2022: $4.8 million). The Company recorded a total of $0.2 million of share-based compensation expense for stock options related to exploration and evaluation activities for the year ended December 31, 2023 (2022: $4.7 million).

Restricted Share Units

The Company may, from time to time, grant RSUs to directors, officers, employees, and consultants of the Company and its subsidiaries under the Plan. On each vesting date, RSU holders are entitled to receive common shares equivalent to the number of RSUs held provided the holder is providing service to the Company on such vesting date.

The details of RSUs granted by the Company during the year are as follows:

Vesting Period	2023	2022
Vesting Immediately [1][2]	**3,561,078**	1,721,729
Vesting fully on the anniversary of the grant date [3]	**1,014,349**	476,189
Vesting in thirds on each anniversary of the grant date [4]	**8,689,481**	464,632
Vesting in fourths on each anniversary of the grant date	**404,277**	527,800
Total Units Granted	**13,669,185**	3,190,350

1. Of the 3,561,078 units vesting immediately on grant date, 3,198,648 units were issued to settle liabilities with a carrying amount of $2.8 million, at a weighted average grant date fair value of $0.89 per RSU.

2. During the year ended December 31, 2023, the Company granted 274,912 units to consultants (2022: 649,157 units) resulting in $0.3 million, charged to professional and consulting fees under general and administrative expenses and $11 thousand charged to exploration and evaluation activities for the year ended December 31, 2023 (2022: $1.2 million of general and administrative expenses). During the year ended December 31, 2023, the Company also granted 43,478 units to consultants as a prepayment for their services (2022: nil).

3. During the year ended December 31, 2023, the Company granted 1,014,349 RSUs (2022: 476,189) to its non-employee directors under the Company's Non-employee Director Compensation Policy, which vest upon the Company's 2024 annual shareholders meeting. The total fair value of units granted as annual grants to the non-employee directors amounted to $700,000 ($700,000 in 2022).

4. During the year ended December 31, 2023, the Company granted 8,645,465 units, as payment for the 2022 LTIP awards and 44,016 units as a sign-on grant. The 2021 LTIP awards were granted in the fourth quarter of 2021 and totaled 3,500,000 units.

A summary of the RSU activity in 2023 is presented in the table below:

	Number of RSUs Outstanding	Weighted average grant-date fair value per RSU
Outstanding – December 31, 2022	3,815,143	$ 2.75
Granted	13,669,185	0.92
Forfeited	(86,700)	0.96
Exercised	(4,912,748)	1.57
Outstanding – December 31, 2023	**12,484,880**	**$ 1.23**

The grant date fair value of RSUs is equivalent to the closing share price of the Company's common shares on the date of grant. During the year, a total of $8.6 million was charged to the statement of loss and comprehensive loss as share-based compensation expense for RSUs (2022: $7.5 million). Share-based compensation expense for RSUs totaling $3.8 million related to general and administration matters was charged to the statement of loss and comprehensive loss for the year ended December 31, 2023 (2022: $3.8 million). The Company recorded a total of $4.8 million of share-based compensation expense for RSUs related to exploration and evaluation activities for the year ended December 31, 2023 (2022: $3.7 million). As at December 31, 2023, total unrecognized share-based compensation expense for RSUs was $6.9 million (December 31, 2022 - $6.1 million). The fair value of shares vested during the year ended December 31, 2023, amounted to $8.3 million (December 31, 2022 - $7.2 million).

As at December 31, 2023, an aggregate of 746,445 vested units were being processed and due to be converted into common shares.

Employee Stock Purchase Plan

On May 31, 2022, TMC's 2021 Employee Stock Purchase Plan ("ESPP") was approved at the Company's 2022 annual shareholders meeting. As of December 31, 2023, there were 7,922,445 common shares reserved for issuance under the ESPP. This included 2,668,121 shares added to the ESPP in January 2023 pursuant to the ESPP's automatic annual increase provision discussed below. Under the ESPP, the number of shares reserved for issuance is subject to an annual increase provision which provides that on the first day of each of the Company's fiscal years starting in 2022, common shares equal to the lesser of (i) 1% percent of the common shares outstanding on the last day of the immediately preceding fiscal year, or (ii) such lesser number of shares as is determined by the board of directors will be added to the ESPP.

Participation in the ESPP is available to all full-time and certain part-time employees, subject to certain conditions. The ESPP comprises offering periods that are twenty-four (24) months in length, which begin on approximately every June 1 and December 1. Each offering period includes four purchase periods of six months each, which begin on approximately every June 1 and December 1, or at such other times designated by the board of directors or its compensation committee. At the exercise date, which is the last business day of each purchase period, the accumulated deductions from participating employees are used to purchase common shares of the Company. Shares are purchased at a price equal to 85% of the lower of either the share price of the Company's common shares on the first business day of the particular offering period or the last business day of the purchase period. The ESPP also has an automatic reset feature wherein, if the share price of the common share on any exercise date is less than the share price of the common share on the first business day of the applicable offering period, then such offering period shall automatically terminate immediately after the purchase of the common shares. In such case, a new offering period shall commence on the first business day following the exercise date.

The ESPP includes the following limitations:

- an employee's contribution is limited to 15% of the employee's annual gross earnings, not to exceed $25,000 per year,
- an employee's purchases in any offering period cannot exceed 15,000 common shares, and
- an employee's purchases are capped, not to exceed 5% of the Company's total outstanding common shares.

During 2023, the Company issued 173,672 common shares (2022: 117,929 common shares) to its employees as part of its ESPP program. A total of $47 thousand was charged to the statement of loss and comprehensive loss as share-based compensation expense for the year ended December 31, 2023, representing the share price purchase discount offered by the Company (2022: $0.1 million). From the amount charged in 2023, $26 thousand was recorded in exploration and evaluation expenses (2022: $35 thousand) and $21 thousand was recorded in general and administrative expenses (2022: $67 thousand).

16. Loss per Share

Basic loss per share is computed by dividing the loss by the weighted-average number of common shares of the Company outstanding during the period. Diluted loss per share is computed by giving effect to all common share equivalents of the Company, including outstanding stock options, RSUs, warrants, Special Shares and options to purchase Special Shares, to the extent these are dilutive. Basic and diluted loss per share was the same for each period presented as the inclusion of all common share equivalents would have been anti-dilutive.

Anti-dilutive equivalent common shares were as follows:

	For the year ended December 31, 2023	For the year ended December 31, 2022
Outstanding options to purchase common shares	**24,858,162**	25,140,262
Outstanding RSUs	**12,484,880**	3,815,143
Outstanding shares under ESPP	**8,802**	12,212
Outstanding warrants	**28,480,770**	36,078,620
Outstanding Special Shares and options to purchase Special Shares	**136,239,964**	136,239,964
Total anti-dilutive common equivalent shares	**202,072,578**	201,286,201

17. Financial Instruments

Categories of Financial Instruments

	December 31, 2023	December 31, 2022
Financial assets		
Amortized cost		
Cash	$ **6,842**	$ 46,876
Receivables and Prepayments	**1,978**	2,726
	$ **8,820**	$ 49,602
Financial liabilities		
Amortized cost		
Accounts payable and accrued liabilities	$ **31,334**	$ 41,614
Fair value through profit or loss	**—**	—
Royalty liability	**14,000**	—
Warrants liability	**1,969**	983
	$ **47,303**	$ 42,597

18. Related Party Transactions

The Company's subsidiary, DeepGreen Engineering Pte. Ltd., is engaged in a consulting agreement with SSCS Pte. Ltd. ("SSCS") to manage offshore engineering studies. A director of DGE is employed through SSCS. Consulting services during the year ended December 31, 2023 totaled $212 thousand, (2022: $275 thousand), out of which a total $170 thousand (2022: $220 thousand), is disclosed as exploration labor within exploration and evaluation expenses (Note 10) and $42 thousand is disclosed as general and administrative expenses (2022: $55 thousand). As at December 31, 2023, the amount payable to SSCS was $17 thousand (December 31, 2022 - $17 thousand).

The Company's Chief Ocean Scientist provides consulting services to the Company through Ocean Renaissance LLC ("Ocean Renaissance") where he is a principal. Consulting services during year ended December 31, 2023 amounted to $331 thousand (2022: $375 thousand), out of which $149 thousand (2022 $188 thousand:), is disclosed as exploration labor within exploration and evaluation expenses (Note 10) and $182 thousand is disclosed as general and administrative expenses (2022: $187 thousand). As at December 31, 2023, the amount payable to Ocean Renaissance was $25 thousand (December 31, 2022- $nil).

The Registered Direct Offering announced on August 14, 2023, included approximately $0.3 million from the participation of several of the Company's Directors and Officers. In addition, the committed funding included $10 million from ERAS Capital LLC, the investment fund of one of the Company's Directors, $1 million of which was received on August 16, 2024 and the remaining $9 million was received on January 30, 2024 (Note 12).

Apart from the above-mentioned transactions, the Company had transactions with Allseas which are detailed in Note 8.

19. Commitments and Contingent Liabilities

NORI Exploration Contract

As part of the NORI Exploration Contract with the ISA, NORI submitted a periodic review report to the ISA in 2021, covering the 2017-2021 period. The periodic review report, which included a proposed work plan and estimated budget for 2022 to 2026, has been reviewed by and agreed with the ISA, and the Company is implementing the five-year plan. The cost of the estimated work plan for 2024 onwards is dependent on the ISA's approval of the NORI Area D exploitation application. Should the approval of NORI's exploitation application for NORI Area D be delayed or rejected, NORI intends to revise its estimated future work plan in respect of its NORI Area. Work plans are reviewed annually by the Company, agreed with the ISA and may be subject to change depending on the Company's progress to date.

Marawa Option Agreement and Services Agreement

Through DGE's Marawa Option Agreement and separate Services Agreement with Marawa with respect to the Marawa Area, Marawa and DGE submitted a periodic review report to the ISA in 2019, covering 2015-2019. The periodic review report includes a proposed work plan and estimated budget for the 2020-2024 five-year period. The five-year estimated expenditure is indicative and subject to change, Marawa will review the program regularly and Marawa will inform the ISA of any changes through its annual reports. To date, limited offshore marine resource definition activities in the Marawa Contract Area have occurred. The Company expects to collaborate with Marawa to assess the viability of any potential project in the Marawa Contract Area, although the timing of such assessment is unclear. Marawa has delayed certain of its efforts in the Marawa Contract Area while it determines how it will move forward with additional assessment work.

TOML Exploration Contract

As part of the TOML Exploration Contract, TOML submitted a periodic review report to the ISA in 2021, covering the 2017-2021 period. The periodic review report included a summary of work completed over the five-year period and a program of activities and estimated budget for the next five-year period. On December 23, 2022, the ISA accepted TOML's proposed program of activities for the 2022-2026 five-year period, which included an estimated five-year expenditure of up to $44 million. The five-year estimated expenditure is indicative and subject to change, TOML will review the program regularly and TOML will inform the ISA of any changes through its annual reports.

Offtake Agreements

On May 25, 2012, the Company's wholly-owned subsidiary, DGE, and Glencore International AG ("Glencore") entered into a copper offtake agreement and a nickel offtake agreement. DGE has agreed to deliver to Glencore 50% of the annual quantity of copper and nickel produced at a DGE-owned processing facility from nodules derived from the NORI Area at London Metal Exchange referenced market pricing with allowances for product quality and delivery location. Both the copper and nickel offtake agreements are for the life of the Company's rights to the NORI Area. Either party may terminate the agreement upon a material breach or insolvency of the other party. Glencore may also terminate the agreement by giving twelve months' notice.

Sponsorship Agreements

On July 5, 2017, Nauru, the Nauru Seabed Minerals Authority and NORI entered into a sponsorship agreement formalizing certain obligations of the parties in relation to NORI's exploration and potential exploitation of the NORI Area. Upon reaching the minimum recovery level within the exploitation contract area, NORI will pay Nauru a seabed mineral recovery payment based on the polymetallic nodules recovered from the exploitation contract area. In addition, NORI will pay an administration fee each year to Nauru for such administration and sponsorship, which is subject to review and increase in the event NORI is granted an ISA exploitation contract. NORI has begun discussions with the Government of Nauru to renegotiate the existing sponsorship agreement and has also committed to ensuring NORI pays corporate income tax within Nauru.

On March 8, 2008, Tonga and TOML entered into a sponsorship agreement formalizing certain obligations of the parties in relation to TOML's exploration and potential exploitation of the TOML Area ("TOML Sponsorship Agreement"). Upon reaching the minimum recovery level within the exploitation contract area, TOML has agreed to pay Tonga a seabed mineral recovery payment based on the polymetallic nodules recovered from the exploitation contract area. In addition, TOML has agreed to pay reasonable direct costs incurred by Tonga to administer the obligations of Tonga to the ISA. On September 23, 2021, the Company and Tonga updated the TOML Sponsorship Agreement harmonizing the terms of its engagement with TOML with those held by NORI with Nauru. TOML expects to renegotiate the existing sponsorship agreement with Tonga prior to entering into operations in the TOML area and has committed to paying corporate income tax within Tonga.

Contingent Liability

On October 28, 2021, a shareholder filed a putative class action against the Company, one of the Company's executives and a former director in federal district court for the Eastern District of New York, captioned Caper v. TMC The Metals Company Inc. F/K/A Sustainable Opportunities Acquisition Corp., Gerard Barron and Scott Leonard. The complaint alleges that all defendants violated Section 10(b) of the Exchange Act of 1934 and Rule 10b-5 promulgated thereunder, and Messrs. Barron and Leonard violated Section 20(a) of the Exchange Act, by making false and/or misleading statements and/or failing to disclose information about the Company's operations and prospects during the period from March 4, 2021 and October 5, 2021. On November 15, 2021, a second complaint containing substantially the same allegations was filed, captioned Tran v. TMC the Metals Company, Inc. These cases have been consolidated. On March 6, 2022, a lead plaintiff was selected. An amended complaint was filed on May 12, 2022, reflecting substantially similar allegations, with the Plaintiff seeking to recover compensable damages caused by the alleged wrongdoings. The Company denies any allegations of wrongdoing and filed and served the plaintiff a motion to dismiss on July 12, 2022 and intend to defend against this lawsuit. On July 12, 2023, an oral hearing on the motion to dismiss was held. The parties are currently awaiting a ruling. There is no assurance, however, that the Company or the other defendants will be successful in the Company's defense of this lawsuit or that insurance will be available or adequate to fund any settlement or judgment or the litigation costs of this action. If the motion to dismiss is unsuccessful, there is a possibility that the Company may incur a loss in this matter. Such losses or range of possible losses cannot be reliably estimated. A resolution of this lawsuit adverse to the Company or the other defendants, however, could have a material effect on the Company's financial position and results of operations in the period in which the lawsuit is resolved.

On January 23, 2023, investors in the 2021 private placement from the Business Combination filed a lawsuit against us in the Commercial Division of New York Supreme Court, New York County, captioned Atalaya Special Purpose Investment Fund II LP et al. v. Sustainable Opportunities Acquisition Corp. n/k/a TMC The Metals Company Inc., Index No. 650449/2023 (N.Y. Sup. Ct.). The Company filed a motion to dismiss on March 31, 2023, after which the plaintiffs filed an amended complaint on June 5, 2023. The amended complaint alleges that the Company breached the representations and warranties in the plaintiffs' private placement Subscription Agreements and breached the covenant of good faith and fair dealing. The Plaintiffs are seeking to recover compensable damages caused by the alleged wrongdoings. The Company deny any allegations of wrongdoing and filed a motion to dismiss the amended complaint on July 28, 2023. On December 7, 2023, the Court granted our motion to dismiss the claim for breach of the covenant of good faith and fair dealing and denied our motion to dismiss the breach of the Subscription Agreement claim. The Company filed a notice of appeal regarding the Court's denial of our motion to dismiss the breach of the Subscription Agreement claim. There is no assurance that the Company will be successful in our defense of this lawsuit or that insurance will be available or adequate to fund any settlement or judgment or the litigation costs of this action. Such losses or range of possible losses cannot be reliably estimated.

20. Segmented Information

The Company's business consists of only one operating segment, namely exploration of seafloor polymetallic nodules, which includes the development of a metallurgical process to treat such seafloor polymetallic nodules. Details on the geographical segmentation of the Company's long-lived assets based on where each legal entity is domiciled are as follows:

Equipment	December 31, 2023	December 31, 2022
Nauru	**$ 1,128**	$ 1,154
Singapore	**1,643**	863
Tonga	**5**	7
North America	**—**	1
Total	**$ 2,776**	$ 2,025

21. Income Taxes

Reconciliation of Effective Tax Rate

The Company is subject to Canadian federal and provincial tax for the estimated assessable profit at a rate of 26.68% for the year ended December 31, 2023 (2022: 26.61%). The Company had no assessable profit in Canada for all periods disclosed.

The income tax expense at statutory rates for the Company can be reconciled to the reported loss for the years 2023 and 2022 per the statement of loss and comprehensive loss as follows:

	For the year ended December 31, 2023	For the year ended December 31, 2022[1]
Loss for the year, before taxes	**$ (73,740)**	$ (170,887)
Canadian Federal and Provincial income tax rates	**26.68 %**	26.61 %
Income tax recovery based on the above rates	**$ (19,677)**	$ (45,473)
Permanent differences	**1,556**	1,926
Effect of differences in future and foreign tax rates	**14,038**	36,903
Valuation allowance changes affecting the provision of income taxes	**4,124**	6,721
Total income taxes	**$ 41**	$ 77

(1) Comparative amounts for the year ended December 31, 2022 are restated based on actual tax returns filed.

The Company currently has no uncertain tax positions and is therefore not reflecting any adjustments.

Components of the Company's deferred income tax assets (liabilities) are as follows:

	December 31, 2023	December 31, 2022
Deferred Tax Assets		
Non-capital losses	**$ 21,195**	$ 16,011
Investments	**384**	172
Equipment	**260**	79
Share issuance costs	**496**	218
Total deferred income tax assets	**$ 22,335**	$ 16,480
Valuation allowance	**(22,335)**	(16,480)
Deferred tax asset recognized	**$ —**	$ —
Deferred Tax Liability		
Difference between the book value and the tax basis of the TOML exploration contract (Note 7)	**$ (10,675)**	$ (10,675)
Deferred tax liability recognized	**$ (10,675)**	$ (10,675)

(1) Comparative amounts for the year ended December 31, 2022 are restated based on actual tax returns filed.

Deductible temporary differences, unused tax losses and unused tax credits are as follows:

	December 31, 2023	December 31, 2022	Expiry Date Range
Non-capital losses	**$ 89,333**	**$ 67,409**	See below
Investments	**$ 2,856**	**$ 1,273**	Not applicable
Equipment	**$ 962**	**$ 291**	Not applicable
Share issuance costs	**$ 1,860**	**$ 821**	Not applicable

As at December 31, 2023, the Company had non-capital loss carry-forwards of $89.3 million that may be used to offset future taxable income.

These losses, if not utilized, will expire as follows:

	Canada	Singapore	United States	Tonga
2035	$ —	$ —	$ 2	$ —
2041	3,741	—	—	—
2042	13,707	—	1	—
2043	12,343	—	3	—
No expiry	—	20,567	—	38,969
Loss carry-forwards	**$ 29,791**	**$ 20,567**	**$ 6**	**$ 38,969**

The Company files income tax returns in Canada, the United States, Singapore and Tonga, and is subject to examination in these jurisdictions for all years since the Company's inception in 2011. As at December 31, 2023, all tax years are subject to examination by the tax authorities and no tax authority audits are currently underway. Fiscal years outside the normal statute of limitation remain open to audit by tax authorities due to tax attributes generated in those early years which have been carried forward and may be audited in subsequent years when utilized. The timing of the resolution, settlement and closure of any income tax audits is highly uncertain, and the Company is unable to estimate the full range of possible adjustments to the balance of gross unrecognized tax benefits. It is possible that the balance of gross unrecognized tax benefits could significantly change in the next twelve months. As at December 31, 2023, the 2023 tax year filings for the Company and its subsidiaries (where applicable) remain unfiled and have not been assessed by the relative tax authorities.

22. Quarterly Financial Data (Unaudited) Restatement of Previously Issued Financial Statements

The right to royalty payments underlying the NORI asset (sale of future revenue) amounting to $14 million (Note 9) was considered as the transfer (sale) of a non-financial asset in the Company's previously issued financial statements for the three months ended March 31, 2023, the six months ended June 30, 2023 and the nine months ended September 30, 2023 contained in its Quarterly Reports on Form 10-Q for the quarter ended March 31, 2023, June 30, 2023 and September 30, 2023, respectively, filed with the SEC (the "Previous Financial Statements"). In preparing the Previous Financial Statements, the Company derecognized the capitalized exploration contract related to the NORI project amounting to $0.25 million and recorded the remaining value of the non-financial asset received amounting to $13.75 million as a gain on disposition. In connection with the preparation of the financial statements for the year ended December 31, 2023 and a re-evaluation of ASC 470 by the Company, the Company concluded that the sale of future revenue falls within the scope of ASC 470 and, as a result, the Company re-evaluated whether the offsetting entry to the proceeds it received from Low Carbon Royalties should be classified as debt or deferred income. As the transaction with Low Carbon Royalties was considered an equity investment rather than a sale transaction, the sale of future revenue was reclassified as Royalty Liability, as per ASC 470, in the Company's 2023 financial statements for the year ended December 31, 2023. Factors that also influenced this reclassification included the Company's continued significant involvement in generating future cash flows from operations and the fact that the earnings process implied in this transaction had not been completed. As a result, the Company has restated the Previous Financial Statements.

- This error had no impact on our annual audited financial statements as of December 31, 2023.
- This error had no impact on the consolidated statements of loss and comprehensive loss for the three-month period ended June 30, 2023 and the three month period ended September 30, 2023
- The error and restatement of the 2023 quarterly financial statements does not impact the Company's reported cash position in any of the previously reported periods or as of December 31, 2023.

In the following tables, we have presented a reconciliation of our unaudited condensed consolidated financial information as originally reported in the Previous Financial Statements to the as restated amounts as of and for the three months ended March 31, 2023, six months ended June 30, 2023, and nine months ended September 30, 2023. The restatements will be reflected in the comparative financial statements included in our future filings of our 2024 unaudited condensed consolidated financial statements within our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2024, June 30, 2024 and September 30, 2024, respectively.

The tables below set forth the unaudited condensed consolidated balance sheet information, the unaudited condensed statements of loss and comprehensive loss and the unaudited condensed consolidated statements of cash flows including the amounts as reported, adjustments and the amounts as restated (in thousands, except per share amounts):

Condensed Consolidated Balance Sheet Information

	As at March 31, 2023			As at June 30, 2023			As at September 30, 2023		
	As Previously Reported	Restatement Adjustments	As Restated	As Previously Reported	Restatement Adjustments	As Restated	As Previously Reported	Restatement Adjustments	As Restated
ASSETS									
Current									
Cash	$ 28,390	$ —	28,390	$ 20,006	$ —	20,006	$ 22,548	—	$ 22,548
Receivables and prepayments	3,230	—	3,230	1,637	—	1,637	5,325	—	5,325
	31,620	—	31,620	21,643	—	21,643	27,873	—	27,873
Non-current									
Exploration contracts	42,900	250	43,150	42,900	250	43,150	42,900	250	43,150
Equipment	1,997	—	1,997	1,970	—	1,970	2,078	—	2,078
Right-of-use asset	—	—	—	—	—	—	6,198	—	6,198
Investment	8,781	—	8,781	8,644	—	8,644	8,525	—	8,525
	53,678	250	53,928	53,514	250	53,764	59,701	250	59,951
TOTAL ASSETS	**$ 85,298**	**$ 250**	**$ 85,548**	**$ 75,157**	**$ 250**	**$ 75,407**	**$ 87,574**	**$ 250**	**$ 87,824**
LIABILITIES									
Current									
Accounts payable and accrued liabilities	17,544	—	17,544	18,113	—	18,113	19,344	—	19,344
	17,544	—	17,544	18,113	—	18,113	19,344	—	19,344
Non-current									
Deferred tax liability	10,675	—	10,675	10,675	—	10,675	10,675	—	10,675
Royalty Liability	—	14,000	14,000	—	14,000	14,000	—	14,000	14,000
Warrants liability	1,528	—	1,528	2,314	—	2,314	2,197	—	2,197
TOTAL LIABILITIES	**$ 29,747**	**$ 14,000**	**$ 43,747**	**$ 31,102**	**$ 14,000**	**$ 45,102**	**$ 32,216**	**$ 14,000**	**$ 46,216**
EQUITY									
Common shares *(unlimited shares, no par value)*	345,090	—	345,090	345,775	—	345,775	434,099	—	434,099
Special Shares	—	—	—	—	—	—	—	—	—
Additional paid in capital	186,796	—	186,796	188,722	—	188,722	124,168	—	124,168
Accumulated other comprehensive loss	(1,216)	—	(1,216)	(1,216)	—	(1,216)	(1,216)	—	(1,216)
Deficit	(475,119)	(13,750)	(488,869)	(489,226)	(13,750)	(502,976)	(501,693)	(13,750)	(515,443)
TOTAL EQUITY	**$ 55,551**	(13,750)	**$ 41,801**	**$ 44,055**	(13,750)	**$ 30,305**	**$ 55,358**	(13,750)	**$ 41,608**
TOTAL LIABILITIES AND EQUITY	**$ 85,298**	**$ 250**	**$ 85,548**	**$ 75,157**	**$ 250**	**$ 75,407**	**$ 87,574**	**$ 250**	**$ 87,824**

Condensed Consolidated Statements of Loss and Comprehensive Loss

	For three months period ended March 31, 2023			For six months period ended June 30, 2023			For nine months period ended September 30, 2023		
	As Previously Reported	Restatement Adjustments	As Restated	As Previously Reported	Restatement Adjustments	As Restated	As Previously Reported	Restatement Adjustments	As Restated
Operating expenses									
Exploration and evaluation expenses	$ 7,169	—	$ 7,169	$ 15,267	—	$ 15,267	$ 23,172	—	$ 23,172
General and administrative expenses	6,214	—	6,214	11,345	—	11,345	15,958	—	15,958
Operating loss	**13,383**	**—**	**13,383**	**26,612**	**—**	**26,612**	**39,130**	**—**	**39,130**
Other items									
Equity-accounted investment loss	219	—	219	356	—	356	475	—	475
Gain on disposition of asset	(13,750)	13,750	—	(13,750)	13,750	—	(13,750)	13,750	—
Change in fair value of warrants liability	544	—	544	1,331	—	1,331	1,214	—	1,214
Foreign exchange loss	29	—	29	52	—	52	66	—	66
Interest income	(454)	—	(454)	(773)	—	(773)	(1,092)	—	(1,092)
Fees and interest on credit facility	27	—	27	277	—	277	529	—	529
Loss and comprehensive loss for the year, before tax	**$ (2)**	**$ 13,750**	**$ 13,748**	**$ 14,105**	**$ 13,750**	**$ 27,855**	**$ 26,572**	**$ 13,750**	**$ 40,322**
Tax expense	—	—	—	—	—	—	—	—	—
Loss (gain) and comprehensive loss (gain) for the period, after tax	**$ (2)**	**$ 13,750**	**$ 13,748**	**$ 14,105**	**$ 13,750**	**$ 27,855**	**$ 26,572**	**$ 13,750**	**$ 40,322**
Loss per share - basic and diluted	**—**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.05**	**$ 0.10**	**$ 0.09**	**$ 0.05**	**$ 0.14**
Weighted average number of Common Shares outstanding – basic	**272,029,603**	**272,029,603**	**272,029,603**	**276,702,050**	**276,702,050**	**276,702,050**	**282,745,892**	**282,745,892**	**282,745,892**
Weighted average number of Common Shares outstanding – diluted	**300,376,133**	**272,029,603**	**272,029,603**	**276,702,050**	**276,702,050**	**276,702,050**	**282,745,892**	**282,745,892**	**282,745,892**

Condensed Consolidated Statements of Cash Flows

	For three months period ended March 31, 2023			For six months period ended June 30, 2023			For nine months period ended September 30, 2023		
	As Previously Reported	Restatement Adjustments	As Restated	As Previously Reported	Restatement Adjustments	As Restated	As Previously Reported	Restatement Adjustments	As Restated
Operating activities									
Gain/(Loss) for the period	2	(13,750)	(13,748)	(14,105)	(13,750)	(27,855)	(26,572)	(13,750)	(40,322)
Items not affecting cash:									
Amortization	88	—	88	175	—	175	262	—	262
Lease expense	—	—	—	—	—	—	318.00	—	318.00
Expenses settled with share-based payments	1,775	—	1,775	4,307	—	4,307	6,839	—	6,839
Expenses to be settled with share-based payments	15	—	15	—	—	—	—	—	—
Equity-accounted investment loss	219	—	219	356	—	356	475	—	475
Gain on disposition of asset	(13,750)	13,750	—	(13,750)	13,750	—	(13,750)	13,750	—
Change in fair value of warrants liability	545	—	545	1,331	—	1,331	1,214	—	1,214
Vesting of Allseas Warrant	—	—	—	—	—	—	—	—	—
Unrealized foreign exchange movement	(20)	—	(20)	(17)	—	(17)	(24)	—	(24)
Changes in working capital:		—		—	—	—	—	—	—
Receivables and prepayments	(469)	—	(469)	1,123	—	1,123	(2,364)	—	(2,364)
Accounts payable and accrued liabilities	(11,877)	—	(11,877)	(11,277)	—	(11,277)	(10,757)	—	(10,757)
Net cash used in operating activities	(23,472)	—	(23,472)	(31,857)	—	(31,857)	(44,359)	—	(44,359)
Investing activities									
Cash received from investment in Low Carbon Royalties	5,000	(5,000)	—	5,000	(5,000)	—	5,000	(5,000)	—
Acquisition of equipment	—	—	—	(75)	—	(75)	(175)		(175)
Net cash provided by (used in) investing activities	5,000	(5,000)	—	4,925	(5,000)	(75)	4,825	(5,000)	(175)
Financing activities									
Proceeds from Low Carbon Royalties investment	—	5,000	5,000	—	5,000	5,000	—	5,000	5,000
Proceeds from Registered Direct Offering	—	—	—	—	—	—	15,723	—	15,723
Expenses paid for Registered Direct Offering	—	—	—	—	—	—	(779)	—	(779)
Proceeds from PIPE financing	—	—	—	—	—	—	—	—	—
Expenses paid for PIPE financing	—	—	—	—	—	—	—	—	—
Proceeds from employee stock plan	—	—	—	49	—	49	49	—	49
Proceeds from exercise of stock options	—	—	—	—	—	—	77	—	77
Proceeds from exercise of warrants by Allseas	—	—	—	—	—	—	116	—	116
Proceeds from issuance of shares	—	—	—	30	—	30	30	—	30
Taxes withheld and paid on share-based compensation	—	—	—	—	—	—	—	—	
Net cash provided by financing activities	—	5,000	5,000	79	5,000	5,079	15,216	5,000	20,216
Decrease in cash	(18,472)	—	(18,472)	(26,853)	—	(26,853)	(24,318)	—	(24,318)
Impact of exchange rate changes on cash	20	—	20	17	—	17	24	—	24
Cash - beginning of period	46,842	—	46,842	46,842	—	46,842	46,842	—	46,842
Cash - end of period	28,390	—	28,390	20,006	—	20,006	22,548	—	22,548

23. Subsequent Events

Amendment to Credit Facility with Allseas Affiliate

On March 22, 2024, the Company entered into the Second Amendment to the Unsecured Credit Facility with the Lender, the parent of Allseas Investments S.A. and an affiliate of Allseas, to extend the Credit Facility to August 31, 2025 and to provide that the underutilization fee thereunder shall cease to be payable after the date on which the Company or the Lender gives notice of termination of the agreement. Under the amended Credit Facility, the Company may borrow from the Lender up to $25,000,000 in the aggregate through August 31, 2025.

Credit Facility with ERAS Capital LLC and Gerard Barron

On March 22, 2024, the Company entered into an Unsecured Credit Facility (the "2024 Credit Facility") with Gerard Barron, our Chief Executive Officer and Chairman, and ERAS Capital LLC, the family fund of our director, Andrei Karkar (collectively, the "2024 Lenders"), pursuant to which, the Company may borrow from the 2024 Lenders up to $20,000,000 in the aggregate ($10,000,000 from each of the 2024 Lenders), from time to time, subject to certain conditions. All amounts drawn under the 2024 Credit Facility will bear interest at the 6-month Secured Overnight Funding Rate (SOFR), 180-day average plus 4.0% per annum payable in cash semi-annually (or plus 5% if paid-in-kind at maturity, at our election) on the first business day of each of June and January. The Company will pay an underutilization fee equal to 4.0% per annum payable semi-annually for any amounts that remain undrawn under the 2024 Credit Facility. The Company has the right to pre-pay the entire amount outstanding under the 2024 Credit Facility at any time, before the 2024 Credit Facility's maturity of September 22, 2025. The 2024 Credit Facility also contains customary events of default. The 2024 Credit Facility will terminate automatically if the Company or any of its subsidiaries raise at least $50,000,000 in the aggregate (i) through the issuance of any of the Company's or its subsidiaries' debt or equity securities, or (ii) in prepayments under an off-take agreement or similar commercial agreement.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were not effective as of December 31, 2023, as a result of a material weakness in our internal control over financial reporting as described below.

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include controls and procedures designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure.

In light of the material weakness in our internal control over financial reporting, we performed additional procedures to ensure that our consolidated financial statements included in this Annual Report were prepared in accordance with U.S. GAAP. Following such additional procedures, our management, including our principal executive officer and principal financial officer, has concluded that our consolidated financial statements present fairly, in all material respects, our financial position, results of operations and cash flows for the periods presented in this Annual Report, in conformity with U.S. GAAP.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act, as a process designed by, or under the supervision of, the company's principal executive and principal financial officers and effected by the company's board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. The company's internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

As of December 31, 2023, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management concluded that our internal control over financial reporting was not effective as management identified a material weakness in our internal control over the accounting for significant non-routine transactions that resulted from the inadequate and untimely involvement of stakeholders and technical advisors with an appropriate level of expertise to account for a non-routine, unusual and complex transaction. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our financial statements will not be prevented or detected on a timely basis.

This material weakness resulted in errors in the financial statements and related disclosures in our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2023, and for the six months ended June 30, 2023 and nine months ended September 30, 2023. The cumulative errors in the three periods were made by management in the financial statements as of and for the year ended December 31, 2023 included in this Annual Report, and as such, had no impact on our annual audited financial statements for the year ended December 31, 2023 included in this Annual Report. See Note 22 to the audited consolidated financial statements for the year ended December 31, 2023 included elsewhere in this Annual Report for more information about these changes.

In order to remediate this material weakness, we are in the process of developing and rolling out training on processes and controls related to non-routine transactions and evaluating the circumstances under which we use technical advisors in connections with evaluating non-routine transactions. We are also considering engaging the assistance of additional third-party resources as deemed appropriate to assist management in its remediation efforts.

Our internal control over significant non-routine transactions need to be in operation and tested for sufficient instances to be considered effective. Consequently, the controls for non-routine transactions were ineffective as of December 31, 2023.

Notwithstanding our material weakness, we have concluded that the financial statements and other financial information included in this Annual Report fairly present in all material respects our financial condition, results of operations and cash flows for the periods presented in conformity with U.S. GAAP.

Changes in Internal Control over Financial Reporting

Except as noted above, there were no changes in our internal control over financial reporting identified in connection with the evaluation of such internal controls that occurred during the fourth quarter of the year ended December 31, 2023 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Disclosure Controls and Procedures

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and implemented, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues within a company are detected. The inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple errors or mistakes. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

Item 9B. OTHER INFORMATION

Amendment to Credit Facility with Allseas

On March 22, 2024, we entered into the Second Amendment to the Unsecured Credit Facility with Argentum Credit Virtuti GCV (the "Lender"), the parent of Allseas Investments S.A. and an affiliate of Allseas, to extend the credit facility to August 31, 2025 and to provide that the underutilization fee thereunder shall cease to be payable after the date on which we or the Lender gives notice of termination of the agreement. Under the amended credit facility, we may borrow from the Lender up to $25,000,000 in the aggregate through August 31, 2025. The foregoing description of the amendment to the Credit Facility does not purport to be a complete description of the rights and obligations of the parties thereunder and is qualified in its entirety by reference to the full text of the amendment to the Credit Facility attached as Exhibit 10.33 to this Annual Report and incorporated herein by reference.

Credit Facility with ERAS Capital LLC and Gerard Barron

On March 22, 2024, we entered into an Unsecured Credit Facility (the "2024 Credit Facility") with Gerard Barron, our Chief Executive Officer and Chairman, and ERAS Capital LLC, the family fund of our director, Andrei Karkar (collectively, the "2024 Lenders"), pursuant to which, we may borrow from the 2024 Lenders up to $20,000,000 in the aggregate ($10,000,000 from each of the 2024 Lenders), from time to time, subject to certain conditions. All amounts drawn under the 2024 Credit Facility will bear interest at the 6-month Secured Overnight Funding Rate (SOFR), 180-day average plus 4.0% per annum payable in cash semi-annually (or plus 5% if paid-in-kind at maturity, at our election) on the first business day of each of June and January. We will pay an underutilization fee equal to 4.0% per annum payable semi-annually for any amounts that remain undrawn under the 2024 Credit Facility. We have the right to pre-pay the entire amount outstanding under the 2024 Credit Facility at any time, before the 2024 Credit Facility's maturity of September 22, 2025. The 2024 Credit Facility also contains customary events of default. The 2024 Credit Facility will terminate automatically if we or any of our subsidiaries raise at least USD $50,000,000 in the aggregate (i) through the issuance of any of our or our subsidiaries' debt or equity securities, or (ii) in prepayments under an off-take agreement or similar commercial agreement. The foregoing description of the 2024 Credit Facility does not purport to be a complete description of the rights and obligations of the parties thereunder and is qualified in its entirety by reference to the full text of the 2024 Credit Facility attached as Exhibit 10.34 to this Annual Report and incorporated herein by reference.

Rule 10b5-1 Trading Arrangements

During the fiscal quarter ended December 31, 2023, none of our directors or officers (as defined in Section 16 of the Securities Exchange Act of 1934, as amended) adopted, modified or terminated any contract, instruction or written plan for the purchase or sale of our securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) or any "non-Rule 10b5-1 trading arrangement," as defined in Item 408(a) of Regulation S-K.

Item 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Management and Corporate Governance," "Code of Business Conduct and Ethics" and "Delinquent Section 16(a) Reports" in the Company's proxy statement for the 2024 annual meeting of shareholders (the "Proxy Statement").

Item 11. EXECUTIVE COMPENSATION

The response to this item is incorporated by reference from the discussion responsive thereto under the caption "Executive Officer and Director Compensation" in the Proxy Statement.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" in the Proxy Statement.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Certain Relationships and Related Person Transactions" and "Management and Corporate Governance" in the Proxy Statement.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The response to this item is incorporated by reference from the discussion responsive thereto under the caption "Appointment of Independent Registered Public Accounting Firm" in the Proxy Statement.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(1) **Financial Statements.**

See "Index to Financial Statements and Financial Statement Schedules" under Part II, Item 8 to this Annual Report.

(2) **Financial Statement Schedules.**

Financial Statement schedules have not been included because they are not applicable or the information is included in the financial statements or notes thereto.

(3) **Exhibits.**

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/Reg. Number
2.1††	Business Combination Agreement, dated as of March 4, 2021, by and among Sustainable Opportunities Acquisition Corp., 1291924 B.C. Unlimited Liability Company and DeepGreen Metals Inc.		Form 8-K (Exhibit 2.1)	3/4/2021	001-39281
3.1	Notice of Articles of TMC the metals company Inc.		Form 8-K (Exhibit 3.1)	9/15/2021	001-39281
3.2	Articles of TMC the metals company Inc.		Form 8-K (Exhibit 3.2)	9/15/2021	001-39281
4.1	Description of Securities	X			
4.2	TMC the metals company Inc. Common Share Certificate		Form 8-K (Exhibit 4.1)	9/15/2021	001-39281
4.3	Warrant Agreement, dated as of May 8, 2020, between Continental Stock Transfer & Trust Company and Sustainable Opportunities Acquisition Corp.		Form S-1 (Exhibit 4.2)	10/7/2021	333-260126
4.4	Form of Class A Warrant to Purchase Common Stock		Form 8-K (Exhibit 4.1)	8/14/2023	001-39281
10.1	Amended and Restated Registration Rights Agreement, by and between Sustainable Opportunities Acquisition Corp., Sustainable Opportunities Holdings LLC, the parties listed under Sponsor Group Holders on the signature page(s) thereto and the parties listed under DeepGreen Holders on the signature page(s) thereto		Form S-4/A (Exhibit 10.5 – Annex H)	8/5/2021	333-255118
10.2†	Strategic Alliance Agreement, dated as of March 29, 2019, by and between DeepGreen Metals Inc. and Allseas Group S.A.		Form S-4 (Exhibit 10.7)	4/8/2021	333-255118
10.3†	Pilot Mining Test Agreement dated as of July 8, 2019, by and between DeepGreen Metals Inc. and Allseas Group S.A.		Form S-4 (Exhibit 10.8)	4/8/2021	333-255118

10.4†	Third Amendment to Pilot Mining Test Agreement and First Amendment to Strategic Alliance Agreement, dated as of March 4, 2021, by and between DeepGreen Metals Inc. and Allseas Group S.A.		Form S-4 (Exhibit 10.9)	4/8/2021	333-255118
10.5	Fourth Amendment to Pilot Mining Test Agreement and Second Amendment to Strategic Alliance Agreement, dated as of June 30, 2021, by and between DeepGreen Metals Inc. and Allseas Group S.A.		Form S-4/A (Exhibit 10.23)	7/14/2021	333-255118
10.6	Fifth Amendment to Pilot Mining Test Agreement and Third Amendment to Strategic Alliance Agreement, effective as of February 8, 2023, by and among DeepGreen Engineering Pte Ltd, DeepGreen Metals Inc., TMC the metals company Inc. and Allseas Group S.A.		Form 8-K (Exhibit 10.1)	2/17/2023	001-39281
10.7†	Sponsorship Agreement, dated as of March 8, 2008, by and between the Kingdom of Tonga and Tonga Offshore Mining Limited		Form S-4 (Exhibit 10.13)	4/8/2021	333-255118
10.8†	Sponsorship Agreement, dated as of September 23, 2021, by and between the Kingdom of Tonga and Tonga Offshore Mining Limited		Form S-1 (Exhibit 10.13)	10/7/2021	333-260126
10.9†	Sponsorship Agreement, dated as of June 5, 2017, by and among the Republic of Nauru, the Nauru Seabed Minerals Authority, and Nauru Ocean Resources Inc.		Form S-4 (Exhibit 10.14)	4/8/2021	333-255118
10.10	Certificate of the Sponsorship signed by the Government of Nauru on April 11, 2011		Form S-4/A (Exhibit 10.24)	7/28/2021	333-255118
10.11	ISA Contract for Exploration (Republic of Nauru) dated as of July 22, 2011		Form S-4 (Exhibit 10.15)	4/8/2021	333-255118
10.12	ISA Contract for Exploration (Kingdom of Tonga) dated as of January 11, 2012		Form S-4 (Exhibit 10.16)	4/8/2021	333-255118
10.13+	Form of Indemnity Agreement		Form 8-K (Exhibit 10.18)	9/15/2021	001-39281
10.14+	Nonemployee Director Compensation Policy		Form 8-K (Exhibit 10.19)	9/15/2021	001-39281
10.15+	Employment Agreement, dated December 15, 2017, by and between DeepGreen Metals Inc. and Gerard Barron		Form S-4/A (Exhibit 10.17)	5/27/2021	333-255118
10.16+**	Employment Agreement, dated September 1, 2018, by and between DeepGreen Metals Inc. and Erika Ilves		Form S-4/A (Exhibit 10.19)	5/27/2021	333-255118
10.17	Amended and Restated Employment Agreement, dated May 8, 2022, by and between The Metals Company Australia Pty. Ltd. and Anthony O'Sullivan		Form 10-Q (Exhibit 10.3)	5/9/2022	001-39281
10.18+	Amended and Restated Employment Agreement, dated May 6, 2022, by and between DeepGreen Resources, LLC and Craig Shesky		Form 10-Q (Exhibit 10.2)	5/9/2022	001-39281
10.19.1+	TMC the metals company Inc. 2021 Incentive Equity Plan		Form 8-K (Exhibit 10.23.1)	9/15/2021	001-39281
10.19.2+	Form of Stock Option Agreement under TMC the metals company Inc. 2021 Incentive Equity Plan		Form 8-K (Exhibit 10.23.2)	9/15/2021	001-39281

10.19.3+	Form of Restricted Stock Unit Agreement under TMC the metals company Inc. 2021 Incentive Equity Plan		Form 8-K (Exhibit 10.23.3)	9/15/2021	001-39281
10.20.1+	DeepGreen Metals Inc. Stock Option Plan and Form of Stock Option Agreement thereunder		Form S-4/A (Exhibit 10.20)	5/27/2021	333-255118
10.20.2+	Amendment to DeepGreen Metals Inc. Stock Option Plan		Form S-4/A (Exhibit 10.21)	5/27/2021	333-255118
10.21+	TMC the metals company Inc. 2021 Employee Stock Purchase Plan		Form S-8 (Exhibit 99.1)	5/31/2022	333-265318
10.22	Form of Subscription Agreement for institutional investors, by and between Sustainable Opportunities Acquisition Corp. and the subscriber parties thereto		Form S-4/A (Exhibit 10.1)	8/5/2021	333-255118
10.23	Form of Subscription Agreement for accredited investors, by and between Sustainable Opportunities Acquisition Corp. and the subscriber parties thereto		Form S-4/A (Exhibit 10.2)	8/5/2021	333-255118
10.24	Form of Securities Purchase Agreement, dated August 12, 2022, by and among the Company and the Purchasers named therein.		Form 8-K (Exhibit 10.1)	8/15/2022	001-39281
10.25	Securities Purchase Agreement, dated August 12, 2022, by and among the Company and Gerard Barron.		Form 8-K (Exhibit 10.2)	8/15/2022	001-39281
10.26	Securities Purchase Agreement, dated August 12, 2022, by and among the Company and ERAS Capital LLC.		Form 8-K (Exhibit 10.3)	8/15/2022	001-39281
10.27	At-The-Market Equity Distribution Agreement, dated December 22, 2022, by and among TMC the metals company Inc., Stifel, Nicolaus & Company, Incorporated and Wedbush Securities Inc.		Form 8-K (Exhibit 10.1)	12/22/2022	001-39281
10.28	Amendment No. 1 to At-The-Market Distribution Agreement, dated as of December 21, 2023, by and among TMC the metals company Inc., Stifel, Nicolaus & Company, Incorporated and Wedbush Securities Inc.		Form 8-K (Exhibit 10.1)	12/21/2023	001-39281
10.29†	Royalty Agreement, dated February 21, 2023 by and among TMC the metals company Inc., Nauru Ocean Resources Inc. and Low Carbon Royalties Inc.		Form 8-K (Exhibit 10.1)	2/22/2023	001-39281
10.30†	Investor Rights Agreement dated February 21, 2023 by and among TMC the metals company Inc., Brian Paes-Braga and Low Carbon Royalties Inc.		Form 8-K (Exhibit 10.2)	2/22/2023	001-39281
10.31†	Unsecured Credit Facility, dated March 22, 2023, by and between TMC the metals company Inc. and Argentum Credit Virtuti GCV		Form 10-K (Exhibit 10.31)	3/27/2023	001-39281
10.32	Amendment to the Unsecured Credit Facility, dated July 31, 2023, by and between TMC the metals company Inc. and Argentum Credit Virtuti GCV		Form 8-K (Exhibit 10.2)	8/01/2023	001-39281
10.33	Second Amendment to the Unsecured Credit Facility, dated March 22, 2024, by and between TMC the metals company Inc. and Argentum Credit Virtuti GCV	X			
10.34†	Unsecured Credit Facility, dated March 22, 2024, by and among TMC the metals company Inc., Gerard Barron and ERAS Capital LLC	X			

10.35	Exclusive Vessel Use Agreement, dated August 1, 2023, by and between TMC the metals company Inc. and Allseas Group S.A.		Form 8-K (Exhibit 10.1)	8/01/2023	001-39281
10.36	Form of Securities Purchase Agreement, dated August 14, 2023		Form 8-K (Exhibit 10.1)	8/14/2023	001-39281
21.1	List of Subsidiaries		Form S-1 (Exhibit 21.1)	10/27/2021	333-260126
23.1**	Consent of Ernst & Young LLP	X			
31.1	Certification of the Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
31.2	Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X			
32*	Certifications of the Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X			
96.1	Technical Report Summary — Initial Assessment of the NORI Property, Clarion Clipperton Zone, for Deep Green Metals Inc., effective as of March 17, 2021, by AMC Consultants Pty Ltd and other qualified persons.		Form S-4/A (Exhibit 96.1)	8/5/2021	333-255118
96.2	Technical Report Summary — Initial Assessment of the TOML Mineral Resource, Clarion Clipperton Zone, Pacific Ocean, for Deep Green Metals Inc., effective as of March 26, 2021, by AMC Consultants Pty Ltd and other qualified persons.		Form S-4/A (Exhibit 96.2)	8/5/2021	333-255118
97.1+	TMC the metals company Inc. Clawback Policy	X			
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)	X			
101.SCH	Inline XBRL Taxonomy Extension Schema Document	X			
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	X			
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	X			
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	X			
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	X			
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)	X			

† Certain confidential portions of this Exhibit were omitted by means of marking such portions with brackets ("[***]") because the identified confidential portions (i) are not material and (ii) is the type of information that the Company treats as private or confidential.

†† Certain of the exhibits and schedules to this Exhibit have been omitted in accordance with Regulation S-K Item 601(a)(5). The Registrant agrees to furnish a copy of all omitted exhibits and schedules to the SEC upon its request.

+ Management contract or compensatory plan or arrangement.

* The certifications attached as Exhibit 32 that accompany this Annual Report are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of TMC the metals company Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of such Form 10-K), irrespective of any general incorporation language contained in such filing.

** Exhibit superseded by exhibit of the same number filed with Amendment No. 1 to the Annual Report on Form 10-K/A filed on April 18, 2024.

Item 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized**.**

TMC THE METALS COMPANY INC.

Date: March 25, 2024

By:/s/ Gerard Barron
Gerard Barron
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated below and on the dates indicated.

Signatures	Title	Date
By:/s/ Gerard Barron Gerard Barron	Chief Executive Officer and Chairman (principal executive officer) and Director	March 25, 2024
By:/s/ Craig Shesky Craig Shesky	Chief Financial Officer (principal financial and accounting officer)	March 25, 2024
By:/s/ Andrew Greig Andrew Greig	Director	March 25, 2024
By:/s/ Christian Madsbjerg Christian Madsbjerg	Director	March 25, 2024
By:/s/ Andrew Hall Andrew Hall	Director	March 25, 2024
By:/s/ Sheila Khama Sheila Khama	Director	March 25, 2024
By:/s/ Andrei Karkar Andrei Karkar	Director	March 25, 2024
By:/s/ Amelia Kinahoi Siamomua Amelia Kinahoi Siamomua	Director	March 25, 2024
By:/s/ Kathleen McAllister Kathleen McAllister	Director	March 25, 2024

Forward-Looking Statements.

The Letter to Shareholders and summary information contained at the beginning of this annual report contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that relate to future events, TMC the metals company Inc.'s (the "Company") future operations or financial performance, or the Company's plans, strategies and prospects. These statements involve risks, uncertainties and assumptions and are based on the current estimates and assumptions of the management of the Company as of the date of this annual report and are subject to uncertainty and changes. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Important factors that could cause actual results to differ materially from those indicated by such forward-looking statements include, among others, those set forth under the heading "Risk Factors" contained in the enclosed Annual Report on Form 10-K for the year ended December 31, 2023, which was filed with the Securities and Exchange Commission on March 25, 2024, as well as any updates to those risk factors filed from time to time in our periodic and current reports.

All information in the Letter to Shareholders and summary information contained at the beginning of this annual report is as of the date of this annual report, and the Company undertakes no duty to update this information unless required by law.

All information in the enclosed Annual Report on Form 10-K for the year ended December 31, 2023 is as of the date of filing the Annual Report on Form 10-K with the Securities and Exchange Commission on March 25, 2024 or as otherwise set forth therein, and the Company undertakes no duty to update the information unless required by law.

"We", "us", "our", "TMC", "The Metals Company" and the "Company" when used in the Letter to Shareholders and summary information contained at the beginning of this annual report refer to TMC the metals company Inc. and its subsidiaries.

Corporate Information

Board of Directors

Gerard Barron, Chairman
Chief Executive Officer of TMC the metals company Inc.

Andrew Greig, Lead Independent Director
Founder and Senior Director of Innovation Pty Ltd

Stephen Jurvetson, Vice Chairman
Co-founder of Future Ventures

Andrew Hall
Managing Director of Saxjo Limited

Andrei Karkar
Chief Executive Officer of ERAS Capital LLC

Sheila Khama
Independent Consultant with SK Consulting Pty, Ltd

Christian Madsbjerg
Professor of Applied Humanities at The New School for Social Research and director and senior partner of ReD Associates

Kathleen McAllister
A Certified Professional Accountant (CPA) and former President and Chief Executive Officer and Chief Financial Officer of Transocean Partners LLC

Amelia Kinahoi Siamomua
Independent Consultant on gender and social inclusion for the Government of Nauru

Executive Officers

Gerard Barron
Chief Executive Officer and Chairman

Craig Shesky
Chief Financial Officer

Anthony O'Sullivan
Chief Development Officer

Erika Ilves
Chief Strategy Officer

Registered Office
TMC the metals company Inc.
595 Howe Street, 10th Floor
Vancouver, British Columbia, V6C 2T5

Internet Website
www.metals.co

Legal Counsel
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
Boston, Massachusetts

Canadian Legal Counsel
Fasken Martineau DuMoulin LLP
Vancouver, British Columbia

Independent Registered Public Accounting Firm
Ernst & Young LLP
Vancouver, Canada

Share and Public Warrant Listing
Our common shares and public warrants are traded on the Nasdaq Global Select Market under the symbol TMC and TMCWW, respectively. On April 17, 2024, the closing price of our common shares was $1.66 per share and of our public warrants was $0.2159.

Investor Information
You may obtain a copy of any of the exhibits to our Annual Report on Form 10-K free of charge. These documents are available on our website at www.metals.co or by contacting our Investor Relations department at investors@metals.co. Requests for information about TMC the metals company Inc. should be directed to our Investor Relations department.

2024 Annual and Special Meeting
Our 2024 Annual and Special Meeting of Shareholders will be held on Thursday, May 30, 2024, at 10:00 a.m. EDT, via live webcast available at the following URL: https://www.cstproxy.com/metals/2024

Transfer Agent and Registrar
Continental Stock Transfer & Trust Company
1 State Street, 30th Floor
New York, NY 10004-1561
For shareholders: (800) 509-5586

the metals company

metals.co