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

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2021	
[] TRANSITION REPORT PURSUANT TO SECTION EXCHANGE ACT OF 1934	ON 13 OR 15(d) OF THE SECURITIES
For the transition period from to	
<u>000-54</u> (Commission Fi	
Scandium Internation	nal Mining Corn.
(Exact Name of Registrant as	
British Columbia, Canada	98-1009717
(State or other Jurisdiction of Incorporation	(I.R.S. Employer
or organization)	Identification No.)
1430 Greg Street, Suite 501	
Sparks, Nevada	89431
(Address of Principal Executive Offices)	(Zip Code)
Registrant's Telephone Number, including area code: ((775) 355-9500
Securities registered pursuant to Section 12(b) of the Ad	ct: None
Securities to be registered pursuant to Section 12(g) of	the Act: Common Shares without par value (Title of class)
Indicate by check mark if the registrant is a well-know Securities Act. Yes $[\]$ No $[X]$	wn seasoned issuer, as defined in Rule 405 of the
Indicate by check mark if the registrant is not required to of the Act. Yes [] No [X]	o file reports pursuant to Section 13 or Section 15(d)
Indicate by check mark whether the registrant (1) has fi 15(d) of the Securities Exchange Act of 1934 during the that the registrant was required to file such reports), and	ne preceding 12 months (or for such shorter period

the past 90 days. Yes [X] 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 (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes [X] 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 (Check one):

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. []

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes $[\]$ No [X]

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter: \$71,161,334 as at June 30, 2021.

Indicate the number of shares outstanding of each of the registrant's classes of common equity, as of the latest practicable date: <u>317,157,595</u> common shares as at March 11, 2022.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K, which Proxy Statement is to be filed within 120 days after the end of the registrant's fiscal year ended December 31, 2021.

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PART I

Note about Forward-Looking Statements

Certain statements contained in this annual report on Form 10-K and the documents incorporated by reference herein constitute "forward-looking statements." Forward-looking statements may include, but are not limited to, statements with respect to the future price of commodities, the estimation of mineral resources, the realization of mineral resource estimates, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of the development of new deposits, success of exploration activities, our ability to fund property acquisition costs, our ability to reach targeted time frames for establishing feasibility, permitting time lines, currency fluctuations, requirements for additional capital, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims, our ability to raise funds necessary for ongoing and planned expenditures and operations, and regulatory approvals. In certain cases, forward-looking statements can be identified by the use of words such as "plans," "expects" or "does not expect," "is expected," "scheduled," "estimates," "intends, "anticipates" or "believes," or variations of such words and phrases or state that certain actions, events or results "may," "could," "would" or "will be taken," "occur" or "be achieved." Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such factors may include, among others, risks related to our joint venture operations; actual results of current exploration activities or production technologies that we are currently testing; actual results of reclamation activities; future metal prices; accidents, labour disputes and other risks of the mining industry; delays in obtaining governmental or regulatory approvals or financing or in the completion of development activities, as well as those factors discussed in the section entitled "Risk Factors" and elsewhere in this Form 10-K. Although we have attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forwardlooking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forwardlooking statements.

Glossary of Terms

"Company," "SCY," "we," "us," "our" and similar words of similar meaning refer to Scandium International Mining Corp.

\$, A\$, C\$ mean respectively, United States dollars, Australian dollars and Canadian dollars.

Alteration Usually referring to chemical reactions in a rock mass resulting from the passage of hydrothermal fluids.

Assay An analysis to determine the presence, absence or quantity of one or more components, elements or minerals.

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Core The long cylindrical piece of a rock, up to several inches in diameter, brought to the

surface by Diamond drilling.

Diamond drilling A drilling method in which the cutting is done by abrasion using diamonds embedded

in a matrix rather than by percussion. The drill cuts a core of rock, which is recovered

in long cylindrical sections.

Fractures Breaks in a rock, usually due to intensive folding or faulting.

Grade The concentration of a valuable mineral within an Ore.

Hydrothermal Hot fluids, usually water, which may or may not carry metals and other compounds

in solution to the site of mineral deposition or wall rock alteration.

Igneous A rock formed by the cooling of molten silicate material.

Intrusion A general term for a body of igneous rock formed below the surface of the earth.

Kg Kilogram which is equivalent to approximately 2.20 pounds.

Km Kilometer which is equivalent to approximately 0.62 miles.

Mineralization A term used to describe the presence of minerals of possible economic value. Also

used to describe the process by which concentration of economic minerals occurs.

Net Smelter Returns Royalty A share of the net revenues generated from the sale of metal produced by a mine.

NI 43-101 National Instrument 43-101 – Standards for Disclosure of Mineral Projects, being the

regulation adopted by Canadian securities regulators that governs the public disclosure of technical and scientific information concerning a mineral property.

Ore A naturally occurring solid material from which a metal or valuable mineral can be

profitably extracted.

Outcrop An exposure of rock at the earth's surface.

ppm Parts per million.

Pyrite Iron sulphide mineral. The most common and abundant sulphide mineral and often

found in association with copper and gold.

Qualified Person Means a Qualified Person as defined in National Instrument 43-101, including an

engineer or geoscientist in good standing with their professional association, with at

least five years of relevant experience.

Quartz The second most common rock forming mineral in the earth's crust. SiO₂.

Resource

Means any of a measured, indicated or inferred resource as used in NI 43-101, and having the following meanings:

"measured resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

"indicated resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

"inferred resource" is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

For the purposes of the above a "mineral resource" means a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

(Please refer to "Item 2. Properties - Cautionary Note to U.S. Investors Regarding Resource Estimates" in regards to the use of the above terms in this Form 10-K.)

Sulphide

A class of minerals characterized by the linkage of sulphur with a metal (such as Pyrite (FeS₂)).

Tpd/Tpa

Tonnes per day/tonnes per annum.

Tonne

A metric ton which is equivalent to approximately 2,204 pounds.

Sediments

The debris resulting from the weathering and breakup of rocks that have been deposited by or carried by runoff, streams and rivers, or left over from glacial erosion or sometimes from wind action.

Vein

A geological feature comprised of minerals (usually dominated by quartz) that are found filling openings in rocks created by faults or replacing rocks on either side of faults or fractures.

ITEM 1. BUSINESS

General

We were incorporated on July 17, 2006, under the laws of British Columbia, Canada under the name Golden Predator Mines Inc. We were incorporated as a wholly owned subsidiary of Energy Metals Corp. for the purpose of holding precious metals and certain specialty metals assets. In order to focus on specialty metals, during February 2009 we transferred most of our precious mineral assets to our then wholly owned subsidiary Golden Predator Corp., and on March 6, 2009 we completed a spin-out of Golden Predator Corp. to our shareholders. Effective March 12, 2009, we changed our name to EMC Metals Corp. In order to reflect a new emphasis on mining for scandium minerals, effective November 19, 2014, we changed our name to Scandium International Mining Corp ("SCY" or the "Company").

We are a reporting issuer in the Canadian Provinces of British Columbia, Alberta and Ontario and our common shares are listed for trading on the Toronto Stock Exchange under the trading symbol "SCY."

Our head office is located at 1430 Greg Street, Suite 501, Sparks, Nevada 89431. The address of our registered office is 1200 - 750 West Pender Street, Vancouver, British Columbia, Canada, V6C 2T8.

Our most advanced project is the Nyngan Scandium Project, located in New South Wales, Australia (the "Nyngan Scandium Project"), on which we hold a mine lease grant and a development consent. We also hold an exploration license on a scandium mineral property located near Nyngan known as the "Honeybugle Scandium property" and a reservation on an exploration license on a scandium mineral property in Finland, known as the "Kiviniemi Scandium property."

In addition to these scandium mining project interests, the Company is pursuing copper industry interest in our ion exchange (IX) and solvent extraction (SX) technology and knowhow, to recover high purity alumina (HPA), scandium, nickel, cobalt and other technology-driven metals from mineral processing solutions and other acidic waste streams in certain acid leach copper operations. This project effort is known as the "Critical Metals Recovery (CMR) Project," with a specific focus on North American opportunities.

Our plan of operation for 2021 has been to obtain copper industry partners for our critical metals harvesting technology, and subsequently initiate discussions regarding offtake sales agreements with counterparties for those critical metals planned to be produced at participating separation sites. In June of 2021, we announced an LOI with a copper industry partner which established a development path for this strategy.

Our plan of operation for 2022 is to progress development of our CMR Project with our partner to the point where we can make joint decisions to build a production facility, and to pursue relevant sales agreements related to that contemplated production facility. We also intend to continue pursuit of scandium product customers for offtakes, either from our critical metals projects or from the Nyngan Scandium Project. We will also seek additional funding for corporate working capital and CMR project development costs in 2022.

Intercorporate Relationships

The chart below illustrates our corporate structure on December 31, 2021, including our subsidiaries, the jurisdictions of incorporation, and the percentage of voting securities held.



Pursuant to a share exchange agreement dated June 30, 2017, the Company acquired the remaining 20% interest in EMC Metals Australia Pty. Ltd. from Scandium Investments LLC ("SIL"). On completion of the share exchange, the Company issued an aggregate of 58,830,645 common shares to SIL and granted to SIL the right to nominate two individuals to the board of the Company for so long as SIL holds at least 15% of SCY's issued and outstanding shares, and one director for so long as SIL holds at least 5% but less than 15% of SCY's issued and outstanding shares.

Business Operations

Company, Projects and Markets Summary

We are a mineral exploration and development company that is primarily focused on the development of critical metals recovery projects from mine-based feedstock sources, principally in North America, and from mine-based scandium mineral resources, principally in Australia. The Company has previously also considered exploration and project development opportunities in rare earth minerals, and other specialty metals, specifically including nickel, cobalt, boron, manganese, tantalum, titanium, and zirconium. We have not commenced construction on of any of our mineral development projects, and as a result we are an exploration stage company.

Our most advanced project is the Nyngan Scandium Project, located in New South Wales, Australia (the "Nyngan Scandium Project"), on which we hold a mine lease grant, a development consent, and 100% of the mineral rights. The Company has completed a definitive feasibility study on the Nyngan Scandium Project dated May 4, 2016 (the "Feasibility Study" or "DFS"), which was prepared independently in accordance with NI 43-101. The results of the DFS include a 16.9 million tonne measured and indicated resource (grading 235ppm at a 100ppm cut-off) and a 1.43 million tonne mineral reserve (combined proven and probable), based on economics established in that study. The DFS was filed on May 6, 2016 and is available on SEDAR (www.sedar.com), on the Company's website (www.scandiummining.com) and on the SEC's website (www.sec.gov). A summary of the DFS is provided herein under "Item 2. Properties,

Projects and Patents – Description of Mineral Projects – Nyngan Scandium Project – Nyngan Feasibility Study."

The Company also holds exploration licenses on two separate scandium-prospective properties:

- an exploration license on the Honeybugle Scandium property, located 24 kilometers from the Nyngan Scandium Project, granted in 2014; and
- an exploration license on the Kiviniemi Scandium Property a scandium-prospective property in central Finland, granted in 2018.

In addition to these scandium mining project interests, the Company is pursuing copper industry interest in our ion exchange ("IX") and solvent extraction (SX) technology and knowhow to recover scandium, nickel, cobalt, high purity alumina ("HPA") and other technology-driven metals from acidic waste streams in certain acid leach copper operations. This project effort is known as the "Critical Metals Recovery ("CMR") Project," with a specific focus on North American copper mine opportunities.

During June 2021, the Company announced signing a Letter of Intent ("LOI") with Nevada Gold Mines ("NGM") to initiate a joint technical and economic feasibility program at NGM's Phoenix Mine, near Battle Mountain, Nevada. The purpose of this joint development program is to confirm the economic and technical viability of a critical metals recovery project (the "Phoenix CMR Project") at the mine site. Development programs began in late 2021, and HPA has become the primary metal focus of the effort. Development efforts will continue to consider nickel, cobalt and scandium harvesting opportunities at copper oxide mine sites other than the Phoenix Mine.

We are also pursuing industry interest in our technology and capability to produce high purity alumina (HPA) from various other aluminum-containing feedstocks, associated with non-mine suppliers, either embedded in existing industrial facilities or stand-alone.

SCY's critical metals recovery programs, including scandium and now HPA, are supported by a series of patent-protected processes and pending protections, filing-date preserved. The Company has been granted a US Patent Office Patent for scandium recovery and has filed additional patent applications for other metals, each using either IX or SX (or both) technologies, based on feedstock sources that encompass and extend beyond copper oxide mine process solutions. The Company has also specifically filed additional patent applications on HPA processing technology in 2020 and 2021 which are directly applicable to our joint development program at the Phoenix Mine with NGM.

Corporate Objectives and Strategy

Our corporate focus is on the development of projects that enable the production and sale of critical metals from mine or mine-related sources. It is our intent to add a series of related metal recovery business opportunities alongside the Nyngan Scandium Project, which has otherwise been SCY's primary project and product focus. This change reflects a marketplace priority for production of identified critical metals from new, local sources. That fact, along with the Company's CMR capability, has broadened the immediate product opportunity for SCY. This strategy reflects SCY's desire to build a suite of projects that can deliver products tailored directly to lithium-ion battery markets, and specifically to battery components that have application in the electric vehicle industry.

While the Nyngan Scandium Project remains the most advanced project in the Company portfolio as at the end of 2021, the Company anticipates this position will be replaced by a CMR Project by the end of 2022.

• For further information on the Nyngan Scandium Project, please refer to "Item 2. Properties, Projects and Patents - Description of Mineral Projects - Nyngan Scandium Project" and "Item

1A. Risk Factors."

• For further information on our ion exchange and solvent extraction technology related to CMR, please refer to "Item 2. Properties, Projects and Patents - Description of Mineral Projects – Critical Metals Recovery Technology Program" and "Item 1A. Risk Factors."

Product Markets for Scandium

Scandium is the 31st most abundant element in the earth's crust (average 33 ppm), which makes it more common than lead, mercury, and precious metals, but less common than copper. Scandium has characteristics that are similar to rare earth elements, and it is often classified as a member of that group, although it is technically a light transition metal. Scandium occurs in nature as an oxide, rarely occurs in concentrated quantities because it does not selectively combine with the common ore-forming anions and is very difficult to reduce to a pure metal state. Scandium is typically produced and sold as a powder, in oxide form, and known as scandium oxide, scandia or Sc₂O₃.,

Global annual production estimates of scandium range from 15 tonnes to 20 tonnes, but accurate statistics are not available due to the lack of public information from countries in which scandium is currently being produced, specifically China and Russia. Two relatively recent production sources have entered the market which may prove more transparent. The Taganito Nickel Mine in the Philippines (Sumitomo Metal Mining Co., Ltd.) announced plans to produce an oxide concentrate for upgrade, and operations have commenced. Recent announcements from Rio Tinto indicate their Quebec titanium feedstock producer, Rio Tinto Fer et Titane (RTFT), has undertaken small scale scandium production, beginning in 2021, with expansion capability planned for the future.

There is no reliable pricing data on global scandium oxide trading. Scandium oxide is typically traded in small quantities, between private parties, and pricing is not transparent to other buyers or sellers as there is no clearing facility as is more common with commercially traded metals and commodities. The U.S. Geological Survey ("USGS") in its latest available report (dated January 2022) documents the 2021 price of scandium oxide (99.99% grade) at US\$2,200/kg, indicating a significant reduction from the 2020 price estimate of US\$3,800/kg. They also estimate the global sales of scandium oxide to be between 15-25 tpy, principally from China, Russia and the Philippines.

Prices vary, based on purity and quantity supplied. The USGS pricing generally reflects small volume sales, with larger quantities selling at lower prices, typically under US\$2,000/kg. USGS reporting also acknowledged that ex-works China prices for 99.99% purity oxide were considerably lower than US-observed prices in 2021, based on underutilization of existing Chinese production capacity. Scandium oxide grades of 95-99% are generally considered suitable for manufacturing AlSc 2% master alloy, the form demanded for aluminum alloy applications

Scandium can also be effectively purchased in the form of aluminum-scandium (Al-Sc) master alloy, typically containing 2% scandium by weight. This product is the preferred form for manufacture of aluminum alloys containing scandium. The current January 2022 USGS report indicates the 2021 price for Al-Sc 2% master alloy at US\$350/kg, slightly higher than the 2020 USGS average. Recent USGS estimated prices for Al-Sc 2% master alloy have also been high relative to commonly available prices ex-works China, which have trended under US\$100/kg and are available in one tonne lots or greater today.

Principal uses for scandium are in high-strength aluminum alloys, high-intensity metal halide lamps, electronics, and laser research. Recently developed applications include welding wire and fuel cells which are expected to be in future demand. Approximately 15 different commercial aluminum-scandium alloys have been developed, and some of them are used for aerospace applications. In Europe and the U.S.,

scandium-containing alloys have been evaluated for use in structural parts in commercial airplanes and high stress parts in automobile engines and brake systems. Military and aerospace applications are known to be of interest, although with less specificity. The combination of high strength, weldability and ductility makes aluminum-scandium alloys potentially attractive replacements for existing aluminum alloys in a number of applications where improved alloy properties can add value to final products.

Product Markets for High Purity Alumina

Aluminum oxide, known as alumina ((Al₂O₃), is a plentiful and globally available commodity today. It is almost always a product of refining bauxite via the Bayer Process for use in the manufacture of aluminum metal and alloys and is available in varying grades. Smelter grade alumina (SGA) is typically traded at 99.0% purity, or slightly higher.

High purity alumina, or HPA, is a specialty grade product, and the designation typically begins at 99.9%, or 3N, and extends to 99.999% or higher. The process of aluminum feedstock purification to these very high purity standards, and the virtual elimination of certain deleterious elements, is challenging and costly. The volumes of HPA traded globally are a small fraction of the worldwide SGA marketplace, and represent a high value, highly demanded product in specialty applications, based on alumina's hardness, nonconducting electrical properties, thermal protective properties, and chemically inert nature.

HPA is otherwise commonly known as synthetic sapphire. Traditional demand has come from manufacturers who utilize this form, with the largest individual application in lighting, specifically light-emitting diodes (LED's). that are constructed on synthetic sapphire wafers. Synthetic sapphire is also used in some semiconductor applications, scratch-resistant lenses and glass products, most commonly in watches, phones and handheld electronic devices.

The emerging demand for HPA is in lithium-ion battery (LiB) applications. HPA is used as a ceramic coating on battery separators, typically made of specialty polyvinyl materials, to add both physical strength and protection, and to significantly improve thermal durability. HPA also shows promising applications as an addition to the material composition of both the anode and cathode in LiB's, based on the same contributing characteristics.

HPA is typically offered in two forms: as very fine powders for coating applications, or in a pellet form required for the manufacture of boules that are the feedstock for wafer manufacture. Product pricing is highly influenced by product form and the ability to meet strict customer quality parameters, including specific contaminant values. The market segments into two product grade categories: grades of 4N or better and grades of 3N or lower, with marked pricing differences between these two segments. The global HPA market is estimated at approximately US\$1Bn today, with the 4N+ segment representing over 60% of the total, on a value basis. Consumer trends show preference for higher purities (4N+), based on safety and performance, but cost and supply pressures in high growth areas will encourage exploration of 3N HPA alternatives.

Competitive Conditions

We compete with numerous other companies and individuals in the search for and the acquisition or control of attractive rare earth and specialty metals mineral properties and opportunities. Our ability to profitably build a portfolio of commercial operations in this market segment will depend on our acquisition success in finding and securing attractive positions for development, our ability to operate the plants and facilities we commit to construct, and our success in marketing the products we manufacture against competing producers in the marketplace.

In regard to our plan to produce scandium, there are a limited number of scandium producers presently. If we are successful at becoming a producer of scandium, our ability to be competitive will require that we establish a reliable supply of scandium to the market, delivered at purity levels demanded by various applications, and that our operating costs generate satisfactory margins, recognizing true prices will be set by customers and competitors in a market that is yet to mature.

Governmental Regulations and Environmental Laws

The development of any of our mining properties or CMR projects will require numerous local and national government approvals and environmental permits. For further information about governmental approvals and permitting requirements, please refer to "Item 1A. Risk Factors" and Nyngan Scandium Project - Environmental Permitting/Development Consent/Mining Lease below for additional information.

Employees

As at January 1, 2022, we have 5 full and part time employees and 2 individuals working on a consulting basis. Our operations are managed by our officers with input from our directors. We engage geological, metallurgical, and engineering consultants from time to time as required to assist in evaluating our property interests and recommending and conducting work programs.

ITEM 1A. RISK FACTORS

In addition to the factors discussed elsewhere in this Form 10-K, the following are certain material risks and uncertainties that are specific to our industry and properties that could materially adversely affect our business, financial condition and results of operations.

Risks Associated with our CMR Project and our Scandium Mine Development

We may not meet the requirements set by the partners to construct and operate the Phoenix CMR project. The CMR Project is in development stage during 2022. The results of the development work may or may not meet the standards and development hurdles applied by the partners at the end of that development work. The project requires mutual consent to construct and operate, and that consent will be based on estimated economics, technical and market risks, and suitability to host the project at the Phoenix Mine. The understanding of these risks and opportunities will not be clear until the development program is completed.

We may not be successful in attracting additional copper industry interest in our ion exchange (IX) technology. Our technology is designed to recover scandium, cobalt and other critical metals from solvent extraction (SX) raffinate and other acidic waste streams in certain acid leach copper operations. Access to these processing streams is dependent on obtaining contractual relationships with existing copper mine operations. If we are unable to locate any further existing copper mine operations willing to initiate access rights, then we may not be able to proceed with additional mine hosted CMR Projects.

There are technical challenges to scandium production that may render the Nyngan Scandium Project not economic. The economics of scandium recovery are known to be challenging. There are very few facilities producing scandium and the existing scandium producers are secretive in their techniques for recovery. In addition, the recovery of scandium product from laterite resources, such as are found on the Nyngan property, has not been demonstrated at an operating facility. The Nyngan processing facility design, if constructed, will be the first of its kind for scandium production. These factors increase the possibility that we will encounter unknown or unanticipated production and processing risks. Should we encounter

any of these risks, they could increase the cost of production thereby reducing margins on the Nyngan Scandium Project or rendering it uneconomic.

There is no guarantee that we will be able to finance the Nyngan Scandium Project for production. Any decision to proceed with production on the Nyngan Scandium Project will require significant production financing. Scandium projects are uncommon, and economic and production uncertainty may limit our ability to attract the required amount of capital to put the project into production. If we are unable to source production financing on commercially viable terms, we may not be able to proceed with the project and may have to write off our investment in the project.

If we are successful at achieving scandium production, we may have difficulty selling scandium-containing products longer term. Scandium is characterized by unreliable supply, resulting in limited development of markets for scandium oxide. Markets may take longer to develop than anticipated, and Nyngan and other potential scandium producers may have to wait for products and applications to create adequate demand. Certain applications may require lengthy certification processes that could delay usage or acceptance. In addition, certain scandium applications require very high purity scandium product, which is much more difficult to produce than lower grade product. If we commence production, our inability to supply scandium in sufficient quantities, in a reliable and timely manner, and in the correct quality, could reduce the demand for any scandium produced from our projects and possibly render the project uneconomic.

General Risks Associated with our Mining Activities and Company

We may not receive permits necessary to proceed with the development of any of our advancing projects. The development of any of our mining properties, including the Nyngan Scandium Project, will require the acquisition and sustained possession of numerous local and national government approvals and permits. Our ability to secure all necessary permits required to develop any of our projects is unknown until such permits are received. If we cannot obtain or retain all necessary permits, the Nyngan Scandium Project cannot be developed, and our investment in the project potentially will be lost. While the critical permits for the Nyngan Scandium Project have been received, other permits remain outstanding at this time and continuing compliance with the terms of the permits is required.

This permitting requirement could be similarly restrictive for any CMR project, whether it is hosted by an existing operational partner or intended for construction and operation stand-alone. Our future market value will likely be significantly reduced to the extent one or more of our projects cannot proceed to the development or production stage due to an inability to secure all required permits.

Mineral Resource Estimates on our properties are subject to uncertainty and may not reflect what may be economically extracted. Resource estimates included for scandium on our Nyngan property are estimates only and no assurances can be given that the estimated levels of scandium minerals will actually be produced or that we will receive the metal prices assumed in determining our resources. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling and exploration results and industry practices. Estimates made at any given time may change significantly when new information becomes available or when parameters that were used for such estimates change. By their nature resource estimates are imprecise and depend, to a certain extent, upon statistical inferences which may ultimately prove unreliable. Furthermore, market price fluctuations in scandium, as well as increased capital or production costs or reduced recovery rates, may limit our ability to establish reserves at some future point on Nyngan, or on any of our properties. The extent to which more Nyngan project resources may ultimately be reclassified as proven or probable reserves is dependent upon the demonstration of their profitable recovery. The evaluation of reserves or resources is always influenced by economic and

technological factors, which may change over time. Accordingly, further current resource estimates on our material properties may never be converted into reserves, or be economically extracted, and we may have to write off such properties or incur a loss on sale of our interest on such properties, which will likely reduce the value of our shares.

Our potential for a competitive advantage in specialty and rare metals production depends on the availability of our technical processing abilities, as currently provided by our Chief Technology Officer. We are dependent upon the personal efforts and commitment of Willem Duyvesteyn, our CTO, a director and significant shareholder of the Company, for the continued development of new extractive technologies related to scandium and other rare and specialty metals production. The loss of the services of Mr. Duyvesteyn would likely limit our ability to use or continue the development of such technologies, which would remove the potential competitive and economic benefit of such technologies.

Our operations are subject to losses due to exchange rate fluctuation. We maintain accounts in Canadian, Australian, Euro and U.S. currency. Our equity financings have to date been priced in Canadian dollars. All of our material projects and non-cash assets are located outside of both Canada and the USA, however, and require regular currency conversions to local currencies where such projects and assets are located. Our operations are accordingly subject to foreign currency fluctuations and such fluctuations may materially affect our financial position and results. We do not engage in currency hedging activities.

We do not currently earn any revenue and without additional funding, we will not be able to carry out our business plan, and if we raise additional funding existing security holders may experience dilution. As an exploration stage mining company, none of our principal properties are in operation and we do not currently earn any revenue. In order to continue our exploration activities and to meet our obligations on the Nyngan Scandium Project, we will need to raise additional funds. Recently, we have relied entirely on the sale of our securities to raise funds for operations. Our ability to continue to raise funds from the sale of our securities is subject to significant uncertainty due to volatility in the mineral exploration marketplace. If we are able to raise funds from the sale of our securities, existing security holders may experience significant dilution of their ownership interests and possibly to the value of their existing securities.

Risks Related to the COVID-19 Pandemic. The current outbreak of the novel coronavirus (COVID-19) that was first reported from Wuhan, China in December 2019, and the spread of this virus could continue to have a material adverse effect on global economic conditions which may adversely impact our business. The World Health Organization (WHO) declared a global emergency on January 30, 2020 with respect to the outbreak and characterized it as a pandemic on March 11, 2020. Cases of COVID-19 have been reported in 223 countries, areas or territories as of February 17, 2021, including China, Australia, the United States, Canada and countries in the European Union. The extent to which the outbreak impacts the Company's business will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of the coronavirus and the actions to contain the outbreak or treat its impact, among others. Moreover, the actual and threatened spread of the coronavirus globally could also have a material adverse effect on the regional economies in which the Company intends to operate, continue to negatively impact stock markets and adversely impact the Company's ability to raise capital. Any of these developments, and others, could have a material adverse effect on the Company's business. In particular, the COVID-19 pandemic has resulted in restrictions including quarantines, closures, cancellations and travel restrictions, which may have a material adverse effect on the Company's business including delays

or disruptions in regulatory submissions, exploration activities on the Nyngan Scandium Project and CMR Project development.

ITEM 2. PROPERTIES, PROJECTS AND PATENTS

Cautionary Note to U.S. Investors Regarding Resource Estimates

The Company's technical disclosure in this section uses certain terms which are defined by the Canadian Institute of Mining, Metallurgy and Petroleum, and required to be disclosed in accordance with Canadian National Instrument 43-101 ("NI 43-101"). The disclosure standards in the United States Securities and Exchange Commission's (the "SEC") Subpart 1300 of Regulation S-K contain significant differences from the disclosure requirements of NI 43-101 and information presented in this section may not be comparable with United States standards in documents filed with the SEC. Accordingly, information concerning mineral deposits set forth in this section may not be comparable with information presented by companies using only United States standards in their public disclosures.

Description of Mineral Projects

Critical Metals Recovery Project

On May 13, 2020, we announced the Company's pursuit of copper industry interest in both our ion exchange (IX) technology, select solvent exchange (SX) technology, and knowhow to recover scandium, high purity alumina, and potentially other critical metals from solvent extraction (SX) raffinate and other acidic waste streams in certain acid leach copper operations.

Recovery metals targets include cobalt, copper, nickel, scandium, and zinc, and possibly other metals and rare earth elements, plus high purity alumina (HPA), depending on recovery economics and project specifics. The suitability of our technologies varies with the specifics of individual orebodies, and associated recovery plant characteristics. Depending on specific project variables, and the value and volume of critical metals recovered, the end result economics are expected to be significant to the parties involved.

The copper industry is fully aware of the opportunity to harvest valuable metals from copper process waste streams, and the industry does so with significant success today in precious metals. Most specialty metals recovery work has historically been considered un-economic, based on effective recovery costs, and recovered metals pricing. The technology in this area has advanced, improving both operating costs and recoveries. New, technology-driven uses for critical metals are stressing supply channels. Traditional jurisdiction risk concerns are now multiplied by ethical sourcing issues, and long-term sustainability questions, all of which elevate the interest in broader, more localized sourcing. These issues are receiving heightened governmental and industry priority, and metals markets customers are now seeking and favoring new, economic, responsible solutions.

On the basis of this dynamic critical metals opportunity, and the fact that SCY has a significant capability to apply advanced mineral recovery technologies to the separation of critical metals from both ores and waste streams, the Company began a search for a North American copper industry host, in order to build a Critical Metals Recovery (CMR) Project. This effort immediately recognized an attractive economic potential for recovery of multiple metals, specifically metals used in lithium-ion battery manufacture. The potential new revenue stream of the combined metals residual does vary by orebody, and also by the specifics of the existing mineral processing systems in place.

In anticipation of securing a partner host with a copper oxide circuit that was suitable to develop this harvesting concept, the Company filed three US Patent Applications, seeking patent protection for its

technical concepts. The work supporting these filings was based on bench scale testing with actual copper SX raffinate solutions. Those three filed patent applications were as follows:

- 1. "Extraction of Scandium Values from Copper Leach Solutions". Filed-2018, status-granted.
- 2. "Recovery of Critical Metals from SX-EW Copper Raffinate and Other Solutions Derived from Leaching Ores with Sulfuric Acid". Filed-2021, status-pending.
- 3. "Process for the Preparation of High Purity Alumina". Filed-2020, status-published/pending.

The Company believes these extraction technologies can be demonstrated with a working and successful copper plant installation, with proven knowhow.

Phoenix CMR Project Initiated with Nevada Gold Mines

On June 28, 2021, the Company announced signing a Letter of Intent ("LOI") with Nevada Gold Mines ("NGM") to initiate a joint technical and economic feasibility program at NGM's Phoenix Mine, near Battle Mountain, Nevada (the "Phoenix CMR Project"). The purpose of this joint development program is to confirm the economic and technical viability of a critical metals recovery project at the mine site. The LOI defines a detailed US\$2.7 million spend program which includes bench test work, pilot plant testing, and feasibility study design work. The program is anticipated to require 15 months to complete. With program completion, the partners intend to take an investment decision on construction and operation of a plant facility to recover critical metals from mine solutions. The LOI also outlines key parameters of a partnership, including formation of a joint venture to hold the plant facility, and a 50:50 ownership in the recovery circuit asset.

On November 8, 2021, the Company announced the addition of HPA to the target metals list, based on work that confirmed the presence of significant aluminum content in both the Phoenix Mine copper oxide ore, and raffinate. This contained aluminum represents a suitable feedstock for high purity aluminum (HPA) product manufacture and is likely to be the most attractive metals product target for the Phoenix orebody. The June 2021 news release did not specifically identify HPA as a specific metals target, but it is now formally included as an important part of the technical development work program and expected to be the primary product of value to be recovered at Phoenix mine.

The Company has had a longstanding interest in oxide copper project sources for HPA manufacture. They tend to present aluminum-containing solutions in relatively pure form and at high enough grades to form an advantageous low-cost HPA feedstock. The harvesting of aluminum from Phoenix mine copper raffinate and similar projects at other mines will provide similar advantages to ongoing copper operations, including improved mine valuations, reserve life extensions, cleaner tailings, and potentially lower reclamation expenses. The environmental impact from this production process is minimal – no new mines are required.

The Phoenix Mine is a gold-copper producer owned and operated by Nevada Gold Mines, a joint venture between Barrick Gold Corporation (61.5%) and Newmont Corporation (38.5%). The mine produces a copper/gold concentrate, copper cathode and gold dore. Nevada Gold Mines assets in Nevada represent the single largest gold-producing complex in the world.

Nyngan Scandium Project

Property Description and Location

The Nyngan Scandium Project site is located approximately 450 kilometres northwest of Sydney, NSW, Australia and approximately 20 kilometres due west from the town of Nyngan, a rural town of approximately 2,900 people. The deposit is located 5 kilometres south of Miandetta, off the Barrier

Highway that connects the towns of Nyngan and Cobar. Final license area access is reached by clay farm tracks. The general area can be characterized as flat agricultural land, used predominantly for wheat farming and livestock grazing. Infrastructure in the area is good, including available water and electric power. The property is classified as an Australia Property for financial statement segment information purposes.

The general location of the Nyngan Scandium Project is provided in Figure 1 below.

New South Wales

More South Wales

Myngan
NYNGAN
Scandium
Nyngan
New South Wales

Advanced
Project
Existing
Mine

Figure 1: Location of Nyngan Scandium Project

Note: None of the Existing Mines identified in Figure 1 produce scandium.

The scandium resource is hosted within the lateritic zone of the Gilgai Intrusion, one of several Alaskantype mafic and ultramafic bodies which intrude Cambrian-Ordovician metasediments collectively called the Girilambone Group. The laterite zone, locally up to 40 meters thick, is layered with hematitic clay at the surface followed by limonitic clay, saprolitic clay, weathered bedrock and finally fresh bedrock. The scandium mineralization is concentrated within the hematitic, limonitic, and saprolitic zones with values up to 350 ppm scandium.

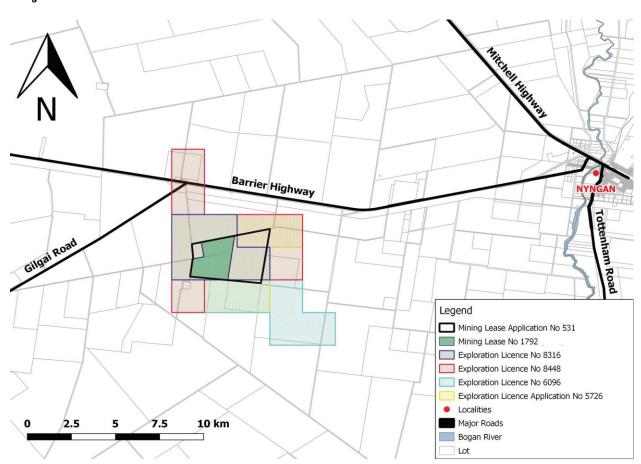


Figure 2: Location of the Exploration Licenses and Mining Lease for the Nyngan Scandium Project

Mineral License Details

The scandium resource is held under Exploration License (EL) 8316 (Block Number 3132, units d, e, j, k and Block no. 3133, unit f) and EL 6096 (Block 3132, unit p, and Block 3133, units l, m, r and s); a total of ten (10) graticular units. The exploration licenses allow the license holder to conduct exploration on private land (with landowner consents and signed compensation agreements in place) and public lands not including wildlife reserves, heritage areas or National Parks. The scandium resource is fully enclosed on private agricultural land.

The Company's Australian subsidiary holds legal title to specific surface and mineral exploration rights on the Nyngan Scandium Project. During 2017, an additional EL (EL 8448) was granted. Figure 2 provides details of the location of EL 8448 and the locations of Mining Lease 1792 and Mining Lease Application 531, both of which overlay the exploration license area.

The exploration licenses cover 29.25 square kilometers (2,925 hectares). The resource site is located at geographic coordinates MGA zone 55, GDA 94, Lat: - 31.5987, Long: 146.9827, Map Sheets 1:250k – Cobar (SH/55-14) and 1:100k Hermidale (8234).

The project surface rights (freehold) total 810 acres (370 hectares) on the portion of the exploration license area corresponding to the Mine Lease 1792 area. The freehold property boundaries are defined by standard

land survey techniques undertaken by the Lands Department and currently presented in the form of Cadastral Deposited Plans (DP) and Lots. The land associated with the project rights is DP 752879, Lots 6 and 7 (Appendix 2, Lots 6 and 7 - Nyngan).

The Company is required to lodge individual A\$10,000 environmental bonds with the NSW Mines Department for each license and must meet total minimum work requirements annually of approximately A\$65,000, covering both licenses.

Royalties attached to the properties include a 1.5% Net Profits Interest royalty to private parties involved with the early exploration on the property, a 1.7% Net Smelter Returns Royalty payable to Jervois for 12 years after production commences, subject to terms in the settlement agreement, and a 0.7% royalty on gross mineral sales to a private investor. Another revenue royalty is payable to private interests of 0.2%, subject to a US\$370k cap. A NSW minerals royalty will also be levied on the project, subject to negotiation, currently 4% on revenue.

Metallurgy Development

The Company has invested in and developed methodology for extracting scandium from the Nyngan property resource since 2010. A portion of the work done over this period has been superseded by work that followed, but subsequent test programs universally benefitted from prior efforts. In summary, the programs have been as follows:

- 2010 The Company inherited work done on Nyngan from the previous property owner, and applied that work to a quick flowsheet and capital estimate done for management by Roberts & Schaefer of Salt Lake City, Utah;
- 2011 The Company employed Hazen Research, Inc., of Golden, Colorado, USA ("Hazen") to test acid baking techniques and solvent extraction ("SX") processes with Nyngan resource material. The Company also employed SGS-Lakefield (Ontario) to test pressure acid leach techniques on Nyngan resource, as a replacement for or an enhancement to acid bake techniques done earlier in the year by Hazen;
- 2012 The Company engaged SNC-Lavalin to do an economic study for management, utilizing an acid bake flowsheet and SX work from the Hazen test program;
- 2014 The Company published a preliminary economic assessment ("PEA") entitled NI 43-101F1 Technical Report on the Feasibility of the Nyngan Scandium Project, authored by Larpro Pty Ltd, utilizing both Hazen and SGS-Lakefield test work results; and
- 2015 The Company amended and refiled the 2014 PEA Report as the "Amended Technical Report and Preliminary Economic Analysis on the Nyngan Scandium Project, NSW, Australia."
- 2016 The Company published an independently prepared definitive feasibility study ("DFS") on the Nyngan Scandium Project. The technical report on the feasibility study entitled "Feasibility Study Nyngan Scandium Project, Bogan Shire, NSW, Australia" was independently compiled pursuant to the requirements of NI 43-101 and incorporated the results of current and previous test work.

Nyngan Definitive Feasibility Study

On April 18, 2016, the Company announced the results of an independent definitive feasibility study on the Nyngan Scandium Project. The technical report on the feasibility study entitled "Feasibility Study – Nyngan Scandium Project, Bogan Shire, NSW, Australia" is dated May 4, 2016, and was independently compiled pursuant to the requirements of NI 43-101 (the "Feasibility Study" or "DFS"). The report was filed on May 6, 2016 and is available on SEDAR (www.sedar.com), the Company's website

(www.scandiummining.com) and the SEC's website (www.sec.gov). A full discussion on the technical report was provided in the Company's Form 10Q for the quarterly period ending March 31, 2016, as filed with the SEC and on SEDAR on May 13, 2016.

The Feasibility Study concluded that the Nyngan Scandium Project has the potential to produce an average of 37,690 kilograms of scandium oxide (scandia) per year, at grades of 98.0%-99.8%, generating an after-tax cumulative cash flow over a 20 year project life of US\$629 million, with an NPV_{10%} of US\$177 million. The average process plant feed grade over the 20 year project life is 409ppm of scandium.

The financial results of the Feasibility Study are based on a conventional flow sheet, employing continuous high pressure acid leach (HPAL) and solvent extraction (SX) techniques. The flow sheet was modeled and validated from METSIM modeling and considerable bench scale/pilot scale metallurgical test work utilising Nyngan resource material. A number of the key elements of this flowsheet work have been protected by the Company under US patent applications.

The Feasibility Study has been developed and compiled to an accuracy level of +15%/-5%, by a globally recognized engineering firm that has considerable expertise in laterite deposits and process facilities, as well as in smaller mining and processing projects, and has excellent familiarity with the Nyngan Scandium Project location and environment.

Nyngan Scandium Project Highlights

- Capital cost estimate for the project is US\$87.1 million,
- Annual scandium oxide product volume averages 37,690 kg, over 20 years,
- Annual revenue of US\$75.4 million (oxide price assumption of US\$2,000/kg),
- Operating cost estimate for the project is US\$557/kg scandium oxide,
- Project Constant Dollar NPV10% is US\$177 million, (NPV8% is US\$225 million),
- Project Constant Dollar IRR is 33.1%,
- Oxide product grades of 98-99.8%, as based on customer requirements,
- Project resource increases by 40% to 16.9 million tonnes, grading 235ppm Sc, at a 100ppm cut-off in the measured and indicated categories, and
- Project Reserve totalling 1.43 million tonnes, grading 409ppm Sc was established on part of the resource.

The Feasibility Study consolidates a significant amount of metallurgical test work and prior study on the Nyngan Scandium Project. The metallurgical assumptions are supported by various bench and pilot scale independent test work programs that are consistent with known outcomes in other laterite resources. A number of the key elements of this flowsheet work have been protected by the Company under US Patent Applications.

The Feasibility Study delivered a positive result on the Nyngan Scandium Project, and recommends the Nyngan Scandium Project owners seek finance and proceed to construction, provided suitable offtake agreements with customers are arranged

Confirmatory Metallurgical Test Results

The final Nyngan Project DFS contained several recommended confirmatory process investigations be undertaken prior to commencing detailed engineering and construction. Specific study areas included pressure leach ("HPAL"), counter-current decant circuits ("CCD"), solvent extraction ("SX"), and oxalate

precipitation, with specific work steps suggested in each area. The Company engaged Altrius Engineering Services (AES) of Brisbane, Australia to undertake these studies, which AES devised and supervised at the SGS laboratory in Perth, Australia and at the Nagrom laboratory in Brisbane, Australia.

On June 29, 2016, the Company announced the results of the subsequent AES metallurgical test work, which confirmed recoveries and efficiencies that either meet or exceed the parameters used in the DFS. Highlights of the independent testing were as follows:

- Pressure leach test work achieved 88% recoveries, from larger volume tests,
- Settling characteristics of leach discharge slurry show substantial improvement,
- Residue neutralization work meets or exceeds all environmental requirements as presented in the DFS and the environmental impact statement,
- Solvent extraction circuit optimization tests generated improved performance, exceeding 99% recovery in single pass systems, and
- Product finish circuits produced 99.8% scandium oxide, completing the recovery process from Nyngan ore to finished scandia product.

Engineering, Procurement and Construction Management Contract

On May 30, 2017, the Company announced that its subsidiary EMC Metals Australia Pty. Ltd. signed an Engineering, Procurement and Construction Management ("EPCM") contract with Lycopodium Minerals Pty Ltd ("Lycopodium"), to build the Nyngan Scandium Project in New South Wales, Australia. The EPCM contract also provides for start-up and commissioning services.

The EPCM contract appoints Lycopodium (Brisbane, QLD, Australia) to manage all aspects of project construction. Lycopodium is the principal engineering firm involved with the DFS. Lycopodium's continued involvement in project construction and commissioning ensures valuable technical and management continuity for the project during the construction and start-up of the project.

On October 19, 2017, we announced that Lycopodium has been instructed to initiate critical path engineering for the Nyngan Scandium Project. Lycopodium commenced work on select critical path components for the project, including design and specification engineering on the high-pressure autoclave unit, associated flash and splash vessels and several specialized high-pressure input pumps. The engineering work was completed in 2018 and will enable final supplier selection, firm component pricing and delivery dates for these key process components.

Environmental Permitting/Development Consent/Mining Lease

On May 2, 2016, the Company announced the filing of an Environmental Impact Statement ("EIS") with the New South Wales, Australia, Department of Planning and Environment, (the "Department") in support of the planned development of the Nyngan Scandium Project. The EIS was prepared by R.W. Corkery & Co. Pty. Limited, on behalf of the Company's subsidiary, EMC Metals Australia Pty. Ltd. ("EMC Australia"), to support an application for Development Consent for the Nyngan Scandium Project. The EIS is a complete document, including a Specialist Consultants Study Compendium, and was submitted to the Department on April 29, 2016.

EIS Highlights:

- The EIS finds residual environmental impacts represent negligible risk.
- The proposed development design achieves sustainable environmental outcomes.

- The EIS finds net-positive social and economic outcomes for the community.
- Nine independent environmental consulting groups conducted analysis over five years, and contributed report findings to the EIS.
- The Nyngan project development is estimated to contribute A\$12.4M to the local and regional economies, and A\$39M to the State and Federal economies, annually
- The EIS is fully aligned with the DFS and with a NSW Mining License Application for the Nyngan project.

Conclusion statement in the EIS: "In light of the conclusions included throughout this *Environmental Impact Statement*, it is assessed that the Proposal could be constructed and operated in a manner that would satisfy all relevant statutory goals and criteria, environmental objectives and reasonable community expectations."

EIS Discussion

The EIS is the foundation document submitted by a developer intending to build a mine facility in Australia. The Nyngan Scandium Project is considered a State Significant Project, in that capital cost exceeds A\$30million, which means State agencies are designated to manage the investigation and approval process for granting a Development Consent from the Minister of Planning and Environment. This Department will manage the review of the Proposal through a number of State and local governmental agencies.

The EIS is a self-contained set of documents used to seek a Development Consent. It is however, supported in many ways by the recently completed DFS.

On November 10, 2016, the Company announced that the Development Consent had been granted. This Development Consent represents an approval to develop the Nyngan Scandium Project and is based on the EIS. The Development Consent follows an in-depth review of the EIS, the project plan, community impact studies, public EIS exhibition and commentary, and economic viability, and involved more than 12 specialized governmental agencies and groups.

Mining Lease

During July 2019, EMC Australia received notice of approval for its mining lease (ML) application. The ML (ML 1792) overlays select areas previously covered by exploration licenses and represents the final major development approval required from the NSW Government to begin construction on the project. The ML 1792 grant is issued for a period of 21 years and is based on the development plans and intent submitted in the ML application. The ML can be modified by NSW regulatory agencies, as requested by EMC Australia over time, to reflect changing operating conditions.

In addition to these two key governmental approvals, other required licenses and permits must be acquired but are considered routine and require only compliance with fixed standards and objective measurements. These remaining approvals include submittal of numerous plans and reports supporting compliance with Development Consent and Mining Lease. In addition, the following water, roads, dam and electrical access reviews and arrangements must be finalized:

- Water Supply Works and Use Approval and Water Access License,
- State and local approval for construction of the intersection of the Site Access Road and Gilgai Road,
- An approval from the NSW Dams Safety Committee for the design and construction of the Residue Storage Facility, and
- A high voltage connection agreement with Essential Energy.

The 2019 ML 1792 grant covers 810 acres (370 hectares) of surface area fully owned by the Company, an area adequate to construct and operate a scandium mine of a scale outlined in the definitive Feasibility Study. The Company had originally filed a mining lease application (MLA 531) covering an area of 874 hectares, which was granted in 2017 as a mining lease (ML 1763), and later ruled invalid. At that time, it was unknown, to both the Department and the Company, that a local landowner had filed a prior, timely and valid objection to the granting of that mining lease. The reduction in area between the initial 2017 ML 1763 and the replacement 2019 ML 1792 represented acreage protested in an "Agricultural Land" objection lodged by a local landowner. The landowner holds freehold surface ownership over a portion of the original grant that was previously covered by the 2017 ML 1763.

On September 10, 2020, the Company announced receipt of a final determination letter from the Deputy Secretary, Department of Regional NSW, Division of Mining, Exploration and Geoscience resolving the outstanding objection filed by the landowner in 2016.

Written advice from the Department to the Company makes clear that all required independent investigative processes, and all affected party comment periods, are now completed, and the Department's decision is final. There are further state courts of appeal available to the landowner, but the facts supporting this final decision are confirmed by the NSW Department of Primary Industry and follow governing law.

This Final Determination from the NSW Government will again allow all measured and indicated resource included in the Nyngan Scandium Project DFS to be reinstated in a new mining lease grant, for which the Company intends to file application.

Downstream Scandium Products

In February 2011, we announced results of a series of laboratory-scale tests investigating the production of aluminum-scandium master alloys directly from aluminum oxide and scandium oxide feed materials. The overall objective of this research was to demonstrate and commercialize the production of aluminum-scandium master alloy using impure scandium oxide as the scandium source, potentially significantly improving the economics of aluminum-scandium master alloy production. In 2014, the Company announced it applied for a US patent on master alloy production, which is still in the application phase.

During the 2015-2017 timeframe, we continued our own internal laboratory-scale investigations into the production of aluminum-scandium master alloys, furthering our understanding of commercial processes and achievable recoveries. We advanced our abilities to make a standard-grade 2% scandium master alloy product typical of commercially available products offered today.

On March 2, 2017, we announced the signing of a Memorandum of Understanding ("MOU") with Weston Aluminium Pty Ltd. ("Weston") of Chatswood, NSW, Australia. The MOU defines a cooperative commercial alliance to jointly develop the capability to manufacture aluminum-scandium master alloy. The intended outcome of this alliance will be to develop the capability to offer Nyngan Scandium Project aluminum alloy customers scandium in form of Al-Sc master alloy, should customers prefer that product form.

The MOU outlines steps to jointly establish the manufacturing parameters, metallurgical processes, and capital requirements to convert Nyngan Scandium Project scandium product into Master Alloy, at Weston's existing production site in NSW. The MOU does not include a binding contract with commercial terms at this stage, although the intent is to pursue the necessary technical elements to arrive at a commercial contract for conversion of scandium oxide to master alloy, and to do so prior to first mine production from the Nyngan Scandium Project.

On March 5, 2018, the Company announced that it had initiated a small-scale pilot program (4kg scale) at the Alcereco Inc. metallurgical research facilities in Kingston, Ontario, to confirm and refine previous labscale work on the manufacture of aluminum-scandium 2% master alloy (MA). The program advanced the process understanding for commercial scale upgrade of Nyngan scandium oxide product to master alloy product.

The 2018 pilot program consisted of five separate trials on two MA product types, production of MA in various forms, and dross analysis to ascertain scandium recoveries to product. The mass of master alloy and product variants produced in the program totaled approximately 20kg and was completed in December of 2018. The results of the program included the successful production of 2% grade MA, with recoveries of scandium to product of 85%.

A second phase of the small-scale pilot program was initiated in the first half of 2019, again at 4kg scale, building on the work done in phase I. The results of this second program included successful production of 2% grade MA, with improvements in form of rapid kinetics, and recoveries of scandium to product of +90%.

On March 5, 2018, the Company also announced that it filed for patent protection on certain process refinements for master alloy manufacture that it believes are novel methods, and also on certain product variants that it believes represent novel forms of introducing scandium more directly into aluminum alloys.

Master Alloy Capability Demonstrated

On February 24, 2020, the Company announced the completion of a three year, three stage program to demonstrate the capability to manufacture aluminum-scandium master alloy (Al-Sc2%), from scandium oxide, using a patent pending melt process involving aluminothermic reactions.

This master alloy capability will allow the Company to offer scandium product from the Nyngan Scandium Project in a form that is used directly by aluminum alloy manufacturers globally, either major integrated manufacturers or smaller wrought or casting alloy consumers.

Research Highlights:

- Program achieved full 2% target product quality requirement,
- Sc recoveries from oxide exceeded target, demonstrated in final tests,
- The microstructure and metal quality meet major alloy producers' specifications,
- Rapid kinetics achieved, important for commercial viability,
- Individual testing batches done at 4kg scale, and
- Successful program testing forms a basis for a larger scale demonstration facility, supporting large scale samples required for industrial aluminum alloy trials.

Focus on Aluminum Alloy Applications for Scandium Products

The Company is in the process of obtaining sales agreements for scandium products produced from our Nyngan Scandium Project. Our focus is on the use of scandium as an alloying ingredient in aluminum-based products. The specific scandium product forms we intend to sell from the Nyngan project include both scandium oxide (Sc₂O₃) and aluminum-scandium master alloys (Al-Sc 2%).

Scandium as an alloying agent in aluminum allows for aluminum metal products that are much stronger, more easily weldable and exhibit improved performance at higher temperatures than current aluminum-

based materials. This also means lighter structures, lower manufacturing costs and improved performance in areas that aluminum alloys do not currently compete.

Aluminum Alloy Research Partner - Alcereco

In 2015, the Company entered into a memorandum of understanding ("MOU") with Alcereco Inc. of Kingston, Ontario ("Alcereco"), forming a strategic alliance to develop markets and applications for aluminum alloys containing scandium. This MOU represented keen mutual interest in foundry-based test work on aluminum alloys containing scandium, based on understandings that Alcereco's team had gained from prior work with Alcan Aluminum, and based on SCY's twin goals of understanding and identifying quality applications for scandium, and also understanding the scandium value proposition for customers.

The Company subsequently sponsored considerable research work with the Alcereco team. This work has developed and documented the improvement in strength characteristics scandium can deliver to aluminum alloys without degrading other key properties. The Alcereco team has run multiple alloy mix programs where scandium loading is varied, in order to look at response to scandium additions on a cost/benefit basis. This work has been done in the context of industries and applications where these alloys are suitable for application today. The programs focused on 1000 series, 3000 Series, 5000 Series and 7000 Series Al-Sc alloys, and have served to make independent data and volume samples available for sales efforts.

Along with the signing of the MOU in 2015, the parties also signed an offtake agreement for scandium sales from the Nyngan Scandium Project. The 2015 offtake agreement specified product prices, annual delivery volumes, and timeframes for commencement of delivery of scandium oxide product. This offtake agreement expired in late 2017 and was renewed on similar price/volume terms, although the sale product was redefined to an aluminum-scandium 2% master alloy. Neither of these offtake agreements contained a mandatory annual minimum purchase volume of scandium product by Alcereco, nor any requirement for payment in lieu of purchase.

The 2017 Alcereco offtake agreement expired in December 2020 and was not renewed by the parties. Alcereco was seeking new company sponsorship at this time, was financially distressed, and the parties could see no benefit to renewal under those circumstances. Alcereco had notified SCY of a planned closure of operations in December, with future re-start possibilities unknown. Alcereco halted operations in late December, at which time all current programs with SCY were completed.

The results of our research work with Alcereco are positive, and consistent with the body of published literature available today on aluminum scandium alloys. We are observing noteworthy strengthening effects with scandium additions at and above 0.1%, and dramatic strengthening improvements with additions of 0.3%, while preserving or enhancing other alloy properties and characteristics. We have also demonstrated that alloy hardening process techniques can have significant effect on the final alloy properties, offering the opportunity to tune alloy characteristics to suit specific applications. These findings belong to SCY and can continue to be shared with select potential customers, as is deemed relevant to their specific areas of commercial interest.

Letters of Intent Signed with Aluminum Scandium Alloy Testing Partners

During 2018 and 2019, the Company announced that it entered into letter of intent ("LOI") agreements with nine unrelated partnering entities who either manufactured parts from aluminum or consumed aluminum in the making of products. In each instance, we agreed to contribute scandium samples, either in form of scandium master alloy product, or aluminum-scandium alloy product, for trial testing by the partners in their downstream manufacturing applications. Each of the parties in receipt of the scandium samples agreed

to report the general results of their testing programs, once completed. One of the agreements, specifically with Eck Industries, was extended in 2020 to a wider development program.

These formal LOI agreements, with various industry segment leaders, were designed to demonstrate how scandium performs in specific products, and in production-specific environments. Potential scandium customers insist on these sample testing opportunities, directly in their research facilities or on their shop floor, to ensure their full understanding of the impacts, benefits, and costing implications of introducing scandium into their traditional aluminum feedstocks.

The results of the nine programs varied, with some showing positive results and others either showing little advantage or not enough to offset cost impacts. Some outcomes were limited in significant ways by the parameters of the testing itself. Based on the reported testing results, all nine partners would need to enter into new testing agreements, with more compelling outcomes, in order to contemplate the introduction of scandium into the aluminum alloy contained in their products in the future.

Some further specifics:

Alloy Casting Partners. Four agreements were executed with the following entities: Eck Industries Inc. (Manitowoc, Wisconsin, USA), Grainger & Worrall Ltd., based in Shropshire, UK, Ohm & Häner Metallwerk GmbH & Co. GK, based in Olpe, Germany, and Bronze-Alu Group, based in La Couture-Boussey, northern France. Eck Industries is expected to continue their work with scandium (and cerium) additions in cast alloys, based on success in strength retention in high heat environments. The other groups did not see cost-offsetting benefits in existing alloys with existing customers.

Wrought Aluminum Manufacturing Partners. Two agreements were executed with the following entities: Austal Ltd. headquartered in Henderson, Western Australia, and Gränges AB, based in Stockholm, Sweden. Results on marine alloys with Austal were encouraging, but further development of both plate and wire samples were deemed required to draw commercially favorable conclusions. Both corrosion and weld strength properties were pursued. Results on heat exchanger alloys with Gränges were ultimately less successful, based on the impacts of downstream manufacturing processes on scandium, and a challenging cost environment in the business sector.

Metal Forming Partners. Two agreements were executed with the following entities: Impression Technologies Ltd., based in Coventry, UK., and PAB Coventry Ltd., based in Coventry, UK. These entities were both interested in determining whether ITLdefine? sheet-forming technology would see advantage in shaping aluminum containing scandium. A brief testing regime indicated that the machines saw no improvement, and in fact had difficulty managing the properties in the AlSc samples provided.

<u>3D Print Partners.</u> Only one agreement was executed, with AML Technologies, based in Adelaide, Australia. SCY found significant challenge in sourcing quality AlSc wire for AML, and also for making suitable wire for this purpose ourselves. However, AML has had success with other wire sourcing partners, and ultimately received sample material in wire form from SCY. AML has not provided test results on SCY-supplied samples to date. Our independent testing results on these wire samples have been favorable.

While working with these nine industry partner groups during the 2018-2021 period, the Company also pursued independent work on aluminum-scandium alloys in two areas: welding/heat tolerance and electrical conductivity. Results of the work in both of these areas is incomplete but shows good promise in specific applications. SCY's intent is to continue to pursue opportunities to test these specific property-driven applications for aluminum-scandium alloys with appropriate testing partners in the future, whether those partners and programs can be disclosed or not disclosed.

The Company's objectives regarding all future sample and testing programs with industry participants remains unchanged – to build a market for scandium alloys and to secure long term customers for the purchase of scandium products supplied by SCY.

Use Of Scandium in Lithium-Ion Batteries

On September 24, 2020, the Company announced the filing of a provisional patent application with the US Patent Office seeking patent rights on various applications of scandium in lithium-ion batteries. The patent application covers a number of scandium enhancements, including doping potential for both anodes and cathodes, and for solid electrolytes.

Patent Application Highlights:

- US Patent Application filed for use of scandium in lithium-ion battery applications.
- Scandium doping applications are explained for anodes, cathodes and electrolytes.
- Scandium offers conductivity advantages as a dopant, over other options, and
- Scandium in other aluminum components offers numerous property improvements, including conductivity, strength and corrosion resistance.

Rechargeable lithium-ion batteries (LIBs) are a staple of everyday life. The search for improved performance through design and materials advances is intense today. Considerable effort is being expended in developing next-generation materials for LIBs that will make batteries safer, lighter, more durable, faster to charge, more powerful, and more cost-effective. A sampling of some these efforts are as follows:

- Minimizing or removing cobalt from cathode materials, based on cost, supply and geographic sourcing issues.
- Improving the durability of liquid electrolytes with dopants, or substitution with safer and higher performing liquid or solid electrolyte systems.
- Designing for higher voltage potential by utilizing different anode or cathode materials.
- Determining combinations of metals that can better withstand harsh internal conditions.
- Scandium, along with other specialty metals, has a clear role to play in each of these areas.

One particularly promising area for scandium contributions is in a lithium nickel manganese oxide (LNMO) battery. The cathode in this design substitutes manganese for cobalt and supports a higher nickel content as well. The substitution then delivers higher working potentials (voltage), higher energy densities, and faster charge/discharge rates, all of which offer the promise of improved battery performance.

Delivering on that promise requires a number of improvements, including employing a dopant for stabilization of the manganese in certain cathode compositions, potential stabilization of lithium titanate (LTO) anode materials as well, and use of dopants to improve the conductivity of both these anode and cathode materials. Conventional liquid electrolytes may see improved function and longevity with the improved cathode and anode conductivity. Scandium represents a suitable and effective dopant in each of these applications.

Solid state electrolytes (SSEs) represent another potential break-through improvement in LIBs. They will handle higher voltages, higher temperatures, greater power densities, are potentially easier to package, and are considered safer in use. Scandium represents a suitable and effective dopant in these applications, analogous to the use of scandium to stabilize solid zirconia electrolytes in solid oxide fuel cells. Recently technical papers (available upon request) covering the use of Lithium Super Ion Conductors (LiSICON) for SSEs have indicated that primary compounds containing scandium, such as Li₃Sc₂(PO₄)₃, LiScP₂O₇ and

 $\text{Li}_3\text{Sc}(BO_3)_2$, LiScO_2 as well as certain doped compounds such as $\text{Li}_{1.33}\text{ScSi}_{0.33}P_{1.67}O_7$, $\text{Li}_{3.375}\text{Mg}_{0.375}\text{Sc}_{0.625}(BO_3)_2$, $\text{Li}_{1.5}\text{Al}_{0.33}\text{Sc}_{0.17}\text{Ge}_{1.5}(PO_4)_3$, etc. can provide desirable crystal structural frameworks for solid state electrolytes. Non-oxide LiSICON fast conductors have also been identified recently, such as some lithium cryolite types: Li_3ScCl_6 , as well as its fluoride counterpart Li_3ScF_6 .

Lithium-ion batteries employ aluminum in a number of areas, specifically in cathode structure, current connectors, and in general battery structure. Aluminum-scandium alloys represent an enhanced aluminum alloy option, based on their combination of conductivity and strength.

The intent of this SCY patent filing was to advise the battery industry that scandium is a prospective dopant choice for enhanced performance of LIBs, both under existing design parameters and in particular for certain next-gen lithium-ion batteries. We want to ensure that battery research and design groups consider scandium additions, amongst their various materials choices, as they race to build a better lithium-ion battery.

Honeybugle Scandium Property

On April 2, 2014, the Company announced that it had secured a 100% interest in an exploration license (EL 7977) covering 34.7 square kilometers in New South Wales (NSW), Australia referred to as the Honeybugle Scandium property. The license area is located approximately 24 kilometers west-southwest from SCY's Nyngan Scandium Project. The license area covers part of the Honeybugle geologic complex and will carry that name in our future references to the property. The ground was released by the prior holder, and SCY intends to explore the property for scandium and other metals.

The Company does not consider the Honeybugle Scandium property to be a material property at this time. No resources or reserves are known to exist on the property. The property is classified as an Australian property for purposes of financial statement segment information.

The location of the Honeybugle Scandium property is provided below.



Figure 4. Location of Honeybugle Scandium property

Honeybugle Drill Results

On May 7, 2014, the Company announced completion of an initial program of 30 air core (AC) drill holes on the property, specifically at the Seaford anomaly, targeting scandium (Sc). Results on 13 of these holes are shown in detail in the table below. These holes suggest the potential for scandium mineralization on the property similar to our Nyngan Scandium Project.

Highlights of initial drilling program results are as follows:

- The highest 3-meter intercept graded 572 ppm scandium (hole EHAC 11);
- EHAC 11 also generated two additional high grade scandium intercepts, grading 510 ppm and 415 ppm, each over 3 meters;
- The program identified a 13-hole cluster which was of particular interest;
- Intercepts on these 13 holes averaged 270 ppm scandium over a total 273 meters at an average continuous thickness of 21 meters per hole, representing a total of 57% (354 meters) of total initial program drilling;
- The 13 holes produced 29 individual (3-meter) intercepts over 300 ppm, representing 31% of the mineralized intercepts in the 273 meters of interest; and
- This initial 30-hole AC exploratory drill program generated a total of 620 meters of scandium drill/assay results, over approximately 1 square kilometer on the property.

The detail results of 13 holes in the initial drill program are as follows:

Table 7. Results of 13-Hole Initial Drill Program

Honeybug	le 30 Hole I	Drill Progra	m - April 2	2014 Tar	get-Scandiı	um
Drill Hole	Honeybugle Drill	Hole	From (meter	To (meter	Intercept Length	Total Scandium
Number	Area	Type	depth)	depth)	(meters)	Grade (ppm)
EHAC 1	Seaford	Explore (AC)	21	42	21	218
		including	27	36	9	262
EHAC 2	Seaford	Explore (AC)	0	12	12	300
		including	0	9	9	333
EHAC 3	Seaford	Explore (AC)	3	12	9	295
		including	6	9	3	352
EHAC 5	Seaford	Explore (AC)	0	15	15	244
		including	12	15	3	333
EHAC 6	Seaford	Explore (AC)	0	24	24	185
		including	0	9	9	214
		including	18	24	6	214
EHAC 7	Seaford	Explore (AC)	9	51	42	225
		including	15	42	27	220
		including	42	51	9	252
EHAC 9	Seaford	Explore (AC)	6	27	21	272
		including	9	24	15	350
EHAC 10	Seaford	Explore (AC)	0	18	18	251
EHAC 11	Seaford	Explore (AC)	0	30	30	369
		including	9	15	6	461
		including	21	24	3	572
EHAC 12	Seaford	Explore (AC)	0	21	21	177
EHAC 26	Seaford	Explore (AC)	0	21	21	309
	Seaford	including	3	18	15	343
EHAC 28	Seaford	Explore (AC)	0	18	18	344
	Seaford	including	3	15	12	363
EHAC 29	Seaford	Explore (AC)	3	21	18	316
		including	9	18	9	396
Assumes 175 ppm	cut-off grade					

Seaford is characterized by extensive outcrops of dry, iron-rich laterites, allowing for a particularly shallow drill program. Thirty (30) air core (AC) holes on nominal 100-meter spacing were planned, over an area of approximately 1 square kilometer. Four holes were halted in under 10 meters depth, based on thin laterite beds, low scandium grades, and shallow bedrock.

The 13 holes highlighted in the table are grouped together on either side of Coffills Lane and represent all of the drill locations where meaningful intercept thickness generated scandium grades exceeding 175 ppm. Some of these 13 holes showed significant scandium values on the immediate surface, and alternately, other holes exhibited favorable scandium grades that began at shallow depth. The highest-grade Sc sample was found in a 21-24 meter interval (572 ppm), although several holes produced better than 350 ppm Sc intercepts at depths of under 9 meters. The deepest hole (EHAC 7) was drilled to 57 meters, showing good scandium grades over a 12-meter horizon (245 ppm) near the bottom of the hole, from 39 to 51 meters depth. Higher scandium grades were associated with higher iron levels. Holes were drilled to a depth where they contacted the fresh ultramafic bedrock, which generally signaled the end of any scandium enrichment zones.

The drill plan divided Seaford into four sub-areas, 1-4, as highlighted Figure 5, below. Area 1 was relatively higher ground and therefore the least impacted by ground moisture. Consequently, this dryer area received

the greatest attention, although that had been the general intention in the plan. Area 1 received 17 holes, with 13 presented in detail in the table above. Areas 2-4 were each intended as step-out areas that need to be further examined in the next program. The three step-out areas did not generate results of particular note, although hole locations were not optimal due to ground conditions and access.

Area 2 received 3 holes, 60 meters total, and generated Sc grades from 45-75 ppm, Area 3 received 4 holes, 87 meters total, and generated Sc grades from 47-122 ppm, Area 4 received 5 holes, 72 meters total, and generated Sc grades from 60-101 ppm, and The average depth of all of these holes was 18 meters, with the deepest 30 meters.

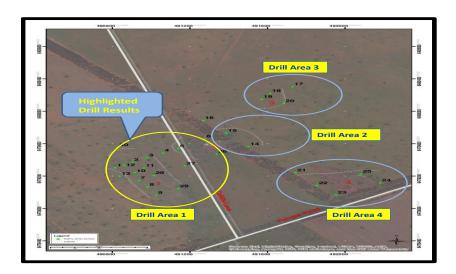


Figure 5. Initial Drill Program Map

This 13-hole cluster (Area 1) was noted to be in a relatively thick laterite zone which was constrained to the west by contact with meta-sediments, to the east by fresh ultramafic bedrock, and to some extent in the north by a poor intersection result in hole 30. Area 1 remains somewhat open to the south, with the two southern-most holes (EHAC 9 and EHAC 29) generating some of the best scandium grade intercepts in the area.

The surface and near surface mineralization at this property is an advantage, both in locating areas of interest for future exploration work, and also because of extremely low overburden ratios. This particular characteristic for the Honeybugle Scandium property is different from our Nyngan Scandium Project, where mineralization is typically covered by 10-20 meters of barren alluvium.

Further drilling at Seaford is warranted, based on the results of this introductory and modest program, specifically to the north and south of the existing area 1 drill pattern, along with investigation and select drilling at the other three remaining anomalies on the property.

During 2018, we performed site work at the Honeybugle Scandium property to meet the expenditure commitment to maintain the exploration license. That 2018 work did not change the previous conclusions, as described above. Work is planned for 2022 on the property.

Qualified Person and Quality Assurance/Quality Control

John Thompson, B.E. (Mining); Vice President - Development at SCY is a qualified person as defined in NI 43-101 and has reviewed the technical information on this property. The drilling, sampling, packaging and transport of the drill samples was carried out to industry standards for QA/QC. SCY employed an independent local geology consulting and drill supervisory team, Rangott Mineral Exploration Pty. Ltd., (RME) of Orange, NSW, Australia, to manage the drill work on-site. Bulk samples of drill returns were collected at one metre intervals from a cyclone mounted on the drilling rig, and a separate three-tier riffle splitter was used on site to obtain 2.0-4.5kg composite samples collected over 3 metre intervals, for assay. Individual sample identifiers were cross-checked during the process. The assay samples were placed in sealed polyweave bags which remained in RME's possession until the completion of the drilling program, at which time they were transported to RME's office in Orange. There, the sequence of sample numbers was validated, and the assay samples were immediately submitted to Australian Laboratory Services' (ALS') laboratory in Orange. The remnant bulk samples, which were collected in sealed polythene bags, were transported by RME to a local storage unit at Orange, for long-term storage. ALS/Orange dried and weighed the samples and pulverized the entire sample to 85% passing 75 microns or better (technique PUL-21). These 50g sample bags of pulps were then sent to the ALS laboratory at Stafford in Brisbane, Queensland for analysis. ALS/Brisbane analyzed the pulps for scandium, nickel, cobalt, chromium, iron and magnesium, using Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) after a four acid (total) digestion (technique ME-ICP61). The lower detection limit for scandium using this technique is 1ppm. For their internal quality control, ALS/Brisbane added 4 standard samples (for 20 repeat analyses), 10 blank samples and 16 duplicate samples to the batch. Please see news release see news release dated May 7, 2014, and available on www.sedar.com for further information on the Honeybugle drill results.

Kiviniemi Scandium Property (Eastern Finland Province, Finland)

On September 25, 2017, the Company announced that its wholly owned subsidiary company, Scandium International Mining Corp., Norway AS, was granted a reservation on an Exploration License for the Kiviniemi Scandium property in central Finland from the Finnish regulatory body governing mineral exploration and mining in Finland. The exploration license was subsequently granted during August 2018, and our exploration rights have been moved to SCY Exploration Finland Oy, a wholly owned Finnish subsidiary.

The Geological Survey of Finland ("GTK") conducted airborne survey work on the area in 1986, conducted exploration drilling on the property in 2008-2010, and published those program results on their public GTK website in 2016.

The Company does not consider the Kiviniemi Scandium property to be a material property at this time. No NI 43-101 resources or reserves are known to exist on the property. The property is classified as the Finland property for purposes of financial statement segment information.

Highlights

- Kiviniemi property was previously identified for scandium and explored by GTK,
- Property is a high iron content, medium grade scandium target, located on surface, with on-site upgrade potential,
- Early resource upgrade work done for GTK promising, confirmed by SCY,
- Property is all-weather accessible, close to infrastructure, and
- Finland location is mining-friendly and ideally suited to EU customer markets.

Property/Location

The Kiviniemi property is located in the municipality of Rautalampi, Eastern Finland Province, approximately 350km northeast of Helsinki, by road. The closest major city/airport is Kuopio (pop. 110,000), approximately 70km to the northeast of the property. The exploration target is located on a small portion of a family farm, partially cleared for farming. Most of the property is wooded, including the area where the mineralization has been located,

Exploration License

During August 2018, an exploration license for the Kiviniemi Scandium property was granted from the Finnish regulatory body governing mineral exploration and mining in Finland. The exploration area is approximately 24.6 hectares (0.25 square kilometer), identical to the historic GTK exploration license on the property, which expired in 2015. The mineralized area, as defined on GTK resource modeling maps, is approximately 25% of the total reservation. The exploration license requires us to report our exploration activities annually to Finland government agencies and to demonstrate in the annual reports that any exploration work has been effective and systematic.

Prior Exploration Work

GTK performed magnetic surveys on the general area in 1986, focused on copper/nickel/cobalt targets, and based on current mining activity in the area. That initial field work located a significant magnetic anomaly on the Kiviniemi property. In 2008, GTK initiated an exploration drilling program on the property, completing 4 diamond core holes in that first program phase, followed by a further 5 diamond holes in 2010, totaling 1,250 meters, at an average (angled) length of 139 meters, and a maximum vertical extension of 167 meters. The drill spacing varied from 50-200 meters, using a diamond drill size of 46mm (T56).

Four of the nine total holes drilled (approx. 850 meters) are in the mineralized area, with the remainder defining portions of the mag zone that did not contain scandium. The mag zone is generally very high in iron, ranging from about 20% to 35% Fe. The GTK published the results of the drill program assays, and other information on the geology and mineralization, on their website in 2016.

Geology of Resource Target. The host rock is very iron-rich, garnet-bearing fayalite ferro(monzo) diorite. The main minerals in the deposit include plagioclase, potassium feldspar, ferrohedenbergite (clinopyroxene), ferrohastingsite (amphibole), almandine garnet and fayalite. The principal scandium carrier minerals are ferrohastingsite (59 %) and ferrohedenbergite (40 %).

Resource Modeling

GTK completed and published a paper outlining property work including a 3D modeling and resource estimation on the project, in March 2016. The authors employed data from 6 holes and used an industry standard GEOVIA Surpac software to produce a geological 3D domain model, and inverse distance was run to estimate resource grades into the block model. The authors declined to specifically characterize the resource on the basis of limited holes and uneven spacing, describing their estimate as an "exploration potential measurement." The authors estimated that another 500-700 meters of drilling (5-7 holes) would establish 50-meter centers on the target and allow a resource classification. The mineralized target remains open at depth. The authors did provide a table of results on tonnage estimates from their modeling work, at various cut off values, excerpts of which are presented below.

Kiviniemi Scandium Property - GTK Resource Potential Estimate				
Estimated				
Potential	Sc Cut Off	Average Grade Estimate (ppm)		
Tonnage (Mt)	Grade (ppm)	Scandium	Yttrium	Zirconium
12.6	60	170.1	80.5	1745
12.5	100	170.9	80.3	1744
11.1	150	173.3	80.2	1830

SOURCE: Publication, GTK, "3D Modeling and Mineral Resource Estimation of the Kiviniemi Scandium Deposit, Eastern Finland". Authors, Janne Hokka & Tapio Halkoaho

The Company believes the standards and controls employed by GTK are reliable and consistent with proper industry practice. However, the potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a mineral resource and it is uncertain whether further exploration will result in a mineral resource. The Company considers the above estimates as historical in nature, and such estimates do not use the categories prescribed by NI 43-101. A qualified person (as defined in NI 43-101) has not done sufficient work to classify the historical estimate as a current mineral resource. The Company is not treating the historical estimate as a current mineral resource.

Metallurgical Upgrade Work

In 2010, GTK engaged their metallurgical research laboratory (at Outokumpu) to conduct standard upgrade testing on the drill core sample material, specifically magnetic gravity separations. The mag separation work suggested a scandium upgrade to approximately 346ppm, based on a resource material head grade of 160-200ppm, and a 72% scandium recovery.

In June 2017, SCY engaged FLSmidth (Salt Lake City, Utah) seeking to duplicate the earlier 2010 upgrade work and confirm the earlier results. The earlier results were generally confirmed, in that the 2017 work achieved magnetic separation upgrade assays of 286ppm on a resource material head grade of 186ppm. We supplied FLSmidth with approximately 16kg of resource material sourced from GTK, all samples from a single hole (P433-R3). FLSmidth also carried out scandium check assays on the individual drill hole samples provided by GTK, with good grade correlation to GTK data.

Kiviniemi Project Summary

The Kiviniemi property represents a medium grade scandium resource target that has remained unrecognized and overlooked by earlier exploration work, largely due to the absence of the more commonly sought-after minerals in the region, specifically copper, nickel and cobalt. We believe that Kiviniemi is Europe's largest underdeveloped primary scandium mining resource.

The target has benefited significantly from valuable early exploration work by the GTK, which has advanced the property to a stage where successful metallurgical investigations may prove value that offsets grade concerns. SCY estimates roughly US\$2M of work value has been directed at this property to date, including field work, drilling programs, assay work, overheads, and metallurgical upgrade studies, but firm numbers are not available.

We plan a limited drill program to augment the existing GTK data and provide more sample material for metallurgical test work programs to define economic site upgrade possibilities on the scandium mineralization observed to date.

Patent Program Summary- Applications and Grants

Patent Filings - Summary

The Company is in the process of establishing a significant portfolio of intellectual property through the filing of scandium related patents both in the US and abroad.

On 10/12/2021 the company was granted a patent for the recovery of scandium from nickel laterite ores.

To date, the following nine US patents have been granted to the Company:

11,142,809	Systems and Processes for Recovering Scandium Values from Laterite Ores
10,988,830	Scandium Master Alloy Production
10,988,828	Extraction of Scandium Values from Copper Leach Solutions
10,450,634	Scandium-Containing Master Alloys and Method for Making The Same
10,378,085	Recovery Of Scandium Values Through Selective Precipitation of Hematite and
	Basic Iron Sulfates from Acid Leachates
10,260,127	Method For Recovering Scandium Values from Leach Solutions
9,982,326	Solvent Extraction of Scandium from Leach Solutions
9,982,325	Systems And Methodologies for Direct Acid Leaching of Scandium-Bearing
	Ores
8,372,367	System and Method for Recovering Boron Values from Plant Tailings

Below is a list of thirteen US patents that have been filed, but have not been granted yet:

US20210371294-A1	Process for the Preparation of High Purity Alumina*
US202163038873	Recovery of Critical Metals from SX-EW Copper Raffinate and Other Solutions
	Derived from Leaching Ores with Sulfuric Acid
US20210347651	Counter Current Process for Recovering High Purity Copper Sulfate Values
	from Low Grade Ores
US20200001407	Control Of Recrystallization In Cold-Rolled AlMn(Mg)ScZr Sheets For
	Brazing Applications
US20210172041	Byproduct Scandium Recovery from Low Grade Primary Metal Oxide Ores
US20190218645	Direct Scandium Alloying
US20120305452	Dry, Stackable Tailings and Methods for Producing the Same
US20110298270	In Situ Ore Leaching Using Freeze Barriers
US20120055851	Low Carbon Dioxide Footprint for Coal Liquefaction
US20120204680	System and Method for Recovery of Nickel Values from Nickel-Containing
	Ores
US20120207656	System and Method for Recovery of Scandium Values from Scandium-
	Containing Ores
Provisional (2)	Titles not yet publicly disclosed

*NOTE: This Final Patent Application was published by the US Patent office on December 2, 2021 (A1)

Patent Applications Discussion

- These patents and patent applications cover novel, unique flowsheet designs, applicable to both scandium extraction and other metals extraction.
- The patented designs on scandium are largely supported by test work done with Nyngan Scandium Project resource material and known design parameters.
- The scandium patents cover HPAL system material flows, solvent extraction (SX), ion exchange systems ("IX"), atmospheric tank and heap leaching systems and techniques, and processes for directly making select master alloys containing scandium; and
- A number of the scandium-focussed designs are incorporated as part of the DFS.
- Recovery of by-product scandium from certain other mineral resources is also covered.
- Recovery of base metals, such as copper, cobalt, nickel, manganese and aluminum from process solutions or waste products is also covered.
- Use of scandium in lithium-ion batteries is addressed.

These patent applications, filed with the US Patent Office, protect the Company's position and rights to the intellectual property (IP) contained and identified in the applications as of the date filed, within the worldwide jurisdiction limits of the US patent system. Review of patent applications by the US Patent Office takes time, but the initial dates of filing these patents define the basis of IP ownership claims, as is generally afforded U.S. patentholders.

The Company intends to utilize the IP contained in these process patents in the development of process flowsheets for recovery of scandium from its Nyngan Scandium Project, as well as its Honeybugle project and future by-product opportunities from leach solutions and/or waste products. The Company believes that patent protection of these specific, novel process designs will be granted.

Many of the basic design elements contemplated in the Nyngan Scandium Project flowsheet are commonly applied to other specialty metals, particularly nickel. However, the application of these basic design elements has not been commonly applied to scandium extraction from laterite resources, and there are enough intended and required operational differences in the application to permit the Company to patent-protect IP on those differences.

Our history of work on solution separation technologies using ion exchange and/or solvent extraction has widened our opportunity to pursue recovery of select elements of a growing list of critical metals, as defined by governments, concerned customers and industry groups, specifically prioritising lithium-ion battery metals. Our current high-priority CMR Project development program at the Phoenix Mine, focussed on aluminum harvesting and HPA manufacture from copper oxide raffinate solutions is a direct beneficiary. HPA patent application US20210371294-A1, filed in May 2021, is directly applicable to this project and currently defines our approach in development work with Nevada Gold Mines.

These patent claims are the result of ten years of metallurgical test work with independent resource laboratories and specific design work by Willem Duyvesteyn, the Company's Chief Technology Officer. This work is ongoing. Patent protection on flowsheet intellectual property will serve to limit or prevent the unauthorized use of that IP by others without the Company's consent. We believe these filings are an important action to protect the ownership of a Company asset, on behalf of all SCY shareholders.

Principal Projects - Planned Activities for 2022-2023

The following development steps are planned for the Company's initiatives in 2022 and 2023:

- Continue and complete the 15-month Phoenix CMR Project development program, including test work, pilot plant studies, and high grade financial and costing studies required to take Final Investment Decision (FID). Work is scheduled to complete by end 2022.
- Investigate and identify suitable customers for products planned for CMR production,
- Seek additional copper industry host(s) for additional CMR Project developments.
- Seek possible non-mine partners or collaborations that will support an HPA project, specifically targeting opportunities in North America and Europe.
- With results of a successful CMR development program with NGM, raise capital for a Phoenix CMR Project, beginning in late 2022.

With successful completion of the Phoenix CMR development program, and a mutual decision between NGM and SCY to build a critical metals recovery project at Phoenix Mine, the Company intends to commence construction of production facilities and make product available for sale in early 2024.

Project work on any potential stand-alone HPA project will follow a similar but independent course to the Phoenix CMR Project, and is subject to identifying suitable industry partners, in those individual situations where a partner is deemed necessary.

ITEM 3. LEGAL PROCEEDINGS

We are not a party to any pending legal proceedings and, to the best of our knowledge, none of our properties or assets are the subject of any pending legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

The Company has no active mining operations or dormant mining assets currently and has no outstanding mine safety violations or other regulatory safety matters to report.

PART II

ITEM 5. MARKET FOR REGISTRANTS' COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Price Range of Common Shares

The principal market on which our common shares are traded is the Toronto Stock Exchange. Our common shares commenced trading on the Toronto Stock Exchange on April 24, 2008, under the symbol "GP." Effective March 11, 2009, the common shares were listed and posted for trading on the Toronto Stock Exchange under the symbol "EMC." Effective November 28, 2014, the common shares were listed and posted for trading on the Toronto Stock Exchange under the symbol "SCY." The following table shows the high and low trading prices of our common shares on the Toronto Stock Exchange for the periods indicated.

Year	High	Low
	(C\$)	(C\$)
Fiscal Year ended December 31, 2021		
First quarter	0.325	0.205
Second quarter	0.250	0.165
Third quarter	0.225	0.155
Fourth quarter	0.200	0.135

Year	High	Low
	(C\$)	(C\$)
Fiscal Year ended December 31, 2020		
First quarter	0.095	0.060
Second quarter	0.135	0.060
Third quarter	0.135	0.110
Fourth quarter	0.230	0.110

Exchange Rates

We maintain our books of account in United States dollars and references to dollar amounts herein are to the lawful currency of the United States except that we are traded on the Toronto Stock Exchange and, accordingly, stock price quotes and sales of stock are conducted in Canadian dollars (C\$). The following table sets forth, for the periods indicated, certain exchange rates based on the noon rate provided by the Bank of Canada. Such rates are the number of Canadian dollars per one (1) U.S. dollar (US\$). The high and low exchange rates for each month during the previous six months were as follows:

	<u>High</u>	Low
January 2022	1.2741	1.2484
December 2021	1.2942	1.2660
November 2021	1.2792	1.2368
October 2021	1.2654	1.2329
September 2021	1.2828	1.2518
August 2021	1.2856	1.2514

The following table sets out the exchange rate (price of one U.S. dollar in Canadian dollars) information as at each of the years ended December 31, 2020, and 2021.

	Year Ended I	December 31
	(Canadian \$	per U.S. \$)
	<u>2021</u>	<u>2020</u>
Rate at end of Period	1.2732	1.2732
Low	1.2718	1.2718
High	1.4496	1.4496

As of March 8, 2022, there were 104 registered holders of record of the Company's common shares and an undetermined number of beneficial holders.

Dividends

We have not paid any cash dividends on our common shares since our inception and do not anticipate paying any cash dividends in the foreseeable future. We plan to retain our earnings, if any, to provide funds for the expansion of our business.

Securities Authorized for Issuance under Compensation Plans

The following table sets forth information as of December 31, 2021, respecting the compensation plans under which shares of the Company's common stock are authorized to be issued.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	34,615,000	C\$0.177	12,958,639
Equity compensation plans not approved by security holders	Nil	Nil	Nil
Total	34,615,000	C\$0.177	12,958,639

Purchases of Equity Securities by the Company and Affiliated Purchasers

Neither the Company nor an affiliated purchaser of the Company purchased common shares of the Company in the year ended December 31, 2021.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS

Overview

Scandium International is a specialty metals company focused on the evaluation and potential development of projects into producing assets. The Company pursues project opportunities from both known geologic resources and existing mine process solutions when it identifies further recovery potential.

The Company is an exploration stage company and anticipates incurring significant additional expenditures prior to production at all its properties. The Company was incorporated under the laws of the Province of British Columbia, Canada in 2006. The Company currently trades on the Toronto Stock Exchange under the symbol "SCY."

These consolidated financial statements have been prepared on a going concern basis that contemplates the realization of assets and discharge of liabilities at their carrying values in the normal course of business for the foreseeable future. These financial statements do not reflect any adjustments that may be necessary if the Company is unable to continue as a going concern.

The Company currently earns no operating revenues and will require additional capital to advance the Nyngan property. The Company's ability to continue as a going concern is uncertain and is dependent upon the generation of profits from mineral properties, obtaining additional financing and maintaining continued

support from its shareholders and creditors. These are material uncertainties that raise substantial doubt about the Company's ability to continue as a going concern. If additional financial support is not received, or operating profits are not generated, the carrying values of the Company's assets may be adversely affected.

In March 2020, the World Health Organization declared coronavirus COVID-19 a global pandemic. This contagious disease outbreak, which has continued to spread, and related adverse public health developments, has adversely affected workforces, economies, and financial markets globally, leading to an economic downturn. It is not possible for the Company to predict the duration or magnitude of the adverse results of the outbreak and its effects on the Company's business or ability to raise funds.

RESULTS FOR THE YEAR ENDED DECEMBER 31, 2021

Liquidity and Capital Resources

On December 31, 2021, we had working capital of \$(1,598,778) including cash of \$93,694 and current liabilities of \$1,727,714 as compared to working capital of \$(941,674) including cash of \$170,284 at December 31, 2020.

On December 31, 2021, we had a total of 34,615,000 (2020 - 35,100,000) stock options exercisable between C\$0.065 and C\$0.37 (2020 – between C\$0.065 and C\$0.37) which have the potential upon exercise to generate a total of C\$6,122,000 (2020 – C\$5,962,625) in cash over the next four and a half years. There is no assurance that these securities will be exercised.

Our continued development is contingent upon our ability to raise sufficient financing both in the short and long term. There are no guarantees that additional sources of funding will be available to us; however, management is committed to pursuing all possible sources of financing to execute our business plan.

Our major capital requirement in the next 12 months relates our entry into a critical metals recovery program.

Results of Operations

Quarter ended December 31, 2021

The net loss for the quarter decreased by \$491,195 to \$215,111 from a loss of \$706,306 in the prior year mainly because of decreased stock-based compensation costs and lower general and administrative expenses. Details of the individual items contributing to the decreased loss are as follows:

Q4 2021 vs. Q4 2020 - Variance Analysis (US\$)				
Item	Variance Favourable / (Unfavourable)	Explanation		
Stock based compensation	\$425,679	In Q4 of 2020 the Company granted 5,900,000 stock options all of which vested immediately. In the comparative quarter of 2021, no options grant was made.		
General and	\$30,530	In Q4 2021, the Company received a refund of property taxes		

Q4 2021 vs. Q4 2020 - Variance Analysis (US\$)				
Item	Variance Favourable / (Unfavourable)	Explanation		
administrative		in Australia on its' Nyngan property which account for the bulk of this favorable variance.		
Exploration	\$17,330	In Q4 2020 the Company began initial spending on its Critical Metals Recovery program with very little expenditures being made when compared to Q4 2020 when the Company was acquiring aluminum/scandium alloys to promote its focus on scandium.		
Foreign exchange loss	\$10,106	In Q4 2021 the US dollar strengthened against both the Canadian and Australian dollar. This meant that for any accounts payable held in Canadian and Australian dollars those liabilities decreased. In the comparative quarter of one year ago the opposite situation occurred.		
Insurance	\$1,220	This favorable variance is due to lower premiums that the Company was able to negotiate in Q4 2021 when compared to Q4 2020.		
Travel	\$1,006	The Company has curtailed travel in both comparative periods with the 2021 expenses being almost non-existent.		
Consulting	\$989	Year over year costs are almost the same.		
Salaries and benefits	\$948	The slightly lower cost in Q4 2021 is due to the strengthening of the US dollar against both the Canadian and Australian dollar.		
Professional fees	(\$565)	Year over year costs are almost the same.		

Results of Operations for the Year ended December 31, 2021

The net loss for the year increased by \$179,192 to \$1,567,032 from \$1,387,840 in the prior year, mainly because of a one-time royalty sale in 2020 which was partially offset by lower general and administrative and stock-based compensation. Details of the individual items contributing to the decreased net loss are as follows:

2021 vs. 2020 - Variance Analysis (US\$)				
Item	Variance Favourable / (Unfavourable)	Explanation		
Sale of royalty interest	(\$382,430)	In January of 2020, the Company sold a royalty interest for net proceeds of \$382,430. This was a non-recurring event leading to this unfavourable variance		
Professional fees	(\$9,664)	The increased fee is attributable to the entering into of the CMR agreement with Nevada Gold Mines.		
Salaries and benefits	(\$4,790)	The slightly higher cost in 2021 is due to the strengthening of the Australian dollar against the US dollar.		
Insurance	(\$2,237)	The higher cost in 2021 is due to overall increases in insurance premiums for the Company's operations.		
Consulting	(\$1,069)	This negative variance is due to the hiring of a consultant to advance our CMR project.		
Amortization	\$579	A lower base of depreciable assets when compared to 2021 resulted in this favourable variance.		
Travel	\$4,800	In 2021 the Company reduced its travel costs to conserve capital.		
Exploration	\$10,332	With the Company in a conservation of cash mode in 2021, less funds were expended on this activity.		
Foreign exchange gain	\$54,950	The overall strengthening of the US dollar caused this favourable variance.		
Stock-based compensation	\$73,670	Options granted in 2021 were done when the stock was at a lower market price. This resulted in a lower expense.		
General and administrative	\$76,667	The decrease in this expense is largely due to a refund of property taxes paid in Australia on the reassessment of Nyngan from Mining to Agriculture.		

Cash flow discussion for the year ended December 31, 2021, compared to December 31, 2020

The cash outflow from operating activities increased by \$292,224 to \$374,205 (2020 – \$81,981) due mainly to the sale of a royalty interest in 2020 of \$382,430 which was partially offset by overall lower operating costs.

Cash inflows from financing activities of \$297,815 increased by \$161,118 due to exercises of stock options of \$297,815 versus \$136,697 for the year ending December 31, 2020.

Summary of quarterly results (US\$)

	2021			2020				
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Net Sales	-	-	-	-	-	-	-	-
Net Income (Loss)	(215,111)	(278,704)	(761,080)	(312,137)	(706,306)	(265,057)	(270,463)	(146,014)
Basic and diluted Net Income (Loss) per share	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

Financial Position

Cash

Yearend Cash declined by \$76,390 to \$93,894 (2020 - \$170,284)

Prepaid expenses and receivables

Prepaid expenses and receivables have decreased by \$7,388 to \$35,042 (2020 - \$42,430) due to lower activity levels in 2021.

Reclamation bond

A reclamation bond of \$11,444 was purchased for the Kiviniemi property in 2018.

Property, plant and equipment

Property plant and equipment consists of office furniture and computer equipment at the Sparks, Nevada office. The decrease of \$1,728 to \$2,932 at December 31, 2021 (2020 - \$4,660) is due to depreciation of computer servers at the Sparks office.

Mineral interests

Mineral interests remained at \$704,053 at December 31, 2021 (2020 - \$704,053).

Accounts Payable, Accounts payable with related parties and Accrued Liabilities

Accounts payable, accounts payable with related parties and accrued liabilities have increased by \$573,326 to \$1,727,714 at December 31, 2021 (2020 – \$1,154,388) due to the deferral of consulting fees and salaries.

Capital Stock

Capital stock increased by \$522,106 to \$110,149,177 (2020 - \$109,627,071) due to stock option exercises.

Additional paid-in capital increased by \$386,094 to \$6,891,510 (2020 - \$6,505,416) as a result of stock option expensing which was partially offset by stock option exercises.

Treasury shares remained at \$1,264,194 through the 2021 fiscal period.

Off-balance sheet arrangements

At December 31, 2021, we had no material off-balance sheet arrangements such as guarantee contracts, contingent interest in assets transferred to an entity, derivative instruments obligations or any obligations that trigger financing, liquidity, market or credit risk to us.

Transactions with related parties

During the year ended December 31, 2021, the Company expensed \$441,277 for stock-based compensation for stock options issued to Company directors. During the year ended December 31, 2020, the Company expensed \$542,772 for stock options issued to Company directors.

During each of the years ended December 31, 2021, and December 31, 2020, the Company accrued a consulting fee of \$102,000 to one of its directors.

As at December 31, 2021, the Company owed \$1,159,713 (2020 - \$702,456) to officers of the Company.

Additional Information and Accounting Pronouncements

Outstanding share data

At March 8, 2022 we had 317,157,595 issued and outstanding common shares and 30,215,000 outstanding stock options at a weighted average exercise price of C\$0.203. No warrants are outstanding at March 8, 2022.

Critical Accounting Estimates

The preparation of financial statements in conformity with generally accepted accounting policies requires our management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates are based on past experience, industry trends and known commitments and events. By their nature, these estimates are subject to measurement uncertainty and the effects on the financial statements of changes in such estimates in future periods could be significant. Actual results will likely differ from those estimates.

Stock-based compensation

We use the Black-Scholes option pricing model to calculate the fair value of stock options and compensatory warrants granted. This model is subject to various assumptions. The assumptions we make will likely change from time to time. At the time the fair value is determined, the methodology that we use is based on historical information, as well as anticipated future events. The assumptions with the greatest impact on fair value are those for estimated stock volatility and for the expected life of the instrument.

Deferred income taxes

We account for tax consequences of the differences in the carrying amounts of assets and liabilities and our tax bases using tax rates expected to apply when these temporary differences are expected to be settled. When the deferred realization of income tax assets does not meet the test of being more likely than not to occur, a valuation allowance in the amount of the potential future benefit is taken and no future income tax asset is recognized. We have taken a valuation allowance against all such potential tax assets.

Mineral properties and exploration and development costs

We capitalise the costs of acquiring mineral rights at the date of acquisition. After acquisition, various factors can affect the recoverability of the capitalized costs. Our recoverability evaluation of our mineral properties and equipment is based on market conditions for minerals, underlying mineral resources associated with the assets and future costs that may be required for ultimate realization through mining operations or by sale. We are in an industry that is exposed to a number of risks and uncertainties, including exploration risk, development risk, commodity price risk, operating risk, ownership and political risk, funding and currency risk, as well as environmental risk. Bearing these risks in mind, we have assumed recent world commodity prices will be achievable. We have considered the mineral resource reports by independent engineers on the Nyngan project in considering the recoverability of the carrying costs of the mineral properties. All of these assumptions are potentially subject to change, out of our control, however such changes are not determinable. Accordingly, there is always the potential for a material adjustment to the value assigned to mineral properties and equipment.

Recent Accounting Pronouncements

Accounting Standards Update 2021-04 - Earnings Per Share (Topic 260), Debt Modifications and Extinguishments (Subtopic 470-50), Compensation—Stock Compensation (Topic 718), and Derivatives and Hedging Contracts in Entity's Own Equity (Subtopic 815-40). This update is to provide clarity around earnings per share calculations and is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. The Company is reviewing this standard but expects little or no impact on its financial statements.

Accounting Standards Update 2019-12 – Income Taxes (Topic 740), The Financial Accounting Standards Board ("Board") is issuing this Update as part of its initiative to reduce complexity in accounting standards. This standard is effective for interim and annual reporting periods beginning after December 15, 2020, with early adoption permitted. The Company has implemented this standard for 2021, with little or no impact on its financial statements.

Accounting Standards Update 2019-01 – Leases (Topic 842), Codification Improvements - Issue 3 Transition Disclosures Related to Topic 250, Accounting Changes and Error Corrections. The amendments in this Update clarify the Board's original intent by explicitly providing an exception to the paragraph 250-10-50-3 interim disclosure requirements in the Topic 842 transition disclosure requirements. The Company has implemented this standard for 2021, with little or no impact on its financial statements.

Financial instruments and other risks

Our financial instruments consist of cash, receivables, accounts payable and accrued liabilities, accounts payable with related parties, and promissory notes payable. It is management's opinion that we are not exposed to significant interest, currency or credit risks arising from our financial instruments. The fair values of these financial instruments approximate their carrying values unless otherwise noted. The Company has its cash primarily in three commercial banks, one in Vancouver, British Columbia, Canada, one in Melbourne, Australia, and in one in Chicago, Illinois.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The Consolidated Financial Statements of the Company and the notes thereto are attached to this report following the signature page and Certifications.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

For the fiscal years ended December 31, 2021, and 2020, we did not have any disagreement with our accountants on any matter of accounting principles, practices, or financial statement disclosure.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure controls and procedures

The Company's management, including our principal executive officer and our principal financial officer, evaluated the effectiveness of disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) as of the end of the period covered by this report. Based on that evaluation, the principal executive officer and principal financial officer concluded that as of the end of the period covered by this report, the Company has maintained effective disclosure controls and procedures in all material respects, including those necessary to ensure that information required to be disclosed in reports filed or submitted with the SEC (i) is recorded, processed, and reported within the time periods specified by the sec, and (ii) is accumulated and communicated to management, including the principal executive officer and principal financial officer, as appropriate to allow for timely decision regarding required disclosure.

Management's report on internal control over financial reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) or 15d-15(f) of the Exchange Act). Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2019, using criteria established in *Internal Control-Integrated Framework* issued in 1992 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Even an effective internal control system, no matter how well designed, has inherent limitations, including the possibility of human error and circumvention or overriding of controls and therefore can provide only reasonable assurance with respect to reliable financial reporting. Furthermore, the effectiveness of an internal control system in future periods can change with conditions.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

The Company's management has determined that the internal controls over financial reporting are effective as of December 31, 2021.

Changes in Internal Control

There have been no changes in internal control over financial reporting that occurred during the last fiscal quarter that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

Information with respect to Items 10 through 14 is set forth in the definitive Proxy Statement to be filed with the Securities and Exchange Commission on or before April 30, 2022, and is incorporated herein by reference. If the definitive Proxy Statement cannot be filed on or before April 30, 2022, the Company will instead file an amendment to this Form 10-K disclosing the information with respect to Items 10 through 14.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENTS SCHEDULES

Financial Statements

The following Consolidated Financial Statements are filed as part of this report.

Description	Page
Financial statements for the years ended December 31, 2021, and 2020 and	F-1
audit reports thereon.	

Exhibits

The following table sets out the exhibits filed herewith or incorporated herein by reference.

Exhibit	Description
3.1	Certificate of Incorporation, Certificate of Name Change dated March 2009, Notice of
	Articles dated March 2009 ⁽¹⁾
	Certificate of Name Change dated November 19, 2014 and Notice of Articles dated
	November 19, 2014 ⁽²⁾
3.2	Corporate Articles ⁽¹⁾
	Amendment to Corporate Articles dated November 10, 2014 ⁽²⁾
10.1 ⁽³⁾	2015 Stock Option Plan
10.2(1)	Management Contract with George Putnam dated May 1, 2010
10.3(4)	Management Contract with Edward Dickinson dated August 13, 2011
10.4 ⁽⁵⁾	Share Exchange Agreement dated June 30, 2017
21.1 ⁽⁶⁾	List of Subsidiaries
23.1 ⁽⁶⁾	Consent of Davidson & Company LLP

23.2 ⁽⁶⁾	Consent of Stuart Hutchin
23.3 ⁽⁶⁾	Consent of Dean Basile
23.4 ⁽⁶⁾	Consent of Geoffrey Duckworth
31.1 ⁽⁶⁾	Certification Pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934 of the Principal Executive Officer
31.2 ⁽⁶⁾	Certification Pursuant to Rule 13a-14(a) or 15d-14(a) of the U.S. Securities Exchange Act of 1934 of the Principal Financial Officer
32.1 ⁽⁶⁾	Section 1350 Certification of the Principal Executive Officer and Principal Financial Officer of the Principal Executive Officer
32.2 ⁽⁶⁾	Section 1350 Certification of the Principal Executive Officer and Principal Financial Officer of the Principal Financial Officer

⁽¹⁾ Previously filed as exhibits to the Form 10 filed May 24, 2011 and incorporated herein by reference.

⁽²⁾ Previously filed as exhibits to the Form 10-K filed February 27, 2015 and incorporated herein by reference.
(3) Previously filed as Schedule "A" to the Form DEF 14A filed October 5, 2015 and incorporated herein by reference.

⁽⁴⁾ Previously filed as an exhibit to the Form 10-K/A filed May 1, 2014 and incorporated herein by reference.

⁽⁵⁾ Previously filed as an exhibit to the Form 8-K filed July 26, 2017 and incorporated herein by reference.

⁽⁶⁾ Filed herewith.

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.

SCANDIUM INTERNATIONAL MINING CORP.

By: /s/ George Putnam George Putnam		
President and Principa	al Executive Officer	
Date: March 11, 2022		
	ents of the Securities Exchange Act of 1934, this repo- behalf of the registrant and in the capacities and on the	
<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ George Putnam George Putnam	President, Principal Executive Officer, and Director	March 11, 2022
/s/ William Harris William Harris	_Chairman and Director	March 11, 2022
/s/ James Rothwell James Rothwell	_Director	March 11, 2022
/s/ Willem Duyvesteyn Willem Duyvesteyn	Director	March 11, 2022
/s/ Warren Davis Warren Davis	Director	March 11, 2022
/s/ Peter Evensen Peter Evensen	Director	March 11, 2022
/s/ R.Christian Evensen R. Christian Evensen	_Director	March 11, 2022
/s/ Edward Dickinson	Principal Accounting Officer and	March 11, 2022

	Principal Financial Officer
Edward Dickinson	