

#### **QUARTERLY ACTIVITIES REPORT**

# for the period ending 31 March 2022

#### **Highlights**

- EcoPro increases lithium offtake volume from Rhyolite Ridge
- MOU signed with NexTech Batteries of Nevada
- Award of major electrical contract to ABB Inc
- Permitting advancing with revised Plan of Operations soon to be submitted to BLM. NOI to start NEPA process expected shortly thereafter
- Updated timetable reflects changes to Plan of Operations
- Detailed due diligence process began with US Department of Energy's Loan Programs Office
- Continuing progress on secondary listing of ioneer shares in the US
- Detailed engineering and procurement activities advanced

Wednesday, 27 April 2022 – ioneer Ltd (ioneer or the Company) (ASX: INR), an emerging American lithium–boron supplier, is pleased to report on its activities for the quarter ending 31 March 2022 and to provide an update on the development of its 100%-owned Rhyolite Ridge Lithium-Boron Project (Rhyolite Ridge or the Project) in Nevada, USA.

ioneer Managing Director, Bernard Rowe said:

"On March 31, US President, Joe Biden, announced plans to invoke the Defense Production Act (DPA) to provide hundreds of millions in new subsidies for the mining of minerals critical for the wind, solar and electric vehicles (EV) industries. This increased political focus had already been felt by ioneer through the quarter with a clear shift in momentum for the Rhyolite Ridge Project.

"The quarter saw real advances in the sales and marketing workstream with the announcement of an increase in lithium offtake to EcoPro and the announcement of an MOU with NexTech Batteries. In addition, detailed negotiations with large OEMs for additional lithium offtakes made good progress, with announcements anticipated in the June quarter.

"On the engineering front, the electrical contract signed with ABB was another significant supply package award at Rhyolite Ridge and represents another step toward the development of the Project. Like other suppliers we've partnered with, ABB is focused on providing environmentally sound engineering and technology solutions, something at the very core of ioneer.

"In addition, progress was made on permitting, the secondary listing of ioneer shares on NASDAQ, the DOE Loans Program Office detailed due diligence process, other Project financing work, and continuing detailed engineering.

"We are encouraged by the pace of progress, the strong inbound enquiry from customers and maturing offtake negotiations, the clearer path to publishing of the Notice of Intent and start to the NEPA process. We anticipate a busy period of news flow over the balance of this year as real strides are made on each of the key workstreams as we near a Final Investment Decision aligned to full Project permitting"



#### Sales & Marketing

Significant progress was made during the quarter regarding lithium offtake. The Company announced an increase in lithium offtake to EcoPro to 7,000 tpa and the signing of an MOU with NexTech Batteries.

In addition, discussions continued with other potential lithium offtake partners. ioneer anticipates conclusion of these discussions in 2O 2022.

ioneer's strategy for these additional offtake agreements is to sign two binding lithium offtake agreements, targeted at:

- Partner: Large Car manufacturers supplying the US EV supply chain
- Product: Lithium carbonate (technical grade)
- Contract duration: five-year term from commencement of supply
- Quantity: Minimum volumes of ~4000 and ~7000 tonnes per annum per offtake
- Pricing: USD per metric tonne with regular adjustments to market. Index based price formula

# **EcoPro Increases lithium Offtake Volume**

During the quarter, EcoPro Innovation Co Ltd, (EcoPro), part of the EcoPro Group of Companies, exercised an option for an additional 5,000 tpa of lithium carbonate offtake as detailed in the original binding lithium offtake supply agreement (Agreement) announced June 30, 2021. EcoPro Innovation confirmed an increase to the initial 2,000 tpa annual volume in the Agreement to 7,000 tpa.

ioneer will supply EcoPro with lithium carbonate from Rhyolite Ridge. The Agreement remains conditional on ioneer taking a Final Investment Decision (FID) on the Rhyolite Ridge Project.

The increased total offtake represents approximately 34% of ioneer's annual lithium carbonate production from Rhyolite Ridge in the first three years of operation.

EcoPro expects to convert ioneer's lithium carbonate into high purity lithium hydroxide at its recently complete integrated cathode plant in Korea.

#### **MOU signed with NexTech Batteries**

In March, ioneer announced a nonbinding Memorandum of Understanding (MOU) between Ioneer USA Corporation, a wholly owned subsidiary of ioneer, and NexTech Batteries (NexTech), a global leader in proprietary lithium-sulphur battery technology based in Nevada.

Under the terms of the MOU, the two companies have expressed mutual interest in the acquisition of lithium carbonate and/or lithium hydroxide supply from ioneer's Rhyolite Ridge Lithium-Boron Project for NexTech's production facility in Carson City, which will be used to manufacture next generation solid-state batteries poised to revolutionise the automotive industry, renewable energy and grid storage applications, portable electronics, drones/eVTOL aircraft and more.

The companies intend to discuss the potential for long-term supply to NexTech once production has commenced.

## Award of major contract to ABB Inc.

In February, ioneer announced the award of a major engineering and equipment supply contract to ABB Inc., for the development of the Company's Rhyolite Ridge Lithium-Boron Project in Nevada, USA.

The contract has been awarded on a limited notice to proceed (LNTP) basis, with the supply of the equipment packages being conditional on the FID on the Project by ioneer's Board of Directors. Under the contract, the ABB team will commence work on systems engineering and optimization for the equipment packages, which include a steam turbine generator, medium and low voltage electrical distribution, transformers, power management, plant-wide process automation, and instrumentation

systems. ABB will provide their MineOptimize product to enhance the Rhyolite Ridge lithium-boron construction and installation.

ABB is a leading global technology company with 130 years track record in mining applications.

#### **State and Federal Permitting**

ioneer requires three key permits to commence construction at Rhyolite Ridge:

- A state-based Air Quality Permit<sup>1</sup> -Received 24 June 2021
- 2. A state-based Water Pollution Control Permit<sup>2</sup> **Received** 19 July 2021
- 3. The Plan of Operation (Plan) that must be approved by the federal Department of Interior (DOI) **Awaiting**

The Plan of Operations is the foundational permitting document for the Project and will become the basis for compliance during operations and closure. The Plan requires assessment under the National Environmental Policy Act (NEPA) process, which includes public consultation and preparation of an Environmental Impact Statement (EIS).

In August 2020, ioneer announced that its Plan had been deemed complete and accepted by the Bureau of Land Management (BLM)<sup>3</sup>. It was anticipated that a Notice of Intent (NOI) would be published in the Federal Register shortly thereafter starting the NEPA process. The publishing of the NOI has been delayed however, initially due to the change in Federal Administration, and then the process associated with the evaluation of listing of Tiehm's buckwheat as an endangered species.

In recent months, and after extensive consultation with the BLM and USFWS, ioneer elected to revise its 2020 Plan to completely avoid all Tiehm's buckwheat (the 2020 version required moving some plants). This has

resulted in updating various aspects of the Plan. It is anticipated that the updated Plan will be resubmitted to the BLM in 2Q 2022 and the NOI expected to be published thereafter starting the NEPA process.

Once the NOI is published, the BLM will hold a series of public meetings to provide a description of the Project and allow for public comment. Comments are then collated and reviewed with potential changes and mitigants made to the Plan in response to comments. This process ultimately culminates in an EIS and a Record of Decision (ROD). From the publishing of a NOI through to the ROD can take approximately 12 months. Once the Plan has been approved via a ROD, construction of the Rhyolite Ridge Project can begin.

Our current best estimate for timing of key milestones is as follows:

Milestone	Estimated timing <sup>4</sup>		
US Listing on Nasdaq	2Q 2022		
Announcement of additional	2Q 2022		
lithium offtake agreements			
Resubmission of the Plan of	2Q 2022		
Operations			
Publishing of NOI	2Q 2022		
Finalise debt financing	2H 2022		
Finalise engineering to	2H 2022		
'construction ready status'			
Anticipated ROD (assumed 12	1H 2023		
months from NOI)			
Final Investment Decision	1H 2023		
Close of Sibanye-Stillwater	1H 2023		
strategic partner agreement			
Construction commences	1H 2023		
(assumed 24 months)			
First Production	2H 2025		

#### Tiehm's buckwheat

During the quarter, the US Fish and Wildlife Service (FWS) announced that it had proposed critical habitat to accompany its proposed rule

<sup>&</sup>lt;sup>1</sup> Refer ASX release titled 'ioneer Issued Air Quality Permit for Rhyolite Ridge' announced 24 June 2021

<sup>&</sup>lt;sup>2</sup> Refer ASX release titled 'Issuance of Water Pollution Control Permit' announced 19 July 2021

<sup>&</sup>lt;sup>3</sup> Refer ASX release titled 'ioneer's Plan of Operations for Rhyolite Ridge Lithium-Boron Project Accepted by BLM' announced 31 August 2020.

<sup>&</sup>lt;sup>4</sup> Note: all dates are estimates only and are subject to change.

to list Tiehm's buckwheat as an endangered species under the Endangered Species Act (ESA).

The critical habitat proposal was in line with ioneer's expectations and prior announcements, and the Company continues to fully support the FWS' efforts regarding the ongoing management and protection of Tiehm's buckwheat populations at Rhyolite Ridge, including an ESA listing. This anticipated development has no material impact on our planned mining activities.

The buckwheat species is found along the western margin of the Company's Rhyolite Ridge Lithium-Boron ore deposit. The proposed critical habitat at Rhyolite Ridge is primarily focused on providing an area to support the pollinator (insect) population that is an important and necessary resource for the plant, hence the much larger critical habitat (910 acres) compared to the area occupied by the plant (10 acres).

Mining activity is allowable within areas designated as critical habitat with the prior approval of the FWS and BLM. ioneer has already taken this into account with its planning and proposed operations and continues to work closely with both agencies to ensure its proposed activities will not jeopardise the conservation of the species.

Publication of the notice of the proposed critical habitat designation initiates a public comment period. In addition to considering public comments, FWS is required by the ESA to make its listing decision based upon the best available scientific data. FWS is expected to make a final listing decision by September 2022, as agreed upon by prior court stipulation.

The protection and conservation of Tiehm's buckwheat, which is already classified as a Sensitive Species by the BLM, is and always has been a central part of ioneer's environmental planning and approvals process for the Project.

ioneer continues to work with FWS and BLM to accommodate issues raised and remains confident that co-existence of Rhyolite Ridge and Tiehm's buckwheat is achievable.

# Secondary US Stock Exchange Listing

During the quarter, the Company continued to progress submission documents for a secondary listing of ioneer shares in the US.

Ioneer believes a secondary US listing is important as:

- Rhyolite Ridge is a strategic asset for US lithium supply security
- US investors have demonstrated an increasing interest in "Electrification" and materials and technology supporting the transition away from fossil fuel
- It provides opportunity for wider participation in ioneer share ownership from North American investors
- It allows existing investors the opportunity for liquidity in two markets
- It increases market profile across North America

We anticipate the secondary listing to take place in 2Q 2022.

### **Project Debt Funding**

At the end of the December quarter, we announced that the US Department of Energy (DOE) Loan Programs Office (LPO) had invited loneer USA Corporation into the LPO's due diligence process.

The March quarter has seen good progress on the due diligence process. The DOE has appointed external advisors and engagement between all parties has begun. Should the process be successful it would be followed by negotiation of a term sheet and consideration in the LPO's credit approval process.

In addition to the DOE workstream described above, the Company continues to engage with a number of potential debt funders and is encouraged by staged work completed to date.

Sibanye-Stillwater and ioneer are working collaboratively to secure debt financing for the Project on acceptable terms to ensure the Project is fully financed to production.

The debt funding strategy is expected to be agreed ahead of any FID for the Project.

### **Engineering and Vendor Packages**

Work during the quarter focused on further progressing detail and vendor engineering. The key aim of ongoing activities is to be construction ready to support construction mobilisation following the Full Notice to Proceed (FNTP) award.

Ioneer awarded the following packages during the quarter:

- Steam Turbine- Generator, Medium and Low Voltage Electrical Distribution, Transformers, Power Management, Plant-Wide Process Automation, and Instrumentation Belt Filter Package
- Filter Press Package
- Clarifier
- Oxidation Blowers

#### Status of procurement activity:

- Large Packages over US\$2.5M 19/27 (70%)
- Packages less than US\$2.5 and greater than US\$1M - 8/13 (61%)
- Packages under US\$1M 16/76 (21%)

Procurement activity has focused on long lead items and items required for initial Construction. Currently about 17 of the equipment and material Packages are active in the procurement process.

An open book contracting strategy has been frequently employed to minimize escalation risks.

### **Upcoming Work Program**

The work program over the coming months includes:

- Advancing Federal permitting process by obtaining the NOI and commencing the NEPA process
- Closing additional binding offtake agreements for lithium sales
- Progressing a secondary listing of ioneer's shares in the US.
- Securing Debt funding including associated due diligence
- Commencing a work program to advance early-stage exploration of the North Basin
- Continuing the engineering effort to further decrease execution risk. This will include:
  - Releasing further engineering and vendor packages/contracts for bid/award
  - Prepare updated budget estimate for completion 2H 2022
  - Advancing vendor engineering packages

## **Corporate Activities**

During the quarter, Executive-Chairman James Calaway sold 15,331,894 shares from his existing holding in the Company to fund the exercise of 40 million unlisted options at a total exercise price of \$7.8 million. James Calaway continues to hold a significant relevant interest in the Company, comprising 56.3 million ordinary shares (after exercise of the 40 million options), 1.0 remaining options and 1.3 million performance rights.

#### **ASX Additional Information**

The Company provides the following information pursuant to ASX Listing Rule requirements.

1. **ASX LR 5.3.1:** Exploration and Evaluation Expenditure during the quarter was A\$7.6 million. Details of the exploration activity are set out in this report. A breakdown of the expenditure is shown below:

Expenditure	Cost (A\$'000)
Engineering	5,103
Environmental	510
Other	2,013
Total	7,625

2. **ASX LR 5.3.2:** The Company confirms there was no production or development activities during the quarter.

3. **ASX LR 5.3.5:** Related party payments for the quarter totalled A\$378k, comprising salaries and fees for the Company's executive and non-executive directors. No other payments were made to any related parties of the entity or their associates.

#### **Capital Structure**

Total cash on hand as of 31 March 2022 was A\$144.2 million (US\$108.2 million) of which 39% is held in USD cash and cash equivalents.

At the end of the quarter, ioneer had on issue:

- 2.09 billion ordinary shares
- 5.4 million options, and
- 31.5 million performance rights.

This ASX release has been authorised by ioneer Managing Director Bernard Rowe.

--ENDS--

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#### **About ioneer**

ioneer Ltd is the 100% owner of the Rhyolite Ridge Lithium-Boron Project located in Nevada, USA, the only known lithium-boron deposit in North America and one of only two known such deposits in the world. The Definitive Feasibility Study (DFS)<sup>5</sup> completed in 2020 confirmed Rhyolite Ridge as a world-class lithium and boron project that is expected to become a globally significant, long-life, low-cost source of lithium and boron vital to a sustainable future. In September 2021<sup>6</sup>, ioneer entered a 50/50 joint venture agreement with Sibanye Stillwater Ltd to advance the Rhyolite Ridge project. ioneer will be the operator of the Project, which is expected to come onstream in 2025.

#### **Recent Announcements**

The table below lists announcements made by the Company during the quarter.

Date Released	Title
25/01/2022	December 2021 – Quarterly activities report
25/01/2022	December 2021 – Quarterly cashflow report
25/01/2022	Updated December 2021 – Quarterly Cashflow Report
03/02/2022	Proposed Critical Habitat for Tiehm's buckwheat
03/02/2022	Ioneer investor presentation – February 2022
10/02/2022	Ioneer awards major contract to ABB Inc.
16/02/2022	EcoPro Innovation increases lithium offtake volume
23/02/2022	Half Year Accounts
16/03/2022	Change of Director's Notice – James D. Calaway
16/03/2022	Application for quotation of securities - INR
29/03/2022	Ioneer signs MOU with NexTech Batteries
30/03/2022	Ord Minnett East Coast Mining Conference Presentation

<sup>&</sup>lt;sup>5</sup> Refer ASX release titled 'ioneer Delivers Definitive Feasibility Study that Confirms Rhyolite Ridge as a World-Class Lithium and Boron Project' announced 30 April 2020.

<sup>&</sup>lt;sup>6</sup> Refer ASX release titles 'Sibanye-Stillwater to invest US\$490M in Rhyolite Ridge' announced on 16 September 2021



### **Appendix 1 - Schedule of Tenements**

#### **ASX listing rule 5.3.3**

Country	Project	Tenement ID	Tenement Name	Area	Interest at beginning of	Interest at end of quarter	Note
				(km²)	quarter		
USA	Rhyolite Ridge	NMC1118666	NLB claims (160)	13	100%	100%	No change
USA	Rhyolite Ridge	NMC1117360	SLB claims (199)	16.5	100%	100%	No change
USA	Rhyolite Ridge	NMC1171536	SLM claims (122)	9.7	100%	100%	No change
USA	Rhyolite Ridge	NMC 1179516	RR claims (65)	5.4	100%	100%	No change
USA	Rhyolite Ridge	NMC 1129523	BH claims (81)	7	0%, option to purchase 100%	0%, option to purchase 100%	No change
USA	SM	NMC1166813	SM claims (96)	7.7	100%	100%	No change
USA	GD	NMC1166909	GD claims (13)	1.1	100%	100%	No change
USA	CLD	NMC1167799	CLD claims (65)	5.2	100%	100%	No change

On 16 September 2021, the Company announced a strategic investment by Sibanye-Stillwater<sup>7</sup> in the Rhyolite Ridge Project. Under the terms of the agreement, Sibanye-Stillwater will contribute US\$490 million for a 50% interest in the Joint Venture, with ioneer to maintain a 50% interest and retain operatorship. ioneer has also agreed to provide Sibanye-Stillwater with an option to participate in 50% of the North Basin, upon the election of Sibanye-Stillwater to contribute up to an additional US\$50 million, subject to certain terms and conditions. Establishment of the Joint Venture and Sibanye-Stillwater's funding commitment is subject to certain terms and conditions precedent, including receipt of final permits, commitments for remaining debt financing, and other customary approvals.

<sup>&</sup>lt;sup>7</sup> Refer ASX release titles 'Sibanye-Stillwater to invest US\$490M in Rhyolite Ridge' announced on 16 September 2021