

ACCELERATE ENTERS PARTNERSHIP WITH US-BASED ENERGY STORAGE TECHNOLOGY GROUP

HIGHLIGHTS

- Accelerate signs Heads of Agreement with US-based RedoxBlox Inc. ("RedoxBlox") to explore the future supply of manganese products and supply chain solutions for RedoxBlox's patented zero-carbon thermochemical energy storage technology
- RedoxBlox has identified the high quality and favourable location of AX8's manganese projects to provide a reliable and ethically sourced manganese feedstock to their developing business
- Initial objective is to assess compatibility of AX8's high grade Woodie Woodie North Project to produce high value product and volumes required for use in the commercialisation of RedoxBlox's proprietary technology
- RedoxBlox's zero-carbon technology, based on unique high purity manganese and magnesium-based components, offers a novel and disruptive solution to store and dispatch renewable energy for industry energy requirements
- Represents first steps in AX8's endeavours to integrate its business downstream to optimise the value of its critical minerals and proximity to major markets



Figure 1: RedoxBlox long duration energy storage technology for grid and industrial heat applications

Accelerate Resources Limited (ASX:**AX8**) ("AX8" or "**the Company**") is pleased to announce it has entered into a binding Heads of Agreement with RedoxBlox, Inc. to investigate strategic co-operation opportunities for the ongoing material supply, commercialisation and deployment of RedoxBlox's proprietary manganese-based thermochemical energy storage technology using manganese products from the Company's Woodie Woodie North Project.



The collaboration is structured through a phased approach, with initial efforts focused on AX8's testing and supply of manganese materials and providing results of comminution and metallurgical test work to enable RedoxBlox to complete the necessary product qualification test work in the US. RedoxBlox will provide updates on the results of its ongoing demonstration plant test work and any resulting changes in its manganese and magnesium product specifications and volumes.

While demonstrating the applicability of AX8's Woodie Woodie North Project to supply fit for purpose feedstock, AX8 and RedoxBlox will also explore a range of other strategic opportunities working together, including AX8 securing additional supply chain options for other input commodities required by RedoxBlox, and potentially co-operating on establishing scale-up and manufacturing facilities to be close to raw material supply chains.

RedoxBlox is an energy storage technology company based in San Diego, USA, that owns the rights to the patented zero-carbon thermochemical energy storage system based on unique manganese and magnesium-based components, originally developed within leading US research universities, such as the University of Florida and Michigan State University.



Figure 2 – RedoxBlox Pilot-Scale Thermochemical Energy Storage Module

RedoxBlox recently completed a US\$20 million Series A funding round from a group of highprofile energy market investors and energy transition focused venture capital fund.

RedoxBlox's patented technology offers a novel and disruptive solution for low cost, large scale energy storage requirements, being able to store renewable energy in a high energy density pellet bed that can then convert it to heat that can be directly used in industrial processes or used to run turbines to generate electricity when green electricity is unavailable.



A unique feature of RedoxBlox's technology is that the thermochemical energy storage module allows natural gas power plant operators to convert existing or new gas turbines into a renewable energy storage system to enable the transition to a low-carbon energy generation future.

The global market opportunity for energy storage in 2021 was estimated at 10GW of energy storage deployments, with the market forecast to grow rapidly to 58GW per annum by 2030, according to forecasts published by BloombergNEF.

At commercial maturity, RedoxBlox projects its technology can deliver the lowest cost long duration thermal and energy storage solution in the market by a significant margin. This cost has the potential to be even lower where existing combined-cycle gas turbine (CCGT) power plants are retrofitted with RedoxBlox technology, opening up a major market opportunity for the technology.

In late 2021, RedoxBlox was awarded a US\$7 million ARPA-E Plus-Up grant. ARPA-E (or Advanced Research Projects Agency–Energy) is a United States government agency tasked with promoting and funding high-potential, high-impact advanced energy technologies. This grant funding from ARPA-E was used to complete the design and construction of a 100 kWh prototype of the RedoxBlox technology in the US, currently in cycle testing. RedoxBlox is planning a 2MWh system for commercial testing in 2024.

The collaboration under the Heads of Agreement will potentially enable AX8 to develop a tailored manganese product for the RedoxBlox process. Commercial terms of future supply agreements are still to be negotiated and remain confidential and as such no initial inflows or supply contracts arise under this Heads of Agreement. Any future agreements, including any off-take or joint venture developments of AX8's assets or any development of the technology in Australia will be subject to the execution of other agreements at the appropriate time.

AX8 Chairman, Richard Hill commented,

"We welcome this very exciting and unique collaboration with RedoxBlox that will provide AX8 with the opportunity to test its products for the potential supply of manganese for a novel and disruptive manganese-based energy storage technology. This is a key part of our strategic critical minerals journey to add value to our traditional manganese business. This is thanks to the high quality characteristics and favourable location of our manganese deposits at Woodie Woodie North."

RedoxBlox Executive Chairman James Klausner commented,

"RedoxBlox is delighted to have entered into this Heads of Agreement with AX8 in Australia. We now look forward to working with their very capable team to work through the planned phases of the Heads of Agreement as we look to secure high quality manganese feedstock from AX8's well located projects to ethically and reliably supply the roll out of our exciting new energy storage technology worldwide. We also hope to work with the AX8 team to consider all other aspects of the supply chain for our business."





Figure 3 Accelerate Resources Chairman Richard Hill (Left) and RedoxBlox Executive Chairman James Klausner (Right) at the RedoxBlox Oregon Demonstration Facility, USA

Terms of the Agreement

Under the Heads of Agreement:

- The Parties Primary Objective is to explore how AX8 can profitably supply manganese
 products and other input materials to RedoxBlox from its Woodie Woodie North Project
 (or elsewhere in Australia) under a long-term manganese supply agreement for the
 synthesis of RedoxBlox pellets for its energy storage technology.
- Secondary Objectives include exploring mutually beneficial opportunities to:
 - Source magnesium supply within Australia;
 - Expand downstream co-operation for the development of RedoxBlox technologies in Australia including construction, processing and marketing of the RedoxBlox components in Australia and end to end transport and logistics supply chains associated with these components.
- The Term of the Heads of Agreement is for an initial period of 6 months (Scoping Phase) and can then be extended for a further 6 months with the agreement of both parties (Proof of Concept Phase). The Heads of Agreement may be terminated at the end of each Phase or extended through the execution of a fuller, more definitive agreement at the end of the Proof of Concept Phase and move into a third phase (Execution Phase).

The Parties have agreed to exclusivity within Australia for the Term of the Heads of Agreement. This does not restrict the Parties from entering into other business arrangements in the ordinary course of pursuing their business objectives.





About the Woodie Woodie North Manganese Project

Figure 4 Woodie Woodie North Manganese Project Location Map

The Woodie Woodie North Manganese Project is located 250km east of Port Hedland, and approximately 70km north of the world class Woodie Woodie manganese mine. The project is close to key infrastructure such as roads, gas pipelines and water and if developed would be one of the closest sources of manganese to WA ports and potential markets. The project area (358km2) covers a 33km strike of the Woodie Woodie Manganese Corridor which is highly prospective for near surface Direct Shipping Ore (DSO) manganese. AX8 is aggressively exploring this corridor with the ongoing discovery of high grade manganese zones across the project area. For more information, please refer to the ASX Announcement: Regional-Scale Manganese Corridors confirmed.

-ENDS-

This announcement has been produced by the Company's published continuous disclosure policy and approved by the Board.

For further information, please contact

Yaxi Zhan Managing Director

E: Yaxiz@AX8.com.au I P: +61 8 6248 9663 I W: www.AX8.com.au



Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Accelerate Resources Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on various factors.

Competent Person Statement

Information in this release related to Exploration Results is based on information compiled by Dr. Joseph Drake-Brockman. He is a qualified geologist and a Fellow of the Australian Institute of Mining and Metallurgy (AusIMM). Dr. Drake-Brockman has sufficient experience, which is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves'. Dr Drake-Brockman consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.