



September 23, 2024

## **Ivanhoe Electric’s VRB Energy Subsidiary Secures \$55 Million Investment**



### **Ivanhoe Electric to Use \$20 Million of the Transaction Proceeds to Establish U.S.-based Grid Scale Vanadium Redox Flow Battery Manufacturing in Arizona**



### **Existing VRB Energy Manufacturing Operation in China to become 51/49 Joint Venture Following \$35 Million Investment from Red Sun, a Leading Asian New Energy Group**

**PHOENIX, ARIZONA – Ivanhoe Electric Inc. (“Ivanhoe Electric”) (NYSE American: IE; TSX: IE) Executive Chairman Robert Friedland and President and Chief Executive Officer Taylor Melvin are pleased to announce that the Company’s 90%-owned subsidiary, VRB Energy Inc. (“VRB Energy”), has executed a binding Term Sheet (the “Agreement”) with a subsidiary of privately held Shanxi Red Sun Co., Ltd. (“Red Sun”) and VRB Energy’s wholly-owned subsidiary, VRB Energy System (Beijing) Co., Ltd. (“VRB China” or the “Joint Venture”). The Agreement outlines the binding framework for the formation of the Joint Venture, with Red Sun owning 51% and VRB Energy owning 49%.**

**In addition to the formation of the Joint Venture, Ivanhoe Electric and VRB Energy will establish a separate United States-based vanadium redox battery business, to be located in Arizona. \$20 million of the transaction proceeds will support Ivanhoe Electric’s establishment of the U.S.-based battery business.**

**VRB Energy, a clean technology innovator, has commercialized the largest vanadium flow battery cell stack (50 kilowatts) and power module (1 megawatt) on the market. This battery system has been certified by Underwriters Laboratories 1973, recognized as a global standard for commercially available battery energy storage. Red Sun is a private investment group based in Shanxi Province, China, which focuses on investments in new energy and energy storage technology, biomedicine, and high-end agriculture.**

The Joint Venture is being formed to manufacture and sell vanadium redox flow battery systems with a market focus in Asia, the Middle East, and Africa. The restructuring will allow VRB Energy to concentrate on developing its U.S.-based vanadium redox flow battery systems business (“VRB USA”), which will be owned 100% by VRB Energy.

The Agreement was signed on September 23, 2024, with the transaction expected to close in the fourth quarter of 2024, pending execution of definitive agreements and certain other conditions precedent.

Mr. Melvin commented: “Today’s announcement is a significant milestone for our VRB Energy subsidiary and Ivanhoe Electric’s establishment of a U.S.-based vanadium redox battery business in Arizona, supported by \$20 million from the announced transaction. The Agreement also allows us to benefit from the Joint Venture’s growth in Asia, led by a strong and experienced local partner in Red Sun.”

Mr. Charles Ge, VRB Energy’s Chief Executive Officer commented: “Red Sun’s strategic investment in the Joint Venture marks a key milestone in our mission to lead the vanadium redox battery market and accelerate the transition to clean energy. The Joint Venture strengthens our role in the global push for decarbonization and sustainable growth.

“By collaborating with Red Sun, we are advancing both our technology and the potential of long-duration energy storage, critical components for renewable energy solutions. Red Sun’s support and investment allows us to scale production, drive innovation, and deliver impactful solutions to meet market demand while shaping the future of energy storage. We are proud to join forces with Red Sun as we contribute to global efforts in building a sustainable energy infrastructure and addressing climate change.”

### **Key terms of the Joint Venture between Red Sun and VRB Energy Inc.**

- Red Sun will purchase shares from VRB Energy for \$20 million in cash payable in two equal tranches
- Red Sun will also complete a capital increase of \$35 million through 2025 into the Joint Venture through the issuance of new shares
- After closing, Red Sun will own 51% and VRB Energy will own 49% of the Joint Venture
- The Joint Venture will operate through a board of directors with four representatives from Red Sun and two from VRB Energy, with customary pro rata funding and supermajority approval rights

- VRB Energy will restructure its intellectual property that will include, among other things, transferring ownership of U.S. patent rights held by the Joint Venture back to VRB Energy
- The Joint Venture aims to accelerate the manufacture and sale of vanadium redox flow battery systems by combining VRB Energy’s technology with facilities and infrastructure to be leased or acquired from entities affiliated with the founders of Red Sun

The transaction provides Ivanhoe Electric the opportunity to benefit from a newly capitalized Joint Venture operated by a strong and experienced local Chinese partner, Red Sun. Red Sun plans to establish two manufacturing sites for the Joint Venture, one in Changzhi City, Shanxi Province, with a 300-megawatt production line and a second in Huaihua City, Hunan Province, with a 200-megawatt production line. Combined, these production lines will provide approximately ten times the production capacity of VRB Energy’s existing facility. The Joint Venture will also construct a dedicated electrolyte plant with Red Sun’s funding of the Joint Venture. This facility, to be constructed in Shanxi Province, is expected to be completed in 2025 and have a production capacity of 5,000 cubic meters of electrolyte per year with the ability to expand as business conditions require.

As a non-participating, non-controlling shareholder in the Joint Venture, Ivanhoe Electric, through VRB Energy, will retain exposure to the growing grid-scale battery markets in Asia, the Middle East, and Africa. Meanwhile, Ivanhoe Electric will focus on establishing and growing vanadium redox flow battery production in Arizona to serve North American, South American, and European markets.

### **VRB Energy to focus on the development of domestic U.S. manufacturing for vanadium redox flow battery systems**

- VRB Energy will establish VRB USA to pursue domestic manufacturing of vanadium redox flow battery systems
- A Cooperation Agreement for the Joint Venture will ensure global patent protection and will allow VRB USA to maintain access to intellectual property and associated rights, obtain the benefit of cross-licensing of new inventions and improvements, and utilize the Joint Venture as a preferred supplier for certain key equipment and electrolyte
- The holding company of VRB USA, VRB Energy, will receive \$20 million from Red Sun for the purchase of some of its shares in the Joint Venture

- VRB USA will establish a domestic battery assembly facility in Arizona, capable of producing 50 megawatts per year of VRB-ESS® vanadium flow batteries

Photo 1: VRB Energy’s Pod 100 VRB-ESS® vanadium redox flow battery in production.



### Transaction closing is expected in the fourth quarter of 2024

The Agreement is a framework that sets out the binding parameters of the transactions disclosed in today’s announcement. It will be replaced by more detailed definitive agreements, which will include key terms from the Agreement. The transactions remain subject to certain conditions being satisfied, including execution of the definitive agreements, Chinese regulatory approvals, certain waivers under the convertible bond issued by VRB Energy and held by BCPG Public Company Limited, and other customary regulatory approvals.

The disclosure of the transactions in this press release is necessarily of a summary nature and is qualified by text of the Agreement itself, which will be filed with the U.S. Securities and Exchange Commission.

### About Red Sun

Shanxi Red Sun Co., Ltd (“Red Sun”) is a prominent Asian investment firm specializing in new energy and advanced technologies, with several publicly listed companies under

its umbrella. Red Sun's diverse portfolio spans industries such as new energy, new materials, high-end manufacturing, advanced equipment, biopharmaceuticals, modern agriculture, and cultural communication. Guided by a philosophy of sustained financial backing, comprehensive resource allocation, and targeted industrial development, Red Sun has recently expanded its focus to include mineral resources, critical materials, and key technologies in the energy storage supply chain. Moving forward, the group is committed to deepening its investments in new energy storage, positioning itself as a future leader in this rapidly growing sector.

### **About VRB Energy**

VRB Energy is a clean technology innovator that has commercialized the largest vanadium flow battery on the market, the VRB-ESS®, certified to UL1973 product safety standards. VRB-ESS® is best suited for solar photovoltaic integration onto utility grids and industrial sites, as well as backup for electric vehicle charging stations. Vanadium flow battery systems are ideally suited to stabilize isolated microgrids, integrating solar and wind power in a safe, reliable, low-maintenance, and environmentally friendly manner. VRB Energy grid-scale energy storage systems allow for flexible, long-duration energy with proven high performance. VRB Energy is a subsidiary of [Ivanhoe Electric](#). Website: [www.vrbenergy.com](http://www.vrbenergy.com).

### **About Ivanhoe Electric**

We are a U.S. company that combines advanced mineral exploration technologies with electric metals exploration projects predominantly located in the United States. We use our accurate and powerful Typhoon™ geophysical surveying system, together with advanced data analytics provided by our subsidiary, Computational Geosciences Inc., to accelerate and de-risk the mineral exploration process as we seek to discover new deposits of critical metals that may otherwise be undetectable by traditional exploration technologies. We believe the United States is significantly underexplored and has the potential to yield major new discoveries of critical metals. Our mineral exploration efforts focus on copper as well as other metals including nickel, vanadium, cobalt, platinum group elements, gold and silver. Through the advancement of our portfolio of electric metals exploration projects, headlined by the Santa Cruz Copper Project in Arizona and the Tintic Copper-Gold Project in Utah, as well as other exploration projects in the United States, we intend to support United States supply chain independence by finding and delivering the critical metals necessary for the electrification of the economy. We also operate a 50/50 joint venture with Saudi Arabian Mining Company Ma'aden to explore for minerals on ~48,500 km<sup>2</sup> of underexplored Arabian Shield in the Kingdom of Saudi Arabia. Website: [www.ivanhoeelectric.com](http://www.ivanhoeelectric.com).

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Ivanhoe Electric's investor relations website located at [www.ivanhoeelectric.com](http://www.ivanhoeelectric.com) should be considered Ivanhoe Electric's recognized distribution channel for purposes of the Securities and Exchange Commission's Regulation FD.

## Forward-Looking Statements

Certain statements in this news release constitute "forward-looking statements" or "forward-looking information" within the meaning of applicable U.S. and Canadian securities laws. Such statements and information involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of Ivanhoe Electric, its projects, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as "may", "would", "could", "will", "intend", "expect", "believe", "plan", "anticipate", "estimate", "scheduled", "forecast", "predict" and other similar terminology, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. These statements reflect Ivanhoe Electric's current expectations regarding future events, performance and results and speak only as of the date of this news release.

Such statements in this news release include, without limitation, statements regarding the timing and ability to successfully negotiate and sign definitive agreements and close the transaction on the terms stated in the Term Sheet; the ability to obtain all necessary corporate, regulatory and third party approvals and satisfy other applicable conditions to the transactions contemplated by the transaction; the success of the businesses of the Joint Venture and VRB Energy USA Inc.; the capital contributions of Red Sun through 2025; the restructuring and transfer of intellectual property between VRB Energy and the Joint Venture; the Joint Venture's ability to accelerate the manufacture and sale of vanadium redox flow battery systems by combining technology with facilities and infrastructure leased or acquired from entities affiliated with the founders of Red Sun; the Joint Venture's ability to establish two manufacturing sites, one with a 300-megawatt production line and a second with a 200-megawatt production line, and the ability to increase production capacity by ten times VRB Energy's existing Chinese

facility; the timing and ability of the Joint Venture to construct a dedicated electrolyte plant in Shanxi Province with a capacity of 5,000 m<sup>3</sup>; the establishment of a vanadium redox battery manufacturing business located in Arizona and capable of producing 50 megawatts per year of VRB-ESS® vanadium flow batteries; completion of a cooperation Agreement allowing VRB USA to maintain intellectual properties and associated rights, the cross-licensing of new inventions and improvements, preferred supplier arrangements, and establishes global patent protections; and other planned or potential developments in the businesses of Ivanhoe Electric.

Forward-looking statements are based on management's beliefs and assumptions and on information currently available to management. Such statements are subject to significant risks and uncertainties, and actual results may differ materially from those expressed or implied in the forward-looking statements due to various factors, including any inability to negotiate and sign mutually agreeable definitive agreements; any inability to satisfy all applicable closing conditions; changes in the prices of copper or other metals Ivanhoe Electric is exploring for; the results of exploration and drilling activities and/or the failure of exploration programs or studies to deliver anticipated results or results that would justify and support continued exploration, studies, development or operations; the final assessment of exploration results and information that is preliminary; the significant risk and hazards associated with any future mining operations, extensive regulation by the U.S. government as well as local governments; changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of parties to contracts with Ivanhoe Electric to perform as agreed; and the impact of political, economic and other uncertainties associated with operating in foreign countries, and the impact of the COVID-19 pandemic and the global economy. These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements and risk factors described in Ivanhoe Electric's Annual Report on Form 10-K and other filings with the U.S. Securities and Exchange Commission at [www.sec.gov](http://www.sec.gov).

No assurance can be given that such future results will be achieved. Forward-looking statements speak only as of the date of this news release. Ivanhoe Electric cautions you not to place undue reliance on these forward-looking statements. Subject to applicable securities laws, Ivanhoe Electric does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this news release, and Ivanhoe Electric expressly disclaims any requirement to do so.