

# Vortex Energy's Collaboration with the University of Alberta Receives Alberta Innovates Funding

The University of Alberta will receive a total of \$1.2 million from the Government of Alberta, through Alberta Innovates, for the project titled "Field Trial of Hydrogen Storage in Canadian Domal and Bedded Salts"

April 29th, 2024

Vancouver, British Columbia — Vortex Energy Corp. (CSE: VRTX | OTC: VTECF | FRA: AA3) ("Vortex" or the "Company") is pleased to announce that the collaborative project with the University of Alberta ("U of A") alongside Keyera Corporation titled "Field Trial of Hydrogen Storage in Canadian Domal and Bedded Salts" will receive a total of \$1.2 million from the Government of Alberta, through Alberta Innovates. As part of the collaboration, Vortex will provide the U of A with data, resources, and core samples from the Robinsons River Salt Project. In return, the U of A has agreed to perform laboratory and mathematical analyses with the intent of designing and implementing the first field trial of hydrogen storage in a domal salt in Canada at the Robinsons River Salt Project.

The project is being supported by Alberta Innovates, in partnership with Natural Resources Canada, who is committing \$22.5 million for 20 early-stage projects through the Hydrogen Centre of Excellence – Competition 2. There were a total of 95 expressions of interest received for this competition. The University of Alberta will have 24 months to complete the work for projects funded by Alberta Innovates.

Paul Sparkes, Chief Executive Officer, commented "We are proud to be collaborating with the University of Alberta and would like to congratulate Dr. Dehghanpour and his team for receiving follow-on funding from Alberta Innovates. Alberta is an energy systems leader and we believe this partnership will play a critical role in the development of the first field trial of hydrogen storage at the Robinsons River Salt Project in Newfoundland. I'd also like to thank our management team and consultants who have been working tirelessly to secure funding for this project."

Building on its current fundamental research into hydrogen-rock interactions, the U of A team will develop protocols and guidelines to optimize locations, design specifications, and operational parameters for hydrogen storage in the salt caverns proposed to be developed at the Robinsons River Salt Project. To achieve this goal, the research team will conduct proof of concept experiments on core samples and simulation studies to identify and develop solutions for challenges related to containment and contamination of stored hydrogen. The findings are expected to help to develop a multi-physics model to predict hydrogen transport and reactions in the caverns proposed to be developed at the Robinsons River Salt Project as functions of temperature, pressure, in-situ stress, rock fabric and composition, and storage operational parameters.

Major laboratory infrastructure required for the proposed hydrogen-related experiments (core flooding systems, reactors, and visualization systems) have been recently designed and built under a previous grant awarded to the research team by Alberta Innovates Hydrogen Center of Excellence and the Natural Sciences and Engineering Research Council of Canada. As part of their partnership, Vortex and the U of A will actively seek out other provincial and federal grants available for hydrogen and green energy initiatives throughout North America. The Company is also exploring the opportunity to use developed hydrogen caverns for compressed air energy storage.

## **About the Hydrogen Centre of Excellence**

The Hydrogen Centre of Excellence is a funding program, testing and service facility and a forum for facilitating partnerships to de-risk hydrogen technology development led by Alberta Innovates. The Centre received \$50 million in funding from the Government of Alberta as an important component of Alberta's Hydrogen Roadmap and Alberta's Recovery Plan. The Hydrogen Centre of Excellence aims to accelerate technology and innovation across the hydrogen value chain to strengthen Alberta's hydrogen economy. Its purpose is to provide innovation support across the entire hydrogen system, from production to end use. Learn more about the Hydrogen Centre of Excellence, https://albertainnovates.ca/strategic-initiatives/hydrogen-centre-of-excellence/.

### **About Alberta Innovates**

Alberta Innovates manages nearly 1,300 projects in a portfolio valued at \$1.33 billion. It works with innovators in all sectors of the economy and all corners of Alberta to drive entrepreneurship, applied research and industry development. With impact-based funding programs and services, Alberta Innovates aims to transform energy systems for a net-zero world while promoting the responsible use of land and water, leveraging provincial strengths in agriculture, and contributing to improved health and well-being by harnessing digital tech and data. It is also advancing emerging technologies and strengthening entrepreneurship for a strong and diversified economy. Alberta Innovates has more than one million sq. ft of industrial testing and lab facilities and employs nearly 600 highly skilled scientists, business and technical professionals. Learn more about Alberta Innovates at https://albertainnovates.ca.

## **About Vortex Energy Corp.**

Vortex Energy Corp. is an exploration stage company engaged principally in the acquisition, exploration, and development of mineral properties in North America. The company is currently advancing its Robinson River Salt Project comprised of a total of 942 claims covering 23,500 hectares located approximately 35 linear kms south of the town of Stephenville in the Province of Newfoundland & Labrador. The Robinson River Salt Project is prospective for both salt and hydrogen salt cavern storage. The company is actively evaluating technologies to efficiently store hydrogen or energy in salt caverns. Vortex Energy Corp. also holds the Fire Eye Project, which is located in the Wollaston Domain of northern Saskatchewan, Canada.

## On Behalf of the Board of Directors

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# **Cautionary Note Regarding Forward-Looking Statements**

Certain statements contained in this press release constitute forward-looking information. These statements relate to future events or future performance. The use of any of the words "could", "intend", "expect", "believe", "will", "projected", "estimated" and similar expressions and statements relating to matters that are not

historical facts are intended to identify forward-looking information and are based on the Company's current beliefs or assumptions as to the outcome and timing of such future events. In particular, this press release contains forward-looking information relating to, among other things, the Company's development of salt caverns at the Robinsons River Salt Project; the Company's exploration plans for the Robinsons River Salt Project; the intent of the Company and the U of A to design and implement the first field trial of hydrogen storage in domal salt in Canada; the aim of the research of the U of A, the planned phases and timing of this research and the expected outcomes of this research, including the U of A's plan to develop protocols and guidelines to optimize locations, design specifications, and operational parameters for hydrogen storage in the salt caverns proposed to be developed at the Robinsons River Salt Project to identify and develop solutions for the challenges related to containment and contamination of stored hydrogen and to develop a multi-physics model to predict hydrogen transport and reactions in the caverns proposed to be developed at the Robinsons River Salt Project as functions of temperature, pressure, in-situ stress, rock fabric and composition, and storage operational parameters; the Company's intention to provide core samples to the U of A as part of the collaboration; the receipt by the U of A of the funding which has been allocated by Alberta Innovates the intent of the Company and the U of A to actively seek out provincial and federal grants designated for hydrogen and green energy initiatives throughout North America; and the utility of any developed hydrogen caverns at the Robinsons River Salt Property for compressed air energy storage.

Various assumptions or factors are typically applied in drawing conclusions or making the forecasts or projections set out in forward-looking information, including, in respect of the forward-looking information included in this press release, assumptions regarding the Company's ability to develop salt caverns at the Robinsons River Salt Project which may be used for hydrogen, compressed air or other energy storage, or at all; the Company's ability to execute on its exploration plans for the Robinsons River Salt Project, including that it will receive all of the necessary permits to conduct such exploration activities, will be successful in carrying out such exploration activities and will accomplish the desired outcomes from such exploration activities, including that the Company will succeed in conducting a drill program at the Robinsons River Salt Project that produces core samples that may be used by the U of A as part of the collaboration; the Company's partnership with the U of A, including that the collaboration will be carried out in accordance with the collaborative research sponsorship agreement on the timeline currently anticipated and yield the anticipated benefits to the Company and the Robinsons River Salt Project, including that the Company and the U of A will be successful in designing and implementing the first field trial of hydrogen storage in domal salt in Canada; that the U of A will receive the entire amount of the funding allocated by Alberta Innovates; and that the Robinsons River Salt Project will be eligible for provincial and federal grant funding and that the Company and the U of A will be successful in applying for applicable grant funding.

Although forward-looking information is based on the reasonable assumptions of the Company's management, there can be no assurance that any forward-looking information will prove to be accurate. Forward looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among other things, the risk that exploration at the Robinsons River Salt Project does not proceed in the manner currently contemplated; risks inherent in the exploration and development of mineral deposits, including risks relating to receiving requisite permits and approvals, changes in project parameters or delays as plans continue to be redefined, that mineral exploration is inherently uncertain and that the results of mineral exploration may not be indicative of the actual geology or mineralization of a project; that mineral exploration may be unsuccessful or fail to achieve the results anticipated by the Company, including that the Company may fail to develop salt

caverns at the Robinsons River Salt Project which are capable of storing hydrogen, compressed air or other energy storage, or at all; that the Company's collaboration with the U of A may not yield the anticipated benefits to the Company or the Robinsons River Salt Project, including that the Company's collaboration with the U of A may not be carried out pursuant to the collaborative research sponsorship or on the timeline currently anticipated, or at all, and may not result in the design and implementation of the first field trial of hydrogen storage in domal salt in Canada; the risk that the funding from Alberta Innovates may not be received by U of A, whether as a result of actions by the Company, the U of A or the Alberta government; and the risk that the collaboration may not result in additional grant funding being provided to the Company or in respect of the Robinsons River Salt Project. The forward-looking information contained in this release is made as of the date hereof, and the Company not obligated to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by applicable securities laws. Because of the risks, uncertainties and assumptions contained herein, investors should not place undue reliance on forward-looking information. The foregoing statements expressly qualify any forward-looking information contained herein.

The Canadian Securities Exchange (CSE) has not reviewed, approved, or disapproved the contents of this press release.