27th November 2025

TSX Announcement

Velox's Exportable Solid State Hydrogen Project Advancing Toward Commercialisation

Highlights

- **The Company's ARENA-funded Kotai Hydrogen Project has achieved its Milestone 2 objectives, validating the exportable solid state hydrogen technology at the lab scale, demonstrating both synthesis of sodium borohydride and hydrogen release at high-pressure.**
- **The successful completion of Milestone 2, triggers a $1 million funding payment from ARENA, providing ongoing support for the Project.**
- **The project is on-track to meet Milestone 3, which will scale up the technology before moving to production at a demonstration facility.**

Perth, Western Australia – November 27, 2025 – Velox Energy Materials Inc. (TSX.V: VLX) ("**Velox**" or the "**Company**") is pleased to announce the successful completion of Milestone 2 under the Australian Renewable Energy Agency ("**ARENA**") Transformative Research Accelerating Commercialisation ("**TRAC**") Program, for the Kotai Hydrogen Project ("**Kotai**" or "**the Project**"), led by Curtin University's Hydrogen Storage Research Group. Velox, together with Curtin, continues to drive forward the commercialisation of the Kotai Hydrogen Project and its solid-state sodium borohydride hydrogen export technology.

The achievement of Milestone 2 triggers a **funding payment of AUD $1,000,000** from ARENA, part of a **A$5 million TRAC grant** awarded to the Kotai Hydrogen project. This grant was originally announced on April 9, 2024[1], and supports the development of a novel hydrogen export pathway using sodium borohydride ($NaBH_4$) powder. The total project budget is approximately **A$16.5 million**, including contributions from Curtin University and Velox through its wholly owned subsidiary WA Hydrogen Pty Ltd.

John Curtin Distinguished Professor Craig Buckley, Head of Curtin University's Hydrogen Storage Research Group, and an Australian Expert on the IEA Hydrogen Technology Collaboration Project (TCP) Task 51: Hydrogen Materials for Energy Storage commented:

"This milestone demonstrates that sodium borohydride can deliver hydrogen at high pressure safely and efficiently, which is a significant advancement for global hydrogen transport. By validating both synthesis and hydrogen release at lab scale, we've proven the feasibility of a closed-loop system powered by renewables. The next step will show how this technology can compete with traditional carriers such as ammonia and liquid hydrogen, while offering superior safety and sustainability.

Curtin University is proud to lead research that addresses one of the biggest challenges in the hydrogen economy: safe, cost-effective storage and transport. Through our partnership with Velox and support from ARENA, we're translating our team's hydrogen storage expertise into practical solutions that can position Australia as a global clean energy hub. This milestone is a testament to what collaboration between academia, industry, and government can achieve."

***Interim CEO Nicole Morcombe commented**:*

"Low-cost, safe transport and storage of hydrogen remains one of the greatest challenges to unlocking the full potential of the hydrogen economy. Through Kotai Energy and our partners, Velox is developing a highly efficient and scalable process that uses an inert powder, sodium borohydride, to store hydrogen and release it on demand, wherever it's needed. A unique feature of this system is its ability to regenerate the spent material using renewable energy, creating a circular and sustainable hydrogen supply chain.

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[1] TSX-V: VLX – A$5 million ARENA Grant Awarded to Curtin University for the Kotai Hydrogen Project – 10/04/2024

With ARENA's support, we are transitioning from lab-scale validation to pilot-scale deployment, accelerating the path to commercialisation. We are grateful for ARENA's backing and look forward to continuing our collaboration with Curtin University to deliver real-world solutions that meet both environmental and economic goals."

Key Technical Advancements Achieved

- 10 g of sodium borohydride synthesized and purified via an electrochemical process
- Continuous 10 g/hour hydrogen release via hydrolysis in a single vessel
- Hydrogen output up to 1,000 bar, confirming viability of high pressure, on demand delivery

These results confirm proof-of-concept for the closed-loop hydrogen export system and lay the foundation for the next phase of development, targeting scaled production and continuous flow processing.

Pathway to Commercialisation

With the successful completion of Milestone 2 and the receipt of A$1,000,000 in ARENA funding plus $100,000 from Curtin, the project now progresses toward Milestone 3, which will span the next phase of the research program. This milestone will focus on scaling up the electrochemical synthesis of sodium borohydride and demonstrating hydrogen release, building on the validated proof-of-concept.

The ARENA grant also supports the design and construction of a pilot plant, which will be a critical step in transitioning the technology from laboratory to commercial scale. Commercial discussions have commenced regarding the pilot plant's location and operational terms with a prospective site offering access to advanced infrastructure for hydrogen production, testing, and certification. This facility will demonstrate the conversion of sodium borate into sodium borohydride using renewable energy, and its subsequent transformation into hydrogen gas at exportable quantities. The pilot plant will serve as a key validation platform for attracting future investment and enabling market deployment.

Velox continues to play a central role in the commercialisation strategy, contributing technical expertise, project development capability, and market insight. Velox also holds an exclusive option to acquire 100% of the intellectual property developed within the Kotai Hydrogen Project.

The overarching goal of the project is to develop sodium borohydride technology that is cost-competitive with existing hydrogen carriers, such as ammonia and liquid hydrogen. The target is to reduce the cost of hydrogen delivered to overseas consumers positioning sodium borohydride as a safe, efficient, and scalable solution for global hydrogen export.

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Kotai Hydrogen Project Overview

The Kotai Hydrogen Project is a collaborative initiative between Curtin University's Hydrogen Storage Research Group (HSRG) and Velox Energy Materials, focused on developing and deploying a novel technology to **transport hydrogen as a powder**.

The powder is a salt called **sodium borohydride ($NaBH_4$)**, which stores significantly more hydrogen by weight and volume than conventional carriers such as liquid hydrogen, ammonia, or liquid organic hydrogen carriers (LOHCs). When $NaBH_4$ is added to water, it releases hydrogen gas. The remaining by-product, **sodium borate ($NaBO_2$)**, is then **regenerated back into sodium borohydride using renewable energy**, creating a circular and sustainable hydrogen export system.

Funded under ARENA's Transformative Research Accelerating Commercialisation (TRAC) Program, the project is structured into two phases:

- **Research Phase (Milestones 1 – 3):** Focused on lab-scale optimisation of $NaBH_4$ electrochemical synthesis, powder processing, and hydrogen generation.
- **Commercialisation Phase (Milestones 4 – 6):** Includes the design, construction, and optimisation of a pilot plant to demonstrate $NaBH_4$ production and hydrogen release at exportable quantities.

The project's ultimate goal is to deliver hydrogen to overseas markets at a competitive cost, positioning sodium borohydride as a safe, efficient, and scalable solution for global hydrogen transport. Velox holds an option to acquire **100% of the intellectual property** developed through the project.

About the Hydrogen Storage Research Group, Curtin University

Hydrogen Storage Research Group team (HSRG) investigates new types of materials for energy storage. The HSRG expertise in this area is used in conjunction with industry partners to provide real-world solutions to research level problems in the energy storage space. Their expertise spans multiple research fields including those of hydrogen rich materials, new battery technologies, and thermochemical energy storage materials.

John Curtin Distinguished Professor Craig Buckley leads the HSRG and has 37 years experience in hydrogen storage research. Professor Buckley was the Australian executive committee member for the International Energy Agency (IEA) Hydrogen Technology Collaboration Program (TCP) from 2014 - 2024, and is an Australian expert on the IEA Hydrogen TCP Task 51: Hydrogen Materials for Energy Storage. Craig is also Program 2 Leader: "Hydrogen Exports and Value Chains" for the Future Energy Exports (FEnEx) CRC and a Board member of the Hydrogen Society of Australia.

Mark Paskevicius is a Professor in Physics at Curtin University. He is the Theme Lead for Hydrogen within the Curtin Institute for Energy Transition. Mark is also an Australian expert on the IEA Hydrogen TCP Task 51. He has undertaken experimental research into hydrogen-rich materials and borohydrides for the past 18 years so has immense technical knowledge in materials development and chemical processing.

About Sodium Borohydride ($NaBH_4$)

The hydrogen-rich powder called sodium borohydride ($NaBH_4$) that can store more hydrogen by weight and volume than liquid hydrogen, ammonia or LOHCs. This is due to the fact that when NaBH4 is added to water at its end destination it releases double the hydrogen it contains. Two molecules of hydrogen from the $NaBH_4$, and two molecules of hydrogen from water are all released when $NaBH_4$ turns into sodium borate ($NaBO_2$). This results in an effective gravimetric and volumetric hydrogen density of 21.4 wt.% H_2 and 137 kg H_2 per m^3 for each unit of shipped $NaBH_4$ (assuming a powder packing fraction of 60 %). This means that the volumetric hydrogen density in $NaBH_4$ is 1.28 times greater than ammonia and 1.93 times greater than liquid hydrogen.

Australian Renewables Energy Agency (ARENA) (https://arena.gov.au/)

The Australian Renewables Energy Agency was established by the Australian Government and supports the global transition to net zero emissions by accelerating the pace of pre-commercial innovation, to the benefit of Australian consumers, businesses and workers.

ARENA supports improvements in the competitiveness of renewable energy and enabling technologies, increase the supply of renewable energy in Australia, and to facilitate the achievement of Australia's greenhouse gas emissions targets by providing financial assistance and sharing knowledge to accelerate innovation that benefits all Australians.

About Velox Energy Materials

Velox Energy Materials is a publicly traded energy materials company developing and progressing high-value assets in resource and research-friendly jurisdictions. The Company's priority focus is the advanced NQV Project in Queensland, Australia. The NQV Project hosts the Cambridge Deposit with an CIM compliant Indicated Mineral Resource of 61.33 Mt @ 0.34% V_2O_5 and 234.6 ppm MoO_3 along with an Inferred Mineral Resource of 144.87 Mt @ 0.33% V_2O_5 (cut-off grade of 0.25% V_2O_5) and 241.9 ppm MoO_3 (Dufresne et al., 2022). The Company is targeting shallow, high-grade mineralisation that can be developed using low-cost mining and processing options.

The Company additionally owns Kotai Energy and the option to acquire 100% of the intellectual property rights associated with the Solid-State Hydrogen Storage Project from Curtin University in Western Australia. Kotai is focused on the commercialisation of technology that can produce high-pressure hydrogen following transport as an inert powder.

Please visit our website at www.veloxenergymaterials.com.au for further information.

Qualified Persons

The Velox Energy Materials technical information in this news release has been prepared in accordance with the Canadian regulatory requirements set out in National Instrument 43-101 (Standards of Disclosure for Mineral Projects) and reviewed and approved on behalf Velox Energy Materials by Michael Griffiths, FAusIMM, Director & VP Exploration for Velox Energy Materials, a Qualified Person.

Forward Looking Statements

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

This news release may contain forward-looking statements that are based on the Company's expectations, estimates and projections regarding its business and the economic environment in which it operates. Statements about the closing of the transaction, expected terms of the transaction, the number of securities of Velox Energy Materials that may be issued in connection with the transaction, and the parties' ability to satisfy closing conditions and receive necessary approvals are all forward-looking information. These statements are not guarantees of future performance and involve risks and uncertainties that are difficult to control or predict. Therefore, actual outcomes and results may differ materially from those expressed in these forward-looking statements and readers should not place undue reliance on such statements. Statements speak only as of the date on which they are made, and the Company undertakes no obligation to update them publicly to reflect new information or the occurrence of future events or circumstances, unless otherwise required to do so by law.

The figures noted in this announcement are in USD and sourced from the Future of Hydrogen Report prepared by the IEA. They are not actual costs nor forward looking statements or financial forecasts and are not indicative of the future performance of the Company.