Scandium Breakthrough in Sodium-Ion Batteries Highlights Victory's Strategic By Product

Victory Metals Limited (ASX:VTM) ("Victory" or "the Company") is pleased to provide an update on the growing strategic importance of Scandium within the Company's portfolio, following recent research highlighting its role in advancing next generation energy storage.

Research from the Tokyo University of Science has demonstrated Scandium's critical role in improving Sodium-ion battery performance delivering structural stability and enhanced cycle life. With applications already established in aerospace, defence and advanced alloys, this breakthrough underscores Scandium's potential to become a cornerstone of future energy storage technologies.

HIGHLIGHTS

- **Victory positioned as one of the few Australian projects with Scandium Oxide (Sc_2O_3) as a by-product from a clay hosted rare earth system due to the unqiue underlying Alkaline Intrusion**

- **Breakthrough global research shows Scandium doping dramatically improves Sodium-ion battery performance retaining 60% capacity after 300 cycles highlighting scandium's role as a game-changer for next-generation energy storage [1]**

- **North Stanmore's JORC resource contains 7.7 million kg of Scandium[2] with a price forecast of US$630/kg[3], a valuable by-product vital for defence and renewable energy**

- **The research further highlights the significance of the Prestigious Mineral Research Institute of Western Australia (MRIWA) grant that was recenty awarded to advance scandium extraction from the North Stanmore Heavy Rare Earth Project[4]**

- **Pre-feasability Study to incorporate Scandium oxide in the first 10 years of operations under a low-throughput solution[5]**

- **Scandium demand outlook strengthening as applications expand across aerospace, defence, lightweight alloys, and now advanced batteries**

[1] Refer to https://www.energy-reporters.com/storage/scientists-unveil-groundbreaking-doping-that-transforms-sodium-batteries-60-capacity-retained-after-300-cycles/
[2] Refer to Company announcement "UPDATED MRE IDENTIFIES HREO/TREO RATIOS UP TO 83%" - 11 August 2025 and "Outstanding North Stanmore Scoping Study Delivered" dated 12 March 2025
[3] Adamas Intelligence 2025 Price Forecast - down price
[4] Refer to ASX announcement dated 18th August 2015 titled "Victory Secures Prestigous MRIWA Grant"
[5] Refer to ASX announcement dated 8th September 2015 titled "Victory Targets Accelerated Value from World Class Heavy Rare Earths"

Victory's Chief Executive Officer and Executive Director Brendan Clark commented:

"Victory is emerging as one of the very few Australian companies positioned to deliver Scandium oxide as a by-product from a clay hosted heavy rare earth project. Scandium has long been recognised as a critical enabler for aerospace and high strength alloys, but the latest global research confirms its role as a game changer for the next generation of energy storage.

With scandium oxide priced at USD$630 per kilogram and Victory targeting Scandium oxide in the first 10 years of operations under a low-throughput solution, we see this as an incredible revenue stream alongside the heavy rare earths. The support we have received from MRIWA further validates the technical and economic opportunity to unlock scandium from our North Stanmore Project.

As Western markets accelerate the diversification of supply chains away from China and Russia, Victory is uniquely placed to provide secure Scandium oxide supply into aerospace, defence, renewable energy and now advanced battery markets. This is another powerful example of how our North Stanmore Project continues to strengthen as a strategic critical minerals hub and an emerging source".

Global Research Validates Scandium's Role in Next Generation Batteries[6]

Recent research published by the Tokyo University of Science has confirmed Scandium's importance as a performance-enhancing element in sodium-ion batteries, a technology increasingly seen as a lower cost and abundant alternative to lithium-ion.

The study focused on doping sodium manganese oxide cathodes (P'2-$Na_{2/3}[Mn_{1-x}Sc_x]O_2$) with Scandium. By introducing scandium into the crystal structure, researchers found that it significantly improved the long-term stability of the cathode material. Specifically, Scandium reduced the impact of Jahn Teller distortions (a structural instability common in manganese based systems), suppressed side reactions with electrolytes, and increased resistance to moisture degradation. These improvements collectively strengthened the overall durability and performance of sodium-ion batteries.

The results were striking with Scandium-doped cathodes shown to retain approximately 60% of their capacity after 300 charge discharge cycles, outperforming equivalent non-doped materials under the same test conditions. While 300 cycles remains an early-stage benchmark, the findings clearly demonstrate scandium's ability to unlock major gains in cycle life and stability – two of the biggest challenges preventing sodium-ion batteries from competing directly with lithium-ion in large-scale commercial applications.

This breakthrough research is significant because sodium-ion batteries are emerging as a serious contender for grid-scale energy storage, renewable integration, and lower cost electric mobility solutions. The addition of scandium as a dopant could accelerate the commercialisation of sodium-ion batteries by closing the performance gap with lithium-ion systems.

For Victory, this reinforces Scandium's status as a strategic technology metal with demand potential well beyond its established role in aerospace and high strength aluminium alloys. With scandium already priced at around US$1,000/kg and global supply constrained, research breakthroughs of this kind are expected to heighten industry and government focus on securing scandium oxide supply for next-generation technologies.

Project Importance

The MRIWA grant highlights the urgent need for a secure Scandium supply amid China and Russia's 90% dominance of global Scandium oxide production and China's inclusion of scandium on its export

[6] Refer to https://www.energy-reporters.com/storage/scientists-unveil-groundbreaking-doping-that-transforms-sodium-batteries-60-capacity-retained-after-300-cycles/

restriction list (April 2025). North Stanmore's unique Scandium-bearing alkaline intrusion, unparalleled in Western Australia, positions Victory to mitigate global supply.

Awarded through MRIWA's rigorous technical evaluation, the project aligns with Western Australia's Research Priority Plan for downstream processing, leveraging Victory Metals' MREC separation success to enhance North Stanmore's $1.2 billion Net Present Value (NPV) and 31-year mine life[7]. It addresses geopolitical risks, ensuring supply chain security for Western defence and energy sectors.

This announcement has been authorised by the Board of Victory Metals Limited.

For further information please contact:

Brendan Clark
CEO and Executive Director
info@victorymetalsaustralia.com

Andrew Willis
Investor and Media Relations
awillis@nwrcommunications.com.au

Victory Metals Limited

Victory is dedicated to the exploration and development of its flagship North Stanmore Heavy Rare Earth Elements (HREE), Scandium, Hafnium and Gallium Project located in the Cue Region of Western Australia. The Company is committed to advancing this world-class project to unlock its significant potential.

In August 2025, Victory Metals announced a robust Mineral Resource Estimate (MRE) for North Stanmore, totalling 320.6 million tonnes, with the majority of the resource, classified in the indicated category. This positions the North Stanmore Project as Australia's largest indicated clay heavy rare earth resource, underscoring its pivotal role as a future supplier of critical materials for the future.

North Stanmore Mineral Resource Estimate

Table 1: North Stanmore August 2025 MRE (≥330ppm TREO + Sc_2O_3 cut-off grade)

CLASSIFICATION	MRE TONNES (t)	TREOSc (ppm)	TREO (ppm)	HREO (ppm)	LREO (ppm)	HREO/TREO (%)	Sc_2O_3 (ppm)	Ga_2O_3 (ppm)
INDICATED	176,522,000	532	505	190	316	39	26	26
INFERRED	144,118,000	484	463	166	297	37	21	25
TOTAL	**320,640,000**	**510**	**486**	**179**	**307**	**38**	**24**	**26**

Numbers are rounded to reflect they are an estimate. Numbers may not sum due to rounding.

[7] Refer to Company announcement "Outstanding North Stanmore Scoping Study Delivered" dated 12 March 2025

Competent Person Statement

Competent Person Statement - Professor Ken Collerson

Statements contained in this report relating to exploration results, Mineral Resource Estimate, metallurgy results, scientific evaluation, and potential, are based on information compiled and evaluated by Emeritus Professor Ken Collerson. Professor Collerson (PhD) Principal of KDC Consulting and Director of Victory Metals Limited, and a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM No. 100125), is a geochemist/geologist with sufficient relevant experience in relation to rare earth element and critical metal mineralisation being reported on, to qualify as a Competent Person as defined in the Australian Code for Reporting of Identified Mineral resources and Ore reserves (JORC Code 2012). Professor Collerson consents to the use of this information in this report in the form and context in which it appears.

No New Information – Mineral Resources
Information in this report relates to Mineral Resource Estimates and exploration results for the North Stanmore Project and is available to view on www.asx.com.au. Victory Metals Limited confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement, and that all material assumptions and technical parameters underpinning the estimates in the announcement continue to apply and have not materially changed