

27 May 2026

## Niobium-Lithium Battery Development MOU

Encounter Resources Limited (ASX: ENR) (“Encounter” or “the Company”) is pleased to report the Company has entered a Memorandum of Understanding (‘MoU’) with Echion Technologies Ltd (‘Echion’) and Switch Technologies (WA) Pty Ltd (‘Switch’) to collaborate on fostering an integrated lithium-niobium battery industry in Australia.

### Key Highlights:

- Encounter has demonstrated strong recoveries at high concentrate grades<sup>1</sup> from its Green deposit and is assessing multiple product options as part of its marketing and metallurgical development strategy
- Niobium-anode, lithium-ion (lithium-niobium) batteries are at a commercialisation inflection point across heavy-duty mobility and Energy Storage Systems (ESS)
- Hybrid mining fleet technology is being developed by Switch and Echion using Echion’s XNO<sup>®</sup> niobium anode technology. Advantages include<sup>2</sup>:
  - 17-20% decrease in fuel burn
  - 10-15% increased cycle time
  - ~3-year payback period
  - Continued use of retired batteries to support load-smoothing in grid
- Niobium oxide is a key ingredient for Echion’s XNO<sup>®</sup> niobium anode
- Advantages of these batteries extend to grid-stabilising ESS applications and where power requirements are volatile, instantaneous and repetitive such as in AI data centres
- Encounter, Echion and Switch have teamed up to foster an integrated lithium-niobium battery industry in Australia
- Encounter’s Aileron Project represents a potential source of long-term niobium supply to underpin niobium market expansion through diversification of supply from a top-tier jurisdiction

### Executive Chairman, Will Robinson, comments:

*“Niobium is an incredibly versatile metal, which is driving significant growth in demand across the defence, aerospace and battery sectors, and the West Arunta has an important role to play in ensuring continued demand growth through diversification of supply from a top-tier jurisdiction.*

*With the commercial advantages of niobium anodes in batteries becoming a reality, Encounter is delighted to be partnering with innovators in the battery industry and working towards creating an integrated lithium-niobium battery industry in Australia.*

*The potential for Australian mining fleets to be powered by batteries constructed with Australian niobium and lithium is an eminently achievable goal with tremendous advantages for economic development and diversification, as well as the increasingly important reduction in diesel use.”*

## Memorandum of Understanding

Encounter, Echion and Switch have entered into an MoU to collaborate on promoting and fostering an integrated lithium-niobium battery industry in Australia, and particularly the local mine to market potential, utilising each of the Parties respective assets and skillsets.

The MoU is non-binding and subject to definitive agreements as they relate to areas such as offtake, funding, joint ventures and intellectual property. The MoU is intended to be expanded to include additional niobium anode battery users such as logistics companies, mining fleet owners or original equipment manufacturers ('OEM'), data centre developers and niobium suppliers.

### About Echion

Echion is based in Cambridge, United Kingdom and provides advanced technology to solve some of the biggest challenges in the electrification of heavy-duty mobility and ESS. Echion wholly owns the rights to the XNO<sup>®</sup>, which is a niobium-based anode material for lithium-ion batteries.

The benefits of Echion's XNO<sup>®</sup> technology in batteries include very high power density, high energy density, ultra-fast charge rates, high cycle lives and strong safety metrics<sup>2</sup>. These attributes address key challenges for electrification of heavy industry where high productivity is a focus, and provide total cost of ownership advantages relative to other anode technologies. Similarly, these attributes are being shown to be beneficial for ESS applications where power requirements are volatile, instantaneous and repetitive, such as in AI data centres.

Echion was born in the labs of the University of Cambridge Engineering Department in 2017 and has since developed, scaled and commercialised its XNO<sup>®</sup> technology in partnership with cell manufacturers and product engineers. Echion is supported by leading venture capital institutions and the world's largest niobium miner, CBMM.

### About Switch

Switch is based in Perth, Western Australia and delivers end-to-end product engineering and delivery of battery and hybrid systems for industrial operations. Switch blends mechanical, electrical, controls and software specialists to deliver working electrification systems which add immediate value.

Switch is currently developing a mine-ready hybrid system for the Cat 785 haul truck to reduce diesel use and boost performance through high-efficiency regeneration and electric assist<sup>3</sup>. First deployment for mine-ready trials is targeted for Q2 2026 using battery packs built with Echion's XNO<sup>®</sup> technology.

### About Encounter

Encounter's Aileron Project in the West Arunta region of Western Australia contains 26Mt @ 1.7% Nb<sub>2</sub>O<sub>5</sub><sup>3</sup>, making it one of the highest-grade niobium projects globally. The Company is targeting continued resource growth while also progressing pre-development work to support a potential multi-decade mining operation.

Global supply of the niobium market is highly concentrated, and the Aileron Project represents a potential source of future niobium supply which can underpin market expansion in the battery industry through diversification of supply, from a top-tier mining and investment jurisdiction.

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*The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases and confirms that it is not aware of any new data or information that materially affects the information disclosed in this announcement and previously released by the Company in relation to mineral resource estimates. All material assumptions and technical parameters underpinning the mineral resource estimates in the relevant market announcements continue to apply and have not materially changed.*

*The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.*

*This announcement has been approved for release by the Board of Encounter Resources Limited.*

<sup>1</sup> ENR ASX announcement 18 May 2025

<sup>2</sup> Echion Technologies. Insights & Resources from the world's leading supplier of niobium-based anode materials ([echiontech.com/insights-resources/#niobium](https://echiontech.com/insights-resources/#niobium))

<sup>3</sup> Switch Technologies ([switchtechnologies.net](https://switchtechnologies.net))

<sup>4</sup> ENR ASX announcement 22 April 2026

<sup>5</sup> ENR ASX announcement 26 September 2025

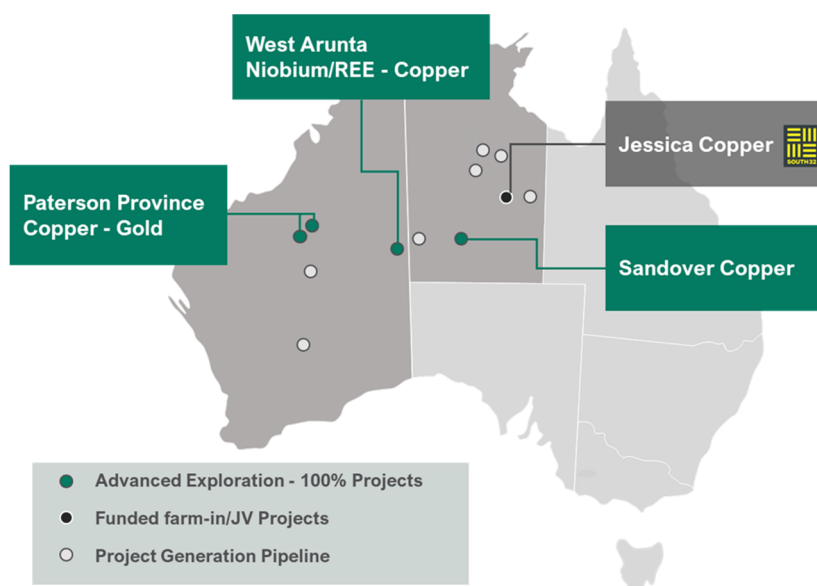
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## About Encounter

**Encounter Resources Limited (ASX:ENR)** is a leading Australian mineral exploration company focused on the discovery of major copper and niobium/rare earth element (REE) deposits.

The Company holds a commanding portfolio of 100%-owned projects located in some of Australia's most prospective mineral belts, targeting copper and critical minerals. Key among these is the Aileron Project in the highly endowed West Arunta region of Western Australia, emerging as a significant frontier for critical mineral exploration.

Encounter's strategy is centred on high-impact discovery in Tier 1 jurisdictions, leveraging strong technical capability and a proven track record of attracting leading industry partners.



Deposit	0.25% Nb <sub>2</sub> O <sub>5</sub> cut-off						
	Tonnage (Mt)	Nb <sub>2</sub> O <sub>5</sub> (%)	Nb <sub>2</sub> O <sub>5</sub> (kt)	TREO (%)	TREO (kt)	P <sub>2</sub> O <sub>5</sub> (%)	P <sub>2</sub> O <sub>5</sub> (kt)
Green	100	0.71	711	0.34	341	5.4	5,401
Emily	13.9	0.93	130	0.32	45	7.4	1,035
Crean	5.7	1.4	78	0.84	48	7.4	423
<b>Total</b>	<b>120</b>	<b>0.77</b>	<b>919</b>	<b>0.36</b>	<b>433</b>	<b>5.7</b>	<b>6,858</b>
Deposit	1.0% Nb <sub>2</sub> O <sub>5</sub> cut-off (subset of 0.25% Nb <sub>2</sub> O <sub>5</sub> cut-off)						
	Tonnage (Mt)	Nb <sub>2</sub> O <sub>5</sub> (%)	Nb <sub>2</sub> O <sub>5</sub> (kt)	TREO (%)	TREO (kt)	P <sub>2</sub> O <sub>5</sub> (%)	P <sub>2</sub> O <sub>5</sub> (kt)
Green	19	1.6	291	0.46	86	7.8	1,472
Emily	3.7	1.9	71	0.61	22	11.2	414
Crean	3.5	1.9	67	1.1	36	8.2	283
<b>Total</b>	<b>26</b>	<b>1.7</b>	<b>430</b>	<b>0.56</b>	<b>146</b>	<b>8.4</b>	<b>2,173</b>

**Table 1 – Aileron Project Inferred Mineral Resource Estimate <sup>4</sup>**

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Inferred Mineral Resource Estimate (JORC 2012)			
Domain	Tonnes (Mt)	Copper Grade (%)	Contained Copper Metal (kt)
HG	1.1	1.27%	8.2
LG	1.7	0.48%	14.0
<b>Total</b>	<b>2.9</b>	<b>0.79%</b>	<b>22.6</b>

**Table 2 – Tyrell Copper Oxide Mineral Resource Estimate<sup>5</sup>**

**Notes**

**Table 1:**

- The resource is constrained within optimised pit shells based on a price of US\$45 per kilogram Nb (US\$30/kg FeNb) and is reported above a 0.25% Nb<sub>2</sub>O<sub>5</sub> cut-off grade.
- The resource reported above a 1% Nb<sub>2</sub>O<sub>5</sub> cut-off grade is a subset of the 0.25% Nb<sub>2</sub>O<sub>5</sub> cut-off grade.
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.

**Table 2**

- The resource is constrained within an optimised pit shell based on a Cu price of A\$17,000 per tonne and is reported above a 0.25% Cu cut-off grade.
- All tonnages reported are dry metric tonnes.

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