

15 June 2026

## Sunrise Energy Metals Agrees to Strategic Investment in Advanced AlScN Memory Semiconductor Developer Agni Semiconductor LLC

### HIGHLIGHTS:

- **Strategic equity investment** of US\$5 million into Agni Semiconductor LLC, a US-based developer of next-generation non-volatile memory based on aluminium scandium nitride (AlScN) ferroelectric diode technology.
- **Investment would represent 50% of Agni's US\$10 million Seed Round**, with Sunrise expected to hold approximately 18% of Agni on a fully diluted basis assuming full exercise of all seed-round warrants.
- **Sunrise Chairman Robert Friedland and Managing Director Sam Riggall** also intend to invest in the seed round funding.
- **Governance rights** include a Sunrise-appointed director, a board observer, customary protective provisions, pro-rata participation rights and a contractual pathway to a 30% target ownership position.
- **Aligns with Sunrise's long-term strategy** of supporting downstream demand opportunities for scandium produced from the Syerston Scandium Project.
- **Completion is subject** to customary conditions precedent, including satisfactory due diligence, regulatory approvals and definitive transaction documentation.

**Sunrise Energy Metals Limited (ASX: SRL, Sunrise or the Company)** Chairman Robert Friedland, and Managing Director Sam Riggall, are pleased to announce a strategic equity investment in Agni Semiconductor LLC (**Agni**), a privately held US company developing next-generation non-volatile memory and AI compute-in-memory semiconductors, based on aluminium scandium nitride (**AlScN**) ferroelectric diode architectures.

The investment will broaden Sunrise's exposure to emerging scandium-enabled semiconductor technologies and advances the Company's strategy of participating in the

downstream value chain for scandium produced from its 100%-owned Syerston Scandium Project in Australia. AlScN — a ferroelectric semiconductor material in which scandium is alloyed into aluminium nitride — is increasingly recognised as one of the most promising emerging materials for high-performance, energy-efficient memory and AI inference hardware.

## Commentary

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### **Sunrise Chairman Robert Friedland commented:**

“Our investment in Agni reflects the next step in Sunrise’s strategy of moving from a pure strategic metal producer to an active participant in the technologies that will shape future demand for scandium. Aluminium scandium nitride is one of the most credible emerging materials platforms in the semiconductor industry, and Agni’s ferroelectric diode architecture is among the most unique implementations of the technology we’ve seen. We look forward to working with Agni’s world-class technical team to address some of the most pressing constraints on high-temperature memory applications and AI compute systems.”

### **Agni Chief Executive Officer Dr. Chris D’Couto noted:**

“We are delighted to welcome Sunrise as a strategic investor and partner. Sunrise brings something that very few investors in our space can offer: direct alignment with the upstream supply of one of the elements at the heart of our technology platform. Scandium is a metal of strategic importance for a variety of applications - in our case for a highly differentiated memory and AI-compute solution. Our initial memory products are focused on extreme environments (high temperature, high radiation) for the defense sector, industrial base applications where materials sourcing is critical. Our focus now turns to advancing foundry qualification, prototype delivery to defence and aerospace customers and the broader compute-in-memory opportunity.”

### **Agni Chief Scientific Officer Dr. Deep Jariwala said:**

“Aluminium scandium nitride is a remarkable material, combining the manufacturability of nitride semiconductors with strong, switchable ferroelectric polarisation, doing so in a thin-film format that integrates cleanly with standard CMOS back-end-of-line processing. Our ferroelectric diodes take direct advantage of these properties to deliver a memory cell that is dense, low-power and fast enough to support compute-in-memory operation for AI workloads. We believe AlScN ferroelectric memory will play a meaningful role in next-generation AI computing systems.”

## Transaction Overview

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Sunrise and Agni have entered into a binding term sheet, pursuant to which Sunrise has agreed to invest US\$5 million in Agni by way of a Simple Agreement for Future Equity, which is expected to convert into shares of common stock of Agni upon its planned reorganisation from a limited liability company to a Delaware C-corporation.

Sunrise's investment would represent 50% of Agni's proposed US\$10 million Seed Round at a US\$45 million pre-money valuation. Assuming the Seed Round is fully subscribed and all warrants attaching to the Seed Round offering are exercised, Sunrise is expected to hold approximately 17% of Agni on a fully diluted basis. Robert Friedland and Sam Riggall also intend to invest in the Seed Round funding.

In connection with the investment, Sunrise will receive customary private-company investor rights and rights to make further follow-on investments in Agni. Any further investment by Sunrise will be at Sunrise's election.

The investment is subject to customary conditions precedent, including completion of satisfactory due diligence, satisfaction of any applicable Australian and US regulatory approvals and execution of definitive documents. Conversion closing is targeted to occur no later than 120 days after the funding closing.

## Use of Proceeds

Funds raised by Agni in the Seed Round will be applied to product development and prototyping on 8-inch wafer platforms, foundry qualification, prototyping and sampling of compute-in-memory designs, and the expansion of Agni's engineering and commercial team over a 30-month deployment horizon.

Agni continues to draw on substantial non-dilutive funding, including existing programs with the United States Air Force Research Laboratory and a Small Business Innovation Research Phase 2 award.

## About Agni Semiconductor ([www.agnisemi.ai](http://www.agnisemi.ai))

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Agni is a Philadelphia-headquartered semiconductor company founded in 2024. Agni's founding team includes Dr. Chris D'Couto (CEO; previously Intel Corporation, Lam Research and FormFactor), Dr. Deep Jariwala (Chief Scientific Officer; Associate Professor at the University of Pennsylvania); Dr. Roy (Troy) H. Olsson III (Professor at the University of

Pennsylvania and former DARPA program manager) and Dr. Eric A. Stach (Professor at the University of Pennsylvania and Scientific Director of the Singh Center for Nanotechnology).

The team's research on memory-enhanced computing utilising AlScN ferrodiodes was awarded the Bell Labs Prize® in 2022.

Dr. Tsu-Jae King Liu, a former director of Intel Corporation, Professor Emerita of UC Berkeley School of Electrical Engineering and Computer Sciences and the current President of the US National Academy of Engineering, serves on Agni's advisory board.

## **The AlScN Ferroelectric Diode Materials Platform**

Aluminium scandium nitride is a ferroelectric semiconductor in which scandium is alloyed into the wurtzite aluminium nitride lattice. The resulting material retains an electric polarisation state without applied power, enabling true non-volatile memory operation. Unlike charge-storage memories (which lose data when power is removed) or magnetic and resistive memories (which rely on conductive metallic filament formation or magnetic tunnel junctions), AlScN stores information through reversible electric polarisation.

Peer-reviewed publications by Agni's founders have demonstrated that AlScN is compatible with standard semiconductor back-end-of-line (BEOL) fabrication processes, can be deposited as films down to approximately 5 nanometres, and exhibits strong write endurance, low switching voltages and high-speed switching characteristics.

## **Ferroelectric Diode Memory Architecture**

Agni's memory cell departs from conventional transistor-based architectures by implementing a simple two-resistor (2R) ferroelectric diode structure. Because the AlScN ferroelectric diode does not require a dedicated access transistor for each bit, the resulting cell is substantially more compact than competing emerging-memory architectures and can be integrated at any metal level of a standard CMOS process flow. Agni's published results, together with its planned product roadmap, target the following potential advantages over incumbent memory technologies:

- Multi-bit (multi-state) storage demonstrated at the device level, increasing density per memory cell;
- Substantially lower write energy than competing non-volatile memory technologies;
- Nanosecond-class write and read speeds, supporting compute-in-memory operation for AI inference workloads;
- BEOL (back-end-of-line) integration into existing semiconductor process flows, simplifying adoption by established foundries;

- Monolithic integration with silicon transistors;
- Operation across an exceptionally wide temperature range, including demonstrated functionality at elevated temperatures relevant to defence, aerospace and industrial applications; and
- A simplified manufacturing flow relative to magnetic or resistive memory technologies that require multilayer stacks or selector devices.

Agni's near-term product roadmap targets initial deliveries of high-temperature memory chips for defence and aerospace customers and prototype compute-in-memory chiplets for AI inference applications. Volume manufacturing is planned at established United States foundry partners.

Sunrise notes that, while the technology has been validated at laboratory and small-array scale and is supported by an extensive peer-reviewed publication record, the technology has not yet been commercialised at scale and remains subject to the ordinary risks of semiconductor development and qualification.

## **Strategic Rationale for Sunrise**

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### **Creating Future Scandium Demand**

Sunrise's Syerston Scandium Project is one of the largest and highest-grade scandium resources globally and is being developed to supply scandium oxide ( $\text{Sc}_2\text{O}_3$ ) and downstream scandium products to advanced-materials markets. Today, scandium consumption is concentrated primarily in solid oxide fuel cells, with emerging demand in aluminium-scandium alloys for aerospace and additive manufacturing.

AlScN represents a structurally different demand story for scandium: rather than being consumed as a bulk alloying element, scandium is incorporated into thin films deposited by sputter targets and used at the wafer level by semiconductor manufacturers.

While per-wafer scandium consumption is modest, the scale of the global semiconductor industry means that even partial adoption of AlScN-based memory or AI accelerator components could, over time, become a meaningful new source of new demand for high-value, high-purity scandium.

### **Positioning Within Advanced Technology Supply Chains**

The investment diversifies Sunrise's exposure beyond traditional scandium-alloy end uses and aligns the Company with one of the most active areas of materials-driven innovation in the global semiconductor industry. As governments in Australia, the United States and allied nations pursue greater resilience in critical-minerals and semiconductor supply chains,

Sunrise believes that integrated relationships between upstream scandium producers and downstream technology developers will become increasingly valuable.

## **Supporting Commercialisation**

With Agni already well advanced on prototype development and positive discussions with US foundries, the Sunrise investment is intended to accelerate commercial-scale production.

Beyond capital, Sunrise expects to support Agni's growth through scandium-supply expertise, assistance in establishing custom aluminium-scandium sputter target development with established materials suppliers, and introductions to potential customers, manufacturing partners and government and institutional investors.

## **Market Opportunity**

Sunrise's investment thesis reflects several structural trends in computing infrastructure that are well documented in the industry: the rapid expansion of artificial intelligence training and inference workloads, the growth of energy consumption associated with hyperscale data centres, increasing demand for memory-intensive computing, and a widening performance gap between processor compute capability and memory bandwidth (the "memory wall").

Industry research cited by Agni projects that the addressable semiconductor markets relevant to its technology — spanning NOR flash replacement, embedded non-volatile memory, edge AI processors and longer-term DRAM substitution — are forecast to grow from approximately US\$2.7 billion in flash, US\$112 billion in DRAM and US\$184 billion in AI processors in 2025 to materially larger figures by 2030 (sources: Objective Analysis 2025; Precedence Research). Ferroelectric memory technologies are widely viewed as a leading candidate to address the energy-efficiency and density limitations of incumbent memories in this environment. Sunrise notes, however, that market sizing of this nature is inherently uncertain and that the timing and scale of any AIScN adoption is not assured.

**This announcement is authorised for release to the market by the Board of Directors of Sunrise Energy Metals Limited.**

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**About Sunrise Energy Metals Limited (ASX:SRL: OTCQX:SREMF)** – Sunrise Energy Metals Limited (SEM) is developing the Syerston Scandium Project, near Fifield in central-west New South Wales (NSW), with the aim of delivering the world’s first source of mineable, high-grade scandium. Sunrise also owns the Sunrise Nickel-Cobalt Project, one of the largest and most cobalt-rich nickel laterite deposits in the world.

**About the Syerston Scandium Project** – The Syerston Scandium Project hosts one of the world’s largest and highest-grade scandium deposits. The Project is supported by extensive piloting, metallurgical test work and engineering. Scandium oxide produced by the Project will service key technology markets, including fuel cells, advanced aluminium alloys and semiconductors.

**Forward Looking Statements Disclaimer**

Certain statements in this announcement may constitute “forward-looking statements or “forward-looking information” within the meaning of applicable securities laws. Such statements involve known and unknown risks, uncertainties and other factors, which may cause actual results, performance or achievements of the Company 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 the Company’s current expectations regarding future events, performance and results, and speak only as of the date of this report. Readers are cautioned not to place undue reliance on forward-looking information or statements.

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