

12 October 2026

ASX:14D

\$1M PROGRAM TO ACCELERATE SiNTL™ BATTERIES; SCALED-UP MATERIAL PRODUCTION BEGINS NEXT MONTH

Parallel US and Australian production and testing to support battery builds for commercial partner evaluation in drone, UAV and satellite applications

Key Highlights

- **Parallel SiNTL anode material production programs** implemented at George Washington University (GWU) in the US and 1414 Degrees' Tonsley facility in South Australia to fast-track supply for commercial partner battery evaluation in drones, UAVs and satellites
- **Scaled up material production** is targeted to begin at GWU in November 2026 and in Australia from December 2026, supported by a \$1 million investment by 14D
- **SiNTL has demonstrated at least 50% greater specific capacity** than traditional graphite anodes¹, offering potentially significant increases to range, payloads and mission times for drones and UAVs, electric vehicles, robotics, military systems and industrial power tools
- **14D partnerships with Ukrainian drone manufacturer² and European satellite company³** for SiNTL battery testing & evaluation program will utilise the anode material produced at GWU and Tonsley to assess suitability of SiNTL batteries for adoption within military drones and satellites
- The GWU program will scale up production and focus on optimising energy density and reproducibility of the SiNTL silicon nanoparticle anode material
- The Australian program plans to partner with Adelaide University to focus on building process know-how and proprietary IP in commercial-scale handling and synthesis of Mg₂Si-derived particles
- Initial battery cell builds at Rochester Institute of Technology (RIT) are planned to commence in December 2026, with batteries targeted for delivery to drone and space industry partners in early 2027

1414 Degrees Ltd (ASX: 14D) ("1414 Degrees" the "Company") is expanding its SiNTL™ silicon-based anode material program from university-based laboratory development into company-led manufacturing development, with parallel US and Australian programs to accelerate material production and battery evaluation by commercial partners in the drone, UAV and space sectors, as well as other prospective battery manufacturers and end-users.

¹ ASX announcement, 28 April 2026

² ASX announcement 11 June 2026

³ ASX announcement 17 June 2026

The programs will improve the SiNTL material while developing the capability to produce larger quantities at consistent quality. This will support the manufacture of complete battery cells for testing by commercial partners and prospective customers.

George Washington University is focused on formulation optimisation, while the Australian program will focus on production processes and consistent material quality at larger volumes.

Both programs will contribute material production capacity. Planned access to battery cell-making and testing facilities at Adelaide University (AU) will also allow the Australian team to evaluate locally produced material alongside testing at GWU. Results will be shared between the teams to inform formulation and process improvements and progress material towards commercial partner evaluation.

SiNTL is designed to increase lithium-ion battery energy density while remaining compatible with existing cell manufacturing processes. The commercial objective is to offer manufacturers a practical performance upgrade using their existing production infrastructure.

US program: formulation optimisation and production scale-up

An experienced associate professor is working full-time at GWU to optimise the SiNTL formulation. Commissioning of a fluidised bed reactor, carbon-coating furnace and mercury porosimeter for material processing and characterisation is underway.

The work will focus on increasing capacity, improving capacity retention and charge-discharge performance, and scaling production while maintaining consistent material quality. Scaled-up production at GWU is targeted to begin in November 2026, supporting evaluation cell builds at RIT from December 2026.

Australian program: production capability and process development

1414 Degrees is procuring equipment and consumables at Tonsley to produce SiNTL anode material at scale for battery cell production.

The Australian program will develop production know-how and potential proprietary process IP relating to the handling and synthesis of SiNTL particles derived from magnesium silicide (Mg_2Si). The focus will be on producing consistent material quality as batch sizes and production volumes increase.

14D holds an exclusive global licence to the SiNTL material technology from George Washington University.

Scaled-up production in Australia is targeted from December 2026, subject to equipment commissioning and export compliance clearance. The Company is also working toward a formal arrangement with Adelaide University.

Battery manufacture and partner evaluation

Rochester Institute of Technology will incorporate SiNTL anode material into battery cells for the Company's existing evaluation programs with Energia-2000 and Space Industries, supporting drone, UAV and space applications.

Indicative timeline

Indicative timing	Milestone
Q3–Q4 2026	Continue equipment procurement and commissioning. Progress engagement with cell manufacturers in South Korea, the EU and the US. Complete US export requirements. Identification of additional OEMs interested in qualifying SiNTL material.
Q4 2026 – Q1 2027	Scaled-up anode material production begins in the US and Australia. Battery cell builds for commercial partners at RIT.
Q1–Q2 2027	Delivery of batteries to Energia-2000 for drone and UAV evaluation, and Space Industries for satellite evaluation. Export of Australian-produced anode material to JR Energy Solution for commercial scale production.
From Q2 2027	Cells supplied to additional OEMs and end-users for qualification, guided by the SiNTL Advisory Board.

The timeline is indicative and depends on equipment delivery, regulatory and export approvals, third-party availability and technical results.

Picture below: various drones and UAVs being used by the Ukrainian Armed Forces



Dr Kevin Moriarty, 1414 Degrees Executive Chairman said:

“SiNTL technology aims to give battery manufacturers and customers a significant increase in energy density with no compromises in performance and cost. Our objective is to prove that SiNTL batteries can outperform traditional graphite-based batteries in the most demanding

defence and commercial applications, and then rapidly commercialise our technology for widespread industry adoption. We are supported by a world-class advisory board and have clear line-of-sight on our mission to capture substantial market share in the global battery market”

Dr Peter Yaron, 1414 Degrees CTO said:

“Running the US and Australian programs side by side means we're working on the material and the manufacturing process at the same time, rather than one after the other. The Tonsley work gives 14D its own process know-how for producing SiNTL at volume, and that's the part a cell manufacturer will look at when deciding whether it can go into their lines.”

AUTHORISED BY:

Dr Kevin Moriarty, Executive Chairman on behalf of the Board of Directors

For investor enquiries or further information, please contact:
info@1414degrees.com.au or +61 8 8357 8273

ABOUT 1414 DEGREES LIMITED

1414 Degrees (ASX:14D) is advancing an integrated clean-energy and industrial decarbonisation platform spanning grid-scale storage, industrial heat, hydrogen and advanced battery materials.

The Company's strategy combines near-term infrastructure revenue with scalable technology commercialisation, underpinned by deep expertise in energy-dense silicon systems and materials engineering. 1414 Degrees owns the Aurora Energy Precinct in South Australia, a development-ready energy and industrial site spanning 16km² within the Upper Spencer Gulf Renewable Energy Zone. Aurora is designed for firm renewable electricity and co-located high-demand users, with grid access, development approvals and proximity to fibre infrastructure supporting global connectivity. The site is strategically positioned to support data centre operators and other energy-intensive industries requiring reliable, low-emissions power at scale. The Stage 1 140 MW / 280 MWh Battery Energy Storage System (BESS) represents a near-term revenue opportunity, with expansion potential aligned to customer demand.

Core Platforms:

SiBrick®: Silicon-based thermal energy storage media forming the foundation of the Company's long-duration energy storage systems.

SiBox® (Industrial Heat-as-a-Service): Long duration energy storage technology that converts low-cost renewable electricity into dispatchable high-temperature heat, supporting industrial decarbonisation across energy-intensive sectors.

SiPhyR®: A silicon-based methane pyrolysis reactor integrating thermal storage to produce low-emissions hydrogen and solid carbon using renewable energy sources.

SiNTL™: A silicon-enhanced anode material designed to increase lithium-ion battery energy density while remaining compatible with existing manufacturing processes.

1414 Degrees' technologies are unified by a single materials platform — leveraging silicon to store, convert and enhance energy across multiple sectors.

For more information, please visit www.1414degrees.com.au

Forward-looking statements

This announcement includes forward-looking statements which may be identified by words such as 'anticipates', 'believes', 'expects', 'intends', 'may', 'will', 'could', or 'should' and other similar words that involve risks and uncertainties. These forward-looking statements are based on the 1414 Degrees' expectations and beliefs concerning future events as at the date of this announcement. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of 1414 Degrees, which could cause actual results to differ materially from such statements. 1414 Degrees makes no undertaking to update or revise the forward-looking statements made in this announcement to reflect any change in circumstances or events after the date of this announcement.