



## SIMBLE SECURES EXCLUSIVE NANOMATERIAL-BASED NANOSENSOR IP AND COMPLETES \$2.5M PLACEMENT

Strategic acquisition strengthens Simble's in-house sensor stack, enhances SimbleSense intelligence, expands IoT safety capabilities and opens new growth pathways in e-skin and nano robotics

29 December 2025

### HIGHLIGHTS

- **Exclusive access to advanced Nanosensor Technology** – Simble to acquire 100% of the issued shares in Next Nano, which holds an exclusive licence from Macquarie University to a patented 3D zinc oxide nanostructure sensor platform technology engineered for high-sensitivity environmental and optical sensing, with applications across industrial safety, healthcare, defence, robotics and consumer electronics.
- **Vertical integration of SimbleSense hardware** – The Nanosensor Technology provides a pathway for Simble to design and ultimately manufacture its own sensor devices, reducing reliance on third-party hardware which currently represents ~65% of SimbleSense cost of sales, and enabling deeper technical integration into the SimbleSense stack.
- **Enhanced workplace safety and ESG data capability** – UV, air-quality and process-sensors can be embedded into SimbleSense deployments, allowing customers to layer workplace health and safety (WHS), sterilisation, and air-quality metrics alongside energy data, and report these outcomes through the CarbonView platform.
- **Platform for new product lines and cross-selling** – Over time, the underlying nanosensor architecture can support a suite of new devices and modules for industrial monitoring, e-skin and wearables, defence, medical diagnostics and nanorobotics, all of which can be distributed through Simble's existing commercial and channel relationships.
- **Broad, high-value application pathways** - The Nanosensor Technology supports multiple end-markets including industrial monitoring and sterilisation/irradiation verification, workplace safety and air-quality sensing, defence and security sensing, and medical diagnostics and therapy monitoring creating multiple avenues for product development and cross-selling.
- **New growth vectors in e-skin and nanorobotics** - Over time, the platform provides a pathway to next-generation e-skin wearables and sensorised prosthetics, and emerging nanorobotic/micro-robotic sensing systems, expanding Simble's long-term opportunity set beyond its core IoT deployments.



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- **E-skin sensing capability** – NanoSensor-enabled e-skin layers can provide highly sensitive, skin-like touch sensing (pressure, vibration and temperature), improving how devices detect and respond to physical contact across wearables, prosthetics and robotic systems.
- **Aligned with Simble's growth strategy** – The transaction adds complementary hardware IP to Simble's existing energy and carbon management software, without changing the nature of Simble's core business as a technology company focused on carbon management and energy/IoT solutions.

Simble Solutions Ltd (ASX: SIS) (**Simble** or the **Company**) is pleased to announce that it has entered into a conditional acquisition agreement to acquire 100% of the issued capital of Next Nano Pty Ltd (**Next Nano**), a private Australian company which holds an exclusive licence from Macquarie University (**MQU**) over a novel ultraviolet (**UV**) and environmental sensor technology based on a three-dimensional zinc oxide nanostructure (**NanoSensor Technology** or the **Technology**).

The proposed acquisition is consistent with Simble's strategy to scale its SimbleSense and CarbonView platforms while adding complementary, high-value technologies that expand Simble's sensor enabled IoT capability across energy, sustainability and safety data solutions.

**Simble's Chief Executive Officer, Fadi Geha, said:** *"This acquisition marks an important step in Simble's evolution from an energy analytics and carbon reporting provider to a broader, sensor-enabled IoT and safety data platform. By combining SimbleSense and CarbonView with Next Nano's exclusive Nanosensor technology, we see a pathway to progressively integrate more of our sensor stack, improve product economics over time, and introduce new workplace safety and environmental monitoring capabilities for customers. We believe the Nanosensor Technology positions Simble to participate in a new class of miniaturised, low-power sensing devices that can be deployed across buildings, equipment and wearables, expanding our long-term opportunity set."*

### INTRODUCING NANOSENSOR TECHNOLOGY

Next Nano is party to a licence agreement with Macquarie University under which it was granted exclusive rights to develop and commercialise the Nanosensor Technology developed at the University) (**Licence Agreement**). The Technology was developed at Macquarie University under the leadership of Professor Noushin Nasiri, Head of the NanoTech Laboratory in the School of Engineering, Faculty of Science and Engineering, an award-winning researcher in nanostructured materials, miniaturised sensor technologies and wearable electronics.



*Figure 1 & 2: Professor Noushin Nasiri, inventor and scientific lead behind the 3D ZnO nanostructure Nanosensor platform, specialising in nanomaterials, miniaturised sensing and wearable electronics.*

Professor Nasiri's work on 3D ZnO film-based optical sensing was supported by Cancer Institute NSW Fellowship, 2023–2025 and is the winner of the 2025 Australian Museum Eureka Prize for Innovative Use of Technology, and a recipient of major competitive fellowships including the 2024 ARC Industry Fellowship and the 2022 L'Oréal–UNESCO For Women in Science Fellowship.

The underlying Technology is the subject of a patent application titled Capillary force induced nanowelding in metal oxide 3D nanostructures (PCT/AU2024/050143), covering the nanostructured zinc oxide architecture and related methods.

Nanotechnology is increasingly central to next-generation sensing because nanoscale architectures can deliver higher performance in smaller, lower-power devices. In this case, the 3D ZnO nanostructure design is intended to enhance sensitivity and signal quality while supporting miniaturised form factors suitable for embedded IoT nodes and wearables.

For Simble, this provides a pathway to differentiated Nanosensor capability that can be progressively integrated into SimbleSense deployments and CarbonView reporting over time.

- Sub-millimeter form factor enables seamless integration into devices
- Ultra-low power consumption for always-on sensing.
- Fast response kinetics for real-time monitoring.
- Scalable & low-cost manufacturing for high volume markets
- UV-only precision (200–400 nm) with zero visible-light interference

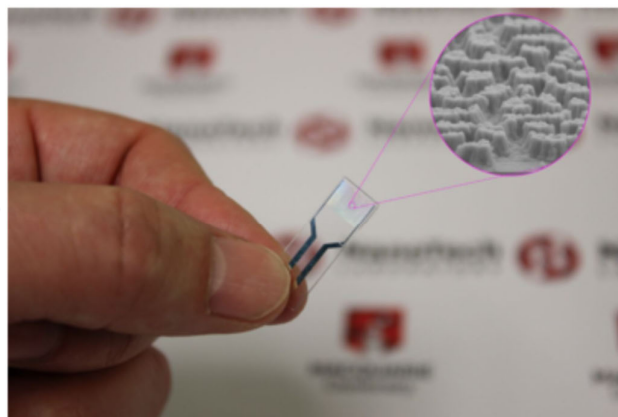


Figure 3: Macquarie University NanoSensor technology prototype device and microscopy image of the 3D ZnO nanostructure array underpinning the NanoSensor platform (scale bar: 20  $\mu$ m).

## WHY ADVANCED NANOSENSOR TECHNOLOGY MATTERS

Conventional environmental and optical sensing hardware can face challenges such as limited sensitivity, interference, elevated background signal (reducing signal-to-noise performance), and relatively larger size and power requirements.

The Nanosensor Technology, based on a semi-conductive 3D zinc oxide nanostructure architecture, is designed to address these limitations by enabling:

- **High sensitivity** for environmental and optical sensing applications;
- **Very small form factor**, with a pathway to sub-millimetre scale devices;
- **Low power consumption** suitable for battery-powered and embedded IoT deployments; and
- **Integration into existing devices**, including industrial equipment, wearables and connected electronics.

In a regulatory environment increasingly focused on WHS, environmental performance, sterilisation verification and ESG reporting, access to accurate, real-time sensing data is a natural extension of Simble's existing capabilities in energy analytics and carbon reporting—enabling SimbleSense and CarbonView to deliver a more complete, auditable view of operational conditions alongside energy and emissions outcomes.



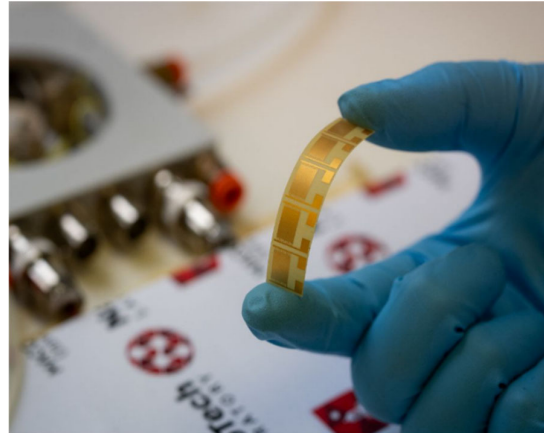
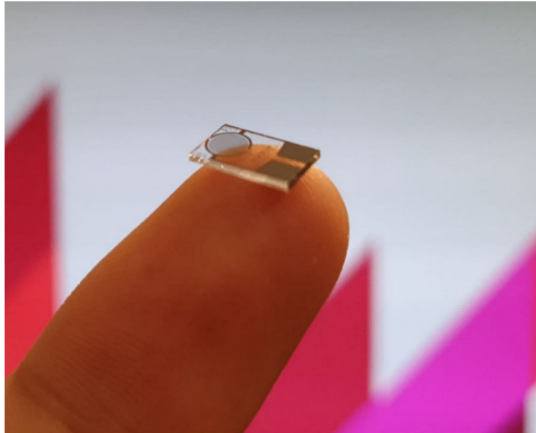


Figure 4: Nanosensor prototypes, miniature “sensor-on-chip” device (left) and flexible Nanosensor strip (right) demonstrating pathways to device integration and scalable form factors.

## APPLICATION PATHWAYS

Built on a nanostructured 3D ZnO architecture designed for compact, low-power, high-sensitivity environmental and optical sensing, the Nanosensor Technology has potential application across multiple high-value sectors, including:

Sector	Example applications	Indicative global Market Size
Industrial / IIoT	Monitoring radiation levels and air quality; detecting defects in manufacturing; verifying effectiveness of sterilisation/irradiation equipment	IIoT market Projected to reach ~US\$1,693B by 2023 <sup>1</sup>
E-skin & consumer electronics	Enabling advanced tactile and environmental sensing in prosthetics, robotics, wearables and other connected devices with electronic skin market	Electronic skin market projected to reach ~US\$37.1B by 2030 <sup>2</sup> & wearable sensors ~US\$9.26B by 2030 <sup>3</sup>
Defence & security	Detecting chemical and biological agents and enhancing optical sensing in defence platforms with the CBRNe defence market	CBRNe defence market projected to reach ~US\$24.93B by 2030 <sup>4</sup>
Medical	Monitoring UV-based phototherapy, diagnostic imaging and sterilisation regimes with the wearable medical devices	Wearable medical market projected to reach ~US\$168.29B by 2030 <sup>5</sup>
Nanorobotics	Serving as a key sensing element in emerging nanorobotic and micro-robotic systems with the nanorobotics market	Nanorobotics market estimated to reach ~US\$27.21B by 2035 <sup>6</sup>

<sup>1</sup> [Industrial Internet of Things Market | Industry Report, 2030](#)

<sup>2</sup> [Electronic Skin Market Size, Share & Trends Report, 2030](#)

<sup>3</sup> [Wearable Sensors Market Size, Share & Growth Report 2030](#)

<sup>4</sup> [CBRNE Defence Market Size, Report, Share & Growth Trends 2030](#)

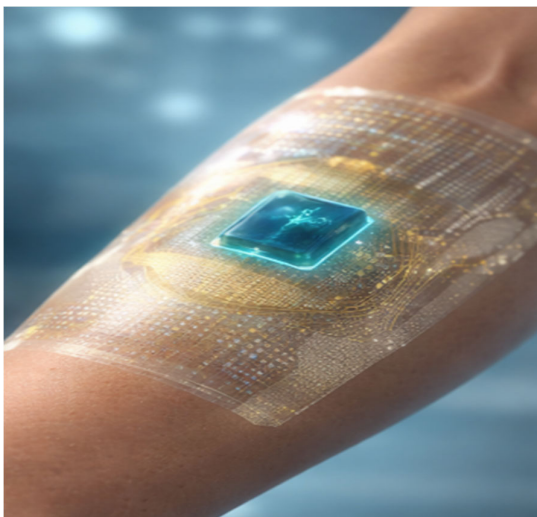
<sup>5</sup> [Wearable Medical Devices Market Size | Industry Report 2030](#)

<sup>6</sup> [By 2035, Nanorobotics Market worth \\$27.21 Bn at a CAGR of 10.91%](#)

Across these sectors, Nanosensors act as the “data layer” that turns devices into always-on monitoring systems. Their compact form factor and low-power operation enable seamless embedding into wearables and e-skin, integration into industrial equipment and building systems, and deployment into robotics and emerging micro-/nanorobotic platforms.

E-skin sensing is a clear extension of this capability. E-skin systems use flexible, stretchable films embedded with dense micro-sensor arrays to create a skin-like sensing layer that can measure touch and contact dynamics, such as pressure, vibration and temperature, across large surface areas. When applied to robotic grippers and prosthetics, these e-skin sensor layers can improve safe human–robot interaction and enable more precise handling of delicate objects, with relevance across medical robotics and disaster-response use cases. In many designs, the e-skin is manufactured using polymer substrates and printed sensor networks, allowing devices to conform to complex shapes and respond in real time to physical contact.

As these sensors generate continuous, high-resolution environmental and operational data, they can be paired with SimbleSense and CarbonView to support real-time alerts, trend analytics and auditable reporting for customers.



*Figure 5 & 6: Future wearable applications, e-skin style sensing patches and compact wearable sensors enabling continuous, real-time monitoring and exposure/environmental sensing.*

## STRATEGIC RATIONALE FOR THE ACQUISITION

Simble's strategy is to continue to grow and develop its SimpleSense and CarbonView divisions, while selectively pursuing synergistic or complementary acquisition opportunities. The acquisition of Next Nano is expected to deliver the following strategic benefits:

- **Vertical integration of sensors into SimpleSense**
  - o SimpleSense's full suite offering currently relies on third-party IoT hardware devices, with hardware purchases accounting for approximately 65% of cost of sales for this product line.
  - o Over time, the Nanosensor Technology provides a pathway to design Simple-branded devices with embedded UV and environmental sensors, improving gross margins and allowing deeper integration into Simple's software.
- **Extension of the value proposition to WHS and environmental quality**
  - o SimpleSense deployments could be expanded to measure UV exposure, indoor air quality and the performance of UV sterilisation equipment, allowing customers to track both energy efficiency and workplace safety outcomes from a single platform.
- **New product families and revenue streams**
  - o Beyond SimpleSense, Simble can explore standalone sensor modules and reference designs targeting industrial, medical, defence and wearables markets, with data feeds potentially integrated into CarbonView to support broader ESG and sustainability reporting.
- **Leverage of existing channels and data platforms**
  - o Simble already serves commercial & industrial and SME customers directly and via channel partners across multiple geographies. The Company expects that adding differentiated sensor hardware and data streams can be leveraged across these existing routes to market.

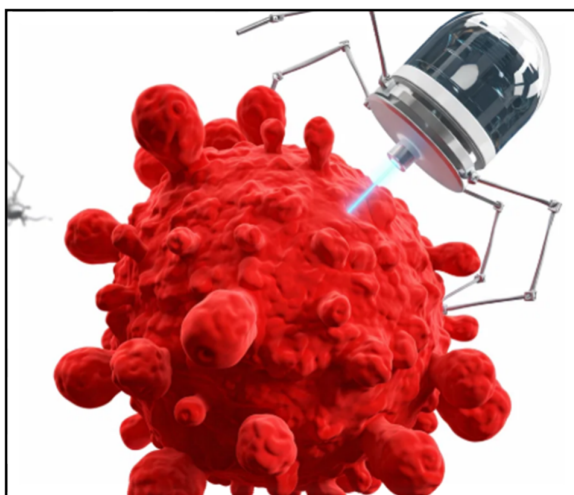


Figure 7 & 8: Concept illustration of medical nanorobotics - micro-/nano-scale robotic agents designed for targeted interaction at the cellular level for sensing and precision therapeutic delivery.





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### NEXT NANO ACQUISITION

Simble has entered into a binding acquisition agreement with the sole shareholder of Next Nano, Dr. David Pevcic, to acquire 100% of the issued shares in Next Nano in consideration for the issue of 600,000,000 fully paid ordinary Simble shares (**Shares**). These shares will be issued subject to shareholder approval.

In connection with the transaction, the Company has received firm commitments to raise \$2.5M (**Placement**). Details of the Placement are set out further below.

On completion of the transaction and the Placement, it is expected that Dr. Pevcic will hold approximately 27.5% of the issued Shares in Simble. As such, completion of the transaction is conditional on shareholder approval from Simble shareholders for the purposes of item 7 section 611 of the Corporations Act. Completion is also subject to confirmatory due diligence by Simble on Next Nano and the Technology.

The Company is working closely with its advisers to satisfy the conditions to the transaction and expect completion to take place in Q1 2026. A notice of meeting to seek shareholder approval for the transaction (including an independent expert's report on whether the transaction is fair and reasonable to shareholders) and for related party participation in the Placement will be despatched to shareholders in due course.

### LICENCE AGREEMENT

On completion of the transaction, Simble will (through Next Nano) acquire an exclusive licence to develop the NanoSensor Technology. The licence is for a minimum period of 20 years after the first commercial sale of a product and subject to satisfying customary terms and conditions of the Licence Agreement. Under the Licence Agreement, the Company will pay Macquarie University:

- an annual license fee of \$25,000, commencing from 2027
- 3% (and a minimum of \$5,000) of all annual gross sales of products and/or services using the intellectual property achieved by Next Nano commencing from 2030;
- \$100,000 in cash on the achievement of each of the following milestones (**Milestone Fee**):
  - o the granting of patents for the intellectual property rights held by Macquarie University in the United States of America; or
  - o the commencement of commercial production leading to the first commercial sale of a licensed product or process from the license.

Macquarie University will have the right to elect to receive the Milestone Fees in Shares based on the 15-day volume weighted average price prior to the date of issue, subject to shareholder approval.





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### PLACEMENT

The Company is pleased to announce that it has received binding commitments from sophisticated and professional investors to raise \$2.5M (before costs) through a strongly supported two tranche Placement of a total of 500M Shares at an issue price of \$0.005 per Share. The Placement will be completed in two tranches as follows:

- Tranche 1: 162,317,415 Shares will be issued under the Company's' existing ASX Listing Rule 7.1 capacity, and 27,682,585 will be issued under the Company's ASX Listing Rule 7.1A capacity, at an issue price of \$0.005 per Share to raise \$950,000; and
- Tranche 2: subject to shareholder approval, Tranche 2 will raise the balance of \$1,550,000 through the issue of 310M Shares at an issue price of \$0.005 per Share.

The issue price of \$0.005 represents no discount to the 15-day VWAP to 24 December 2025.

Shares issued under the Placement will rank equally with existing fully paid ordinary shares in Simble.

Subject to shareholder approval, investors under the Placement will receive 1 free attaching option for every three held, each with an exercise price of \$0.01 expiring 3 years from the date of issue (**Placement Options**). This totals 166,666,666 attaching options across Tranches 1 and 2.

In addition to the Placement above, Directors, Faldi Ismail, Fadi Geha and Stephen Thornhill intend to participate on the same terms up to an aggregate amount of \$150,000. To facilitate the directors participation in the Placement, at the general meeting the Company will seek shareholder approval for the purposes of ASX Listing Rule 10.11 for the issue of Shares and Placement Options to the directors.

62 Capital acted as lead manager to the Placement. The Company will pay the lead manager a capital raising fee of 6% of the amount raised and issue to it (or its nominees) 150,000,000 options with the same terms as the Placement Options, subject to shareholder approval.

Funds raised will be used to support development of the Nanosensor Technology and to provide growth capital for Simble's existing businesses and working capital.

**This announcement has been authorised for release by the Board of Simble Solutions Ltd.**

How to sign up for the Simble Investor Hub:

1. Visit <https://simblegroup.com/auth/signup>



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2. Follow the prompts to sign up for our investor hub account
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**ENDS**

*This announcement has been authorised by the Board of Simble Solutions Limited*



**SimbleSense**



**CarbonView**



**SimbleAcademy**

### About Simble

Simble Solutions Limited (ASX:SIS) is a global Energy and Sustainability provider with integrated solutions across energy efficiency, sustainability and renewable energy development, supporting the global transition to Net Zero.

Simble's operations are built around two core business pillars:

#### 1. Energy and Sustainability Software Solutions & Training

- a. Simble's flagship platforms, *SimbleSense* and *CarbonView* provide real-time energy intelligence, carbon footprint tracking, and enterprise-grade carbon reporting tools to help organisations reduce emissions and optimise energy usage.
- b. *SimbleAcademy* supports these solutions with a professional training and education platform offering industry-relevant programs in carbon accounting, energy management, and ESG. *SimbleAcademy* equips individuals and organisations with the skills required to thrive in the Net Zero era.

#### 2. Renewable Energy Developments

Focused on developing clean energy infrastructure including solar, and battery projects, this division supports Australia's transition to a low-carbon economy by delivering bankable, scalable renewable energy assets.

Simble operates across the Commercial & Industrial and Medium Sized Enterprise segments across Australia and the United Kingdom. We distribute our solutions directly via B2B sales, as well as through multiple channel partners. Simble has an international presence with teams in Australia, the United Kingdom and Vietnam.

**Forward Looking Statements**

This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'ambition', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'mission', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance, or achievements to be materially different from those expressed or implied by such forward looking information.

To learn more please visit us at:

[simblegroup.com](http://simblegroup.com)

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