ASX Announcement
6 January 2026

Adisyn Confirms Successful Low-Temperature Deposition Using ALD System

Key highlights

- **Independent Expert confirms successful low-temperature deposition of an sp^2-based carbon layer using an Atomic Layer Deposition (ALD) system**
- **Demonstration data independently verified by Professor Yoram Selzer, Faculty of Exact Sciences, Tel Aviv University, in accordance with the SPA**
- **Milestone confirms successful low-temperature deposition of an sp^2-based carbon layer using an Atomic Layer Deposition (ALD) system**
- **Demonstration achieved a temperature below the 300 °C requirement for the Milestone, however the critical requirement is to develop a process that is below semiconductor industry thermal limits of 450 °C**
- **The result represents an important technical validation and de-risking step in Adisyn's graphene deposition development program, with this deposition capability creating an important step toward potential integration and scalability**

Adisyn Ltd (ASX: AI1) ("Adisyn" or the "Company") advises that **Milestone 1** under the Share Sale and Purchase Agreement ("SPA") relating to its acquisition of 2D Generation Ltd ("2DG") has been successfully achieved[1].

Milestone 1 relates to the demonstration of low-temperature deposition of an sp^2-based carbon layer onto a metallic substrate, using an Atomic Layer Deposition (ALD) system.

Adisyn required demonstration of:

- deposition of an sp^2-based carbon layer on copper substrates
- deposition achieved at temperatures below 300°C
- confirmation of material structure through Raman spectroscopy, including identification of characteristic G and D bands consistent with sp^2 carbon bonding

The Board considers this achievement important as temperature compatibility is a key constraint in integrating graphene and related materials into existing semiconductor manufacturing processes.

[1] Refer to ASX Announcement dated 4 November 2024

Demonstrating this deposition capability represents an important step toward potential process integration and scalability.

Independent technical verification completed

As defined under the SPA, the achievement of each milestone is subject to independent verification by a qualified professor from a recognised technical university in Australia or Israel, appointed by the Adisyn Board.

The Company confirms that Professor Yoram Selzer, from the Faculty of Exact Sciences at Tel Aviv University, has completed an independent technical review and assessment of the results and has formally confirmed in writing that Milestone 1 has been achieved.

Professor Selzer is a chemist and materials scientist with expertise in surface science, nanoscale materials, thin-film characterisation and advanced spectroscopic techniques, including Raman-based analysis relevant to graphene and related materials. His assessment provides independent, third-party validation of the technical outcomes achieved.

Following receipt of Professor Selzer's confirmation, the Adisyn Board has reviewed the findings and approved the achievement of Milestone 1 in accordance with the terms of the SPA.

Commenting on the successful low-temperature deposition, Adisyn Non-Executive Chairman Kevin Crofton said:

"The achievement of Milestone 1 represents a meaningful step in the development of the 2DG technology. Importantly, this outcome has been independently verified by a suitably qualified academic, providing the Board with confidence in the technical progress achieved to date.

Low-temperature deposition is a critical requirement for semiconductor applications, and this achievement establishes a solid foundation as the Company continues to advance the development program over the coming year."

Milestone outcome and consideration

In accordance with the SPA, and following independent verification and Board approval, the achievement of Milestone 1 results in the issue of 100 million fully paid ordinary shares to the original shareholders of 2D Generation.

Additional shares will also be issued to eligible employees under the agreed incentive arrangements, reflecting their contribution to the delivery of the milestone.

These issuances are directly linked to the achievement of defined technical milestones under the SPA and were structured to align the interests of Adisyn, the 2DG founders and key technical personnel.

The Company will confirm the timing of these issuances once all applicable administrative and regulatory requirements have been completed.

Next steps

With low-temperature deposition achieved and independently validated, Adisyn will progress into the next phase of its graphene deposition development program[2].

Over the coming months, the Company and 2DG intend to:

- expand graphene deposition trials using multiple carbon-ring-based precursor compounds
- continue refinement of remaining sub-processes within the pre-clean stage
- optimise deposition parameters, including plasma power, gas flow rates, pressure and temperature
- characterise deposited films to assess structure, crystalline quality and electrical properties
- iterate results toward a repeatable and scalable graphene growth process

In parallel, Adisyn will continue to work with its international research collaborators, including Tel Aviv University and other semiconductor research partners, as it progresses toward broader coupon-level testing and, subject to results, wafer-level evaluation.

The Company remains aligned with its previously disclosed development roadmap and will continue to update shareholders as further milestones are assessed.

-ENDS-

This announcement has been approved for release by the board of Adisyn Ltd.

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[2] Refer to ASX announcement dated 6 August 2025

About Adisyn

Adisyn is a highly innovative ASX-listed company specialising in the development of graphene-based solutions for the semiconductor industry and the provision of managed IT services for the SME market. The Company's graphene technology is focused on advancing a patented low-temperature Atomic Layer Deposition (ALD) system to enable direct graphene growth on semiconductor wafers. This technology is anticipated to address the performance limits of copper interconnects and deliver faster, stronger, and more energy-efficient computer processing. The Company's broader technology platform is supported by Adisyn Services which provides managed IT solutions, including cloud, cybersecurity and artificial intelligence, primarily to Australian SMEs.

Forward-looking statements:

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices, or potential growth of Adisyn Ltd are, or may be, forward-looking statements. Such statements relate to future events and expectations and as such, involve known and unknown risks and uncertainties. These forward-looking statements are not guarantees or predictions of future performance and involve known and unknown risks, uncertainties, and other factors, many of which are beyond the Company's control, and which may cause actual results to differ materially from those expressed in the statements contained in this release.

The Company cautions shareholders and prospective shareholders not to put undue reliance on forward-looking statements, which reflect the Company's expectations only as of the date of this announcement. The Company disclaims any obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by law.