ASX Announcement
10 June 2025

Delivery of New ALD System to Drive Next Phase of Development

Highlights:

- **State-of-the-art Atomic Layer Deposition (ALD) system delivered to 2D Generation, Adisyn's wholly owned subsidiary**
- **Follows initial procurement announcement and capital raising for equipment acquisition**
- **Complements Beneq TFS 200 ALD system at Tel Aviv University under strategic partnership**
- **Enables parallel development of Adisyn's proprietary low-temperature graphene deposition process**
- **ALD system commissioning process now underway; further update to be provided upon completion**
- **Major infrastructure upgrade completed to support advanced semiconductor research**

Adisyn Ltd (ASX: AI1) ("Adisyn" or "the Company") is pleased to confirm the delivery of current generation Atomic Layer Deposition (ALD) system to its wholly owned subsidiary, 2D Generation.

This advanced system, manufactured by Beneq, was secured as part of the Company's broader strategy to commercialise its low-temperature ALD graphene technology—outlined in the initial procurement announcement released on 11 November 2024. Funding for this acquisition was earmarked in the Company's capital raising announced on 24 January 2025, which identified this system as a key investment to advance Adisyn's R&D capabilities. Following the initial deposit the Company paid in November 2024, Adisyn has paid Beneq a further ~AU$600k upon achieving the delivery milestone with ~AU$150k payable upon successful commissioning of the system.

The ALD system delivered to 2D Generation's research facility will undergo a comprehensive installation and commissioning activity. This includes calibration, test cycles, and integration into the Company's upgraded infrastructure. Further updates will be provided by the Company upon completion of commissioning and commencement of full-scale testing, at which point Adisyn expects to share results of the Company's R&D milestones as they are achieved.

Infrastructure Upgrade Sets New Benchmark

In preparation for the ALD system's arrival, Adisyn has completed a major infrastructure upgrade of its R&D facility in Israel, ensuring an environment optimised for world-class semiconductor research.

These enhancements include:

- Next-generation electrical systems to support high-precision instrumentation
- Advanced temperature and humidity controls to ensure consistency and reproducibility in ultra-sensitive deposition processes

Following months of meticulous planning, engineering collaboration, and dedicated execution, the facility is now equipped to host one of the most advanced and precise graphene research environments in the sector.

Enabling Advanced Graphene Interconnect Testing

The delivery of the new ALD system complements Adisyn's existing access to a Beneq TFS 200 system housed at Tel Aviv University's Jan Koum Center for Nanoscience and Nanotechnology, under a strategic partnership announced on 27 March 2025.

With Adisyn having access to two state-of-the-art ALD systems across two industry standard laboratory environments, the Company will be able to:

- **Systematically test graphene deposition** on a range of metallic and non-metallic interconnect surfaces;
- **Evaluate interface adhesion, resistivity, and layer uniformity** at atomic scales;
- **Run experiments on diffusion barriers, capping layers, and graphene-metal composites** to enhance signal integrity and thermal management;
- **Validate compatibility with industry-standard semiconductor process flows** at sub-5nm geometries.

These experiments are designed to demonstrate that Adisyn's proprietary ALD-based process can reliably produce high-quality graphene films at temperatures compatible with today's semiconductor manufacturing infrastructure—something that has long eluded the industry.

With dual ALD systems now in place, Adisyn is positioned to fast-track the development of low temperature graphene-based interconnects through simultaneous experimentation, data generation, and IP development across both facilities.

Strategic Significance

Commenting on the milestone, Adisyn Chairman Kevin Crofton said:

"The delivery of this state-of-the-art ALD system is a strategic step for Adisyn. With this advanced capability up and running, we can aggressively pursue the validation of our graphene interconnect technology across multiple dimensions: material science, engineering integration, and industry compatibility. We are closing the gap between breakthrough science and commercial application."

This milestone further supports Adisyn's mission to develop next-generation semiconductor materials that can address the bottlenecks of miniaturisation, energy efficiency, and thermal performance in AI, 5G, and high-performance computing applications.

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

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About 2D Generation

2D Generation is a high-tech company specialising in graphene-based solutions for the semiconductor industry. Founded by experienced entrepreneurs and scientists, the company is dedicated to overcoming current technological limitations by developing faster, stronger, and more energy-efficient computer processing solutions. These advancements will support the next generation of AI, data storage, telecommunications, cybersecurity, mobile devices, and more.

About Adisyn

Adisyn is a leading provider of managed technology solutions, primarily serving the SME market. The Company leverages cutting-edge technologies, including artificial intelligence and cybersecurity, to deliver bespoke solutions. Through its wholly owned subsidiary, **2D Generation**, Adisyn is advancing graphene-based semiconductor technologies to overcome industry limitations and drive innovation across sectors including AI, telecommunications, and data storage.

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.