

BluGlass wins \$250k AMCG manufacturing grant

- The Advanced Manufacturing Growth Centre has awarded BluGlass a \$250k co-funded innovation grant
- The project seeks to manufacture smarter, more efficient plasma deposition sources
- BluGlass is collaborating with AKELA Laser and Objective 3D to complete the project

Australian semiconductor technology developer, BluGlass Limited (ASX:BLG) is pleased to announce that it has been awarded a \$250,000 matched-funding innovation grant with the *Advanced Manufacturing Growth Centre* (AMCG) to manufacture smarter, more efficient plasma deposition sources for the Company's 300 series RPCVD manufacturing platforms.

The project aims to design and produce a high-density, large-scale plasma source to produce ultra-precision uniformity for the deposition of high-value semiconductor devices such as laser diodes and next-generation LEDs. The unique distributed plasma source design will provide a scalable, uniform platform suitable for retrofit of even the largest industrial machines, accommodating up to multiple 8-inch wafers. The grant project will specifically focus on a new plasma source for the BLG-300 system to upgrade its capability to uniform deposition on a single 12-inch wafer or multiple 4-inch wafers. The 4-inch wafer size will be important for the Company's laser diode product roadmap.

Dr Jens Goennemann, Managing Director of AMGC said, "BluGlass is a great example of an Australian manufacturer embracing the competitive advantages borne from a commitment to deep research and development. Its technology promises laser diodes that are higher performing and more efficient. It's a game-changing development that delivers better value products to the market."

BluGlass is collaborating with several industry partners and organisations including *AKELA Laser* on laser diodes device packaging and testing and *Objective 3D* on metal 3D design, testing and rapid prototyping of critical plasma source components for the successful delivery of the project.

BluGlass Chief Technology Officer, Dr Ian Mann said "This exciting project aims to give RPCVD a number of new competitive edges for commercialisation. The new design will also support scalability on virtually any MOCVD platform in the industry and be capable of hybrid (both MOCVD and RPCVD growth) in a single deposition chamber, enabling for the first time, the advantages of each growth technique in a single platform".

The project is expected to improve advanced manufacturing capabilities in Australia and help facilitate the revenue growth of BluGlass' direct-to-market laser diode business.

AMGC and BluGlass have each pledged \$250,000 to fund the project.

This announcement has been approved for release by the board.



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About the Advanced Manufacturing Growth Centre (AMGC)

The Advanced Manufacturing Growth Centre (AMGC) was established in 2015 as a key plank of the Australian Government's Industry Growth Centre Initiative. Its goal is to drive innovation, productivity and competitiveness across Australia's manufacturing industry.

AMGC is an industry-led, not-for-profit organisation and is run by a board and management team of industry experts. It is connected with a nationwide network of manufacturers, universities and research institutions, and export hubs.

The Centre's role is to share its respected research on how the industry can transform to become more advanced. AMGC puts its research into action by engaging with manufacturers and universities in high-impact projects and export hub opportunities.

AMGC encourages likeminded manufacturers and research institutions to join its ranks. Membership is open and free of charge to those who care about developing a more globally competitive manufacturing sector.

For more information see https://www.amgc.org.au/

About AKELA Laser

AKELA Laser designs and manufactures high power laser diodes, and high quality laser systems for medical, industrial, and military sectors.

Founded in 2003, AKELA moved into its present facility in Jamesburg, NJ in 2014. AKELA has an unrivalled commitment to lean, US-based manufacturing and all prototyping, production assembly, burn-in and test is done on-site at our 8,200 square foot facility.

For high volume applications, AKELA's system level design expertise enables us to design, build and launch customerspecific assembly lines optimized for low-cost manufacturing. This same expertise also enables us to develop and deliver pre-production prototypes in a fraction of the time that our competitors require. And, since all prototypes are designed to be transferred to our production line, the transition to manufacturing is smooth.

For more information see http://www.akelalaser.com/

About Objective 3D

Objective3D delivers 3d printing and 3d scanning technology and expertise that enables designers, educators and manufacturers unlock innovation and turn ideas into reality. With more than 40 years of combined experience and over 200 customers in medical, education, automotive, military and other industries, Objective3D provides best-in-class solutions from Stratasys, Desktop Metal, Concept Laser, TPM3D and Artec3D. Objective3D also includes manufacturing on demand through Objective3D Direct Manufacturing which houses the most extensive range of FDM, PolyJet, SLS and Metal technologies. ISO 9001 certified, Objective3D is a Stratasys and Desktop Metal Platinum Partner and a multi-year winner of customer satisfaction awards in Asia-Pacific.

www.objective3d.com.au www.direct3dprinting.com.au

About BluGlass

BluGlass Limited (ASX: BLG) is a global leader commercialising a breakthrough technology using Remote Plasma Chemical Vapour Deposition (**RPCVD**) for the manufacture of high-value semiconductor devices such as **laser diodes**, next generation **LEDs** and **microLEDs**. BluGlass has invented a new process using RPCVD to grow advanced materials such as gallium nitride (GaN) and indium gallium nitride (InGaN). These materials are crucial to the production of highefficiency devices used in next-generation devices from lighting, displays, virtual reality systems and industrial cutting and welding.

RPCVD's unique low temperature, low hydrogen growth platform offers many potential benefits to electronics manufacturers over existing growth techniques; including higher efficiency, lower cost, greater substrate flexibility and has the potential to enable novel applications.

In 2019, BluGlass launched its direct-to-market Laser Diode business unit to exploit its unique tunnel junction technology capability in the high-value and high-margin laser diode market. BluGlass expects to launch its first laser diode commercial product in 2021. **Contact**: Stefanie Winwood +61 2 9334 2300 <u>swinwood@bluglass.com.au</u>

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