

BluGlass Business Update

- **Laser Diode business progress**

- BluGlass has engaged Laser Diode customers to develop test products for delivery end of CY2020.
 - repeat customer revenues anticipated to commence early CY2021
- RPCVD tunnel junction laser diode structures show promising performance potential.
- BluGlass' US test facility nears completion.
- Global supply chain build-out continues to progress despite COVID-19 challenges.

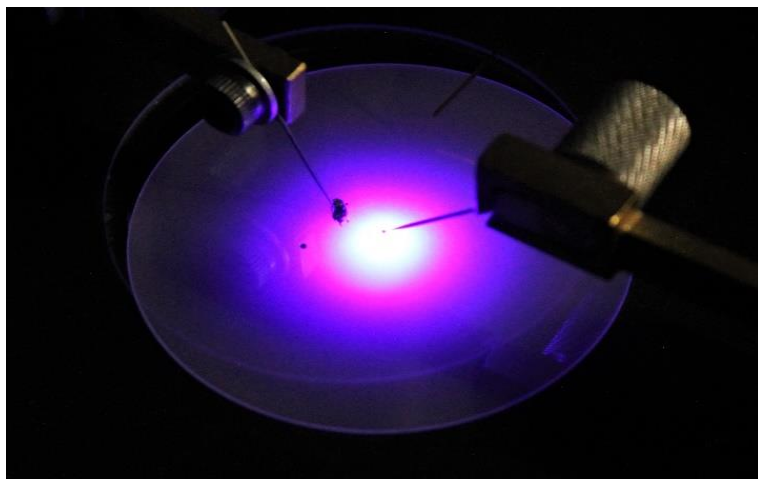
- **BluGlass announces capital preservation measures**

- Non-Executive Board take 50% of director fees as shares (subject to shareholder approval) to end FY2020.
- Senior management team take 50% of salary as shares, for the same period.
 - all other staff to take 25% of salary as shares.

- Board and Key Executives have committed to take up their full entitlement under the rights issue.

Australian semiconductor technology developer, BluGlass Limited (ASX:BLG) is pleased to present this operational update to shareholders, detailing recent developments in its direct-to-market Laser Diode business unit (launched October 2019), recent progress on its microLED and LED programs and the company's cost saving measures for the remainder of the 2020 financial year.

Technology Update: Laser Diode Development Progress



BluGlass EL quick test of standard laser diode structure

BluGlass has engaged with prospective Laser Diode customers to develop bespoke designs for a range of end-product applications from industrial cutting and welding to biomedical devices.

Current customer engagement programs include verified optical designs of standard Laser Diodes that we have successfully modelled and simulated. The technology team have also delivered promising epitaxial results with the implementation of several design improvements.

BluGlass expects to deliver laser diodes products to customers for testing by the end of this calendar year.

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BluGlass RPCVD laser diode epitaxial development run

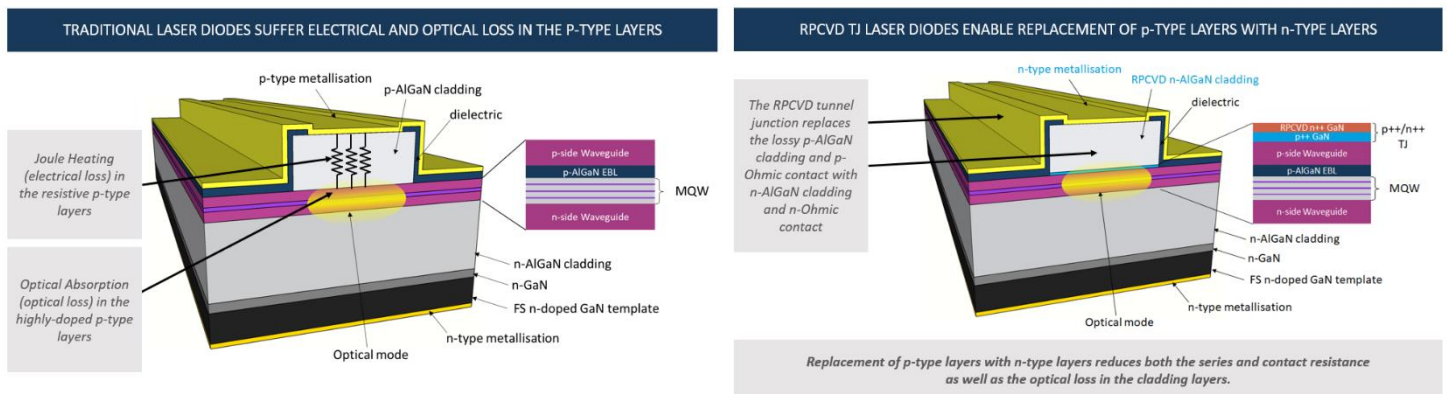
BluGlass has also successfully processed new RPCVD tunnel junction laser diode test structures demonstrating good initial performance.

These novel tunnel junction Laser Diode structures successfully replace the heavily lossy and resistive p-AlGaIn cladding layers needed in standard Laser Diodes. By adding an RPCVD grown tunnel junction the p-type layers can be replaced with significantly less lossy and resistive n-type device layers, paving the way for significant performance improvements with reduced optical loss in laser diodes.

The successful initial device structures confirm the viability of these RPCVD-grown n-type layers for tunnel junction laser diode applications. Further work is ongoing in the development of the laser diode tunnel junction layers.

RPCVD tunnel junctions offers laser diode manufacturers a number of performance and cost advantages for the manufacture of high-brightness GaN laser diodes, including higher performing devices with reduced optical loss, and productivity and cost improvements.

Standard Laser Diode Designs Versus RPCVD Tunnel Junction Laser Diode Designs:



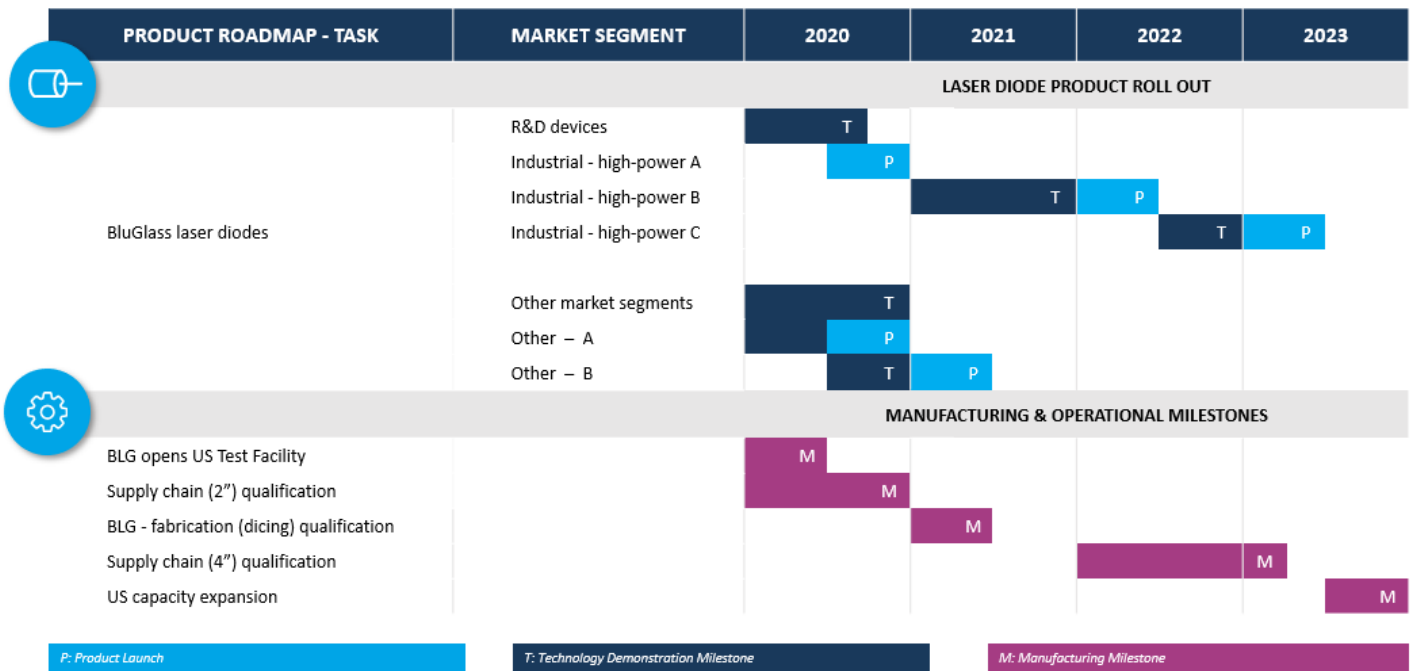
BluGlass has published a technical explainer document on the performance advantages of RPCVD for Laser Diodes, which is available to download from the company website here: www.bluglass.com.au/laser-diodes

Laser Diode Test Facilities

The BluGlass US based Test Facility is on track for completion and full operation in June 2020.

The facility will provide BluGlass with the flexibility to test laser diode chip, bar and packaged devices across a variety of product wavelengths. The capabilities enable initial R&D testing during product development but will ultimately enable fully automated testing of commercial volumes of the LD products.

BluGlass Laser Diode Product Development Roadmap:



The Laser Diode product development roadmap remains on-track to deliver repeat customer revenues anticipated to commence early CY2021.

Supply Chain Qualification

BluGlass continues to develop and strengthen our global supply chain in the current operating environment by working with and qualifying multiple partners on the fabrication of Laser Diode devices. Several of our US fabrication suppliers have been temporarily closed or operating on reduced capacity due to current issues surrounding COVID-19 quarantine, however a primary supplier remains fully operational. To date there has been only minor disruption to BluGlass' critical product design activities. In preparation for potential impacts, discussions are underway with several backup suppliers.

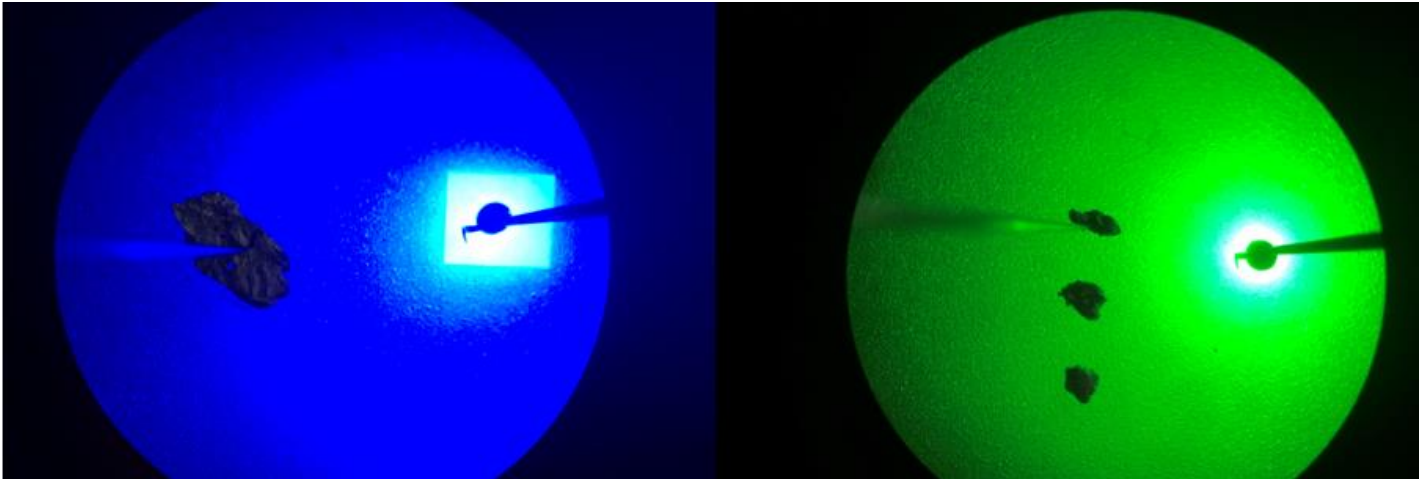
microLED Update

BluGlass continue to advance its R&D on microLEDs, in particular its long-wavelength LEDs for red-green-blue (RGB) applications. BluGlass has recently demonstrated progress towards developing RPCVD grown red LEDs.

Our microLED foundry customer orders for the quarter have been impacted by COVID 19 with several of our customers currently on hold and unable to process and test devices. Despite the facility disruption, communication and preparation for next design iterations and orders continue.

Cascade LED Update

BluGlass has continued to demonstrate iterative improvements in the light output of Cascade LED test structures using RPCVD tunnel junctions. BluGlass is waiting to process cascade LED chips to benchmark these latest developments, currently being fabricated overseas.



Images: A preliminary demonstration of the electroluminescence from a two-colour (green on blue) cascade LED using BluGlass' RPCVD active-as-grown tunnel junction technology. These images are both from the same cascade LED wafer, with the electrical contacts configured to drive only the lower blue LED (left) and only the upper green LED (right).

A new video showing sequential green and blue light emission from an RPCVD grown tunnel junction cascade LED is available to watch here www.bluglass.com.au/video.

One of the key limitations for the commercial adoption of our RPCVD tunnel junction technology for traditional LED applications is the challenge of the added voltage from the tunnel junction layers. The Company remains confident that further reduction of tunnel junction voltage for traditional LEDs is achievable with additional development iterations.

However, this challenge is not as critical for cascade LED applications (two LEDs grown in a single stacked chip). The additional small increase in voltage is potentially negated by the performance improvements offered by cascade LEDs to address efficiency droop and drive smaller form factor, higher efficiency LEDs.

BluGlass has made good progress in optimising the key mechanisms required to drive individual LED performance (the top and bottom LEDs) in cascade structures as shown above.

Capital Raise Update

BluGlass announced in March 2020 a non-renounceable entitlement rights issue on a 1 for 1 basis to holders of ordinary shares in the Company held at 7:00pm (AEDT) on 27 March 2020. All shareholders should now have received their personalised offer booklet (if not please contact corporate.actions@automicgroup.com.au to arrange).

Under the Entitlement Offer, Eligible Shareholders are invited to subscribe for 1 New Share at \$0.02 for every 1 ordinary share held at the Record Date. **The Entitlement Offer closes at 5.00pm (Sydney time) on Thursday, 16 April.**

Purpose of the Entitlement Offer and use of funds

BluGlass intends to invest the proceeds of the Entitlement Offer as follows:

- Ongoing development of the laser diode product pipeline and business;
- Product development and testing to expedite delivery of laser diode products in our selected markets;
- Investment in sales and distribution channels for successful laser diode product launch in early 2021;
- Continuing investment in our specialist laser diode epitaxy and commercialisation expertise;
- Advance development with existing and potential new industry strategic partners, including LED, microLED and RPCVD market participants; and
- General working capital to enable ongoing execution of business strategy

Directors and key executives will take up their full entitlement under the Offer.

COVID-19 Impacts: Capital preserving measures for the remaining financial year

The BluGlass Board and Management are committed to the continued success of the company and the delivery of its key commercial and technical milestones despite the challenging operating environment impacted by COVID-19. Accordingly the Board and Management have implemented a number of measures aimed to conserve capital and maximise our development runway to deliver significant customer revenues and a meaningful return on investment for our shareholders.

These measures include the BluGlass Board taking 50% of its fees as shares until the end of the 2020 financial year at the current rights issue price of 2 cents per share (the proposed issue of shares to directors being subject to shareholder approval).

The Management team will also take 50% of salary as shares with all other staff to take 25% of salary as shares for the same period.

At the end of the financial year the Board will reassess if a further extension of these measures is required.

BluGlass has also entered an R&D tax rebate financing agreement with Radium Capital which provides BluGlass with an immediate cash injection of approximately \$1M. Early access to these funds will allow BluGlass to further strengthen its balance sheet and deliver our near-term milestones. This a low cost facility that has been put in place until our R&D tax refund is received from the ATO in September 2020.

In addition to the measures outlined above, management are working with the federal government and advisors on possible government assistance for the business in the current operating environment which could include:

Assistance	Amount available	Availability
Payroll tax relief	Approximately \$30,000	Available for the 3 months up to the end of the financial year
PAYG tax relief	\$100,000	\$50,000 available to 30 June 2020 and a further \$50,000 to 30 September 2020.
Job Keeper payments	\$350,000 should be available for 18 staff	\$175,000 available this quarter and a further \$175,000 in the next.

In these extraordinary times, the BluGlass Board and Management extend our thanks to our loyal shareholders for their continued support of the company.

This announcement has been approved for release by the board.

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-performance LEDs and other devices. 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 high-efficiency devices such as high-brightness light emitting diodes (**LEDs**) and **laser diodes** and **microLEDs** 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 swinwood@bluglass.com.au