

## CEO'S LETTER TO SHAREHOLDERS

### BLUGLASS UPDATE, JUNE 2014

The Chief Executive Officer of BluGlass Limited (ASX:BLG), Mr. Giles Bourne released the following letter to shareholders via the ASX today:

03 June 2014

Dear Shareholders,

Our Company is continuing to make progress towards achieving its major technical milestones, the 'Brighter LEDs milestone' and the commissioning of the Next Generation RPCVD System. This progress has been made despite encountering unforeseen issues along the way.

I am providing this update to keep you fully informed and to reassure you that these challenging milestones are within reach. Moreover, I am excited that our Company is now a revenue generating enterprise. Our new foundry services are already proving a tangible commercial benefit from our equipment infrastructure.

The newest RPCVD system is soon to be commissioned and a hardware upgrade, an enhanced plasma source on the R&D RPCVD system has now been successfully implemented and is enabling increasing improvements in LED efficiency. The enhanced plasma source and related system have also resulted in new IP.

#### Brighter LEDs

The technology team is encouraged by the continued device performance improvements being shown and is confident the planned performance demonstration is realistic and achievable. There are, however, still a few more steps required before the targeted milestone is achieved.

As foreshadowed at the November 2013 AGM, a major hardware redesign has been undertaken to enhance the plasma source, one of the key components of the RPCVD system. This new plasma source when combined with BluGlass' in-house MOCVD capability to grow partial LED structures has helped advance towards the performance milestone by providing better growth conditions for the p-GaN overgrowth layer and is now delivering improving results.

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The remaining key technical challenge is optimising the interface of the RPCVD and MOCVD integration. The technology team has in place a number of hardware and process strategies to overcome this challenge. The process steps involve both the initial RPCVD growth steps and the optimisation of the final layer grown by MOCVD. This final layer becomes the initial growth surface for RPCVD p-GaN layers. BluGlass has made advances in the process steps to 'prepare' the MOCVD wafers prior to growth using RPCVD. These steps combine both plasma and non-plasma procedures and are improving LED performance. These results reinforce the progress and potential of RPCVD.

The new plasma source has resulted in the creation of additional IP, with the filing of a patent application earlier in the year and an advanced design for the larger scale RPCVD system.

### Progress towards the 'Next Generation RPCVD System Milestone'

The Next Generation RPCVD System is planned to come online soon at the BluGlass Silverwater facility. This retrofitted Thomas Swan MOCVD system is nearing completion with the recent arrival of our custom designed chamber. Assembly and integration is now underway.

This ex-production scale system will effectively double the research and development capacity. Having multiple RPCVD systems will greatly enhance the team's capability to address the LED milestones, the scaling of the technology and the potential performance advantages of a low temperature CVD process for GaN on silicon. Notably, BluGlass will be aiming to demonstrate GaN growth on 8" silicon wafers. This is a commercial wafer size that suffers the most issues when grown using MOCVD at high temperature and is where RPCVD can potentially show the most improvement. These large size silicon wafers are critical for LEDs and in the emerging market for GaN in power electronics to drive down costs by using existing well established silicon manufacturing plants which have significant spare capacity.

This new system is a retrofit of the same model MOCVD system installed at Silverwater and will also enable BluGlass to compare MOCVD and RPCVD based on the identical operating system.

### Foundry Update

BluGlass has begun offering foundry services for the manufacture of highly specialised nitride templates and wafers. In FY14 Q2 and Q3, the Company completed \$204,000 of MOCVD foundry service work. BluGlass continues to fulfill additional commitments in the current quarter. This is a highly effective use of the MOCVD system, which has provided the technical team with further insight into the MOCVD hardware which will assist in developing the RPCVD system(s). This is also building the technology team's capability in product and process development to meet customer needs and will greatly assist in building credibility of our world class team in the industry.

BluGlass plans to extend its foundry offering and increase revenues, initially using MOCVD systems but later with its own RPCVD systems.

### In Summary

With the recent facility and hardware upgrades, BluGlass expects to continue to make strong progress towards the achievement of its next major technical milestones which will underpin its commercialisation path.

The commercial opportunity for the RPCVD process and equipment continues to expand, as the demand for low cost, large scale GaN wafers continues to grow. This is not only for the \$13.9B<sup>i</sup> LED market, but increasingly for the emerging GaN power electronics and GaN on Silicon markets which are predicted to be worth in excess of \$1.7B by 2022<sup>ii</sup>.

Yours sincerely,



Giles Bourne

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<sup>i</sup> Size of the LED Market in 2013. Source: Yole Development - Status of LED Industry September 2013

<sup>ii</sup> GaN Semiconductor Devices, Global Forecast and Analysis (2012-2022) by Markets and Markets

### About BluGlass:

BluGlass Limited (winner of the 2013 Australian Cleantech Competition) is an Australian green technology company formed to commercialise a breakthrough in the Semiconductor Industry. BluGlass has invented a new process using Remote Plasma Chemical Vapour Deposition (RPCVD) to grow semiconductor materials such as gallium nitride (GaN) and indium gallium nitride (InGaN), crucial to the production of high efficiency devices such as next generation lighting technology Light Emitting Diodes (LEDs) with advanced low cost potential.

The RPCVD technology, because of its low temperature and highly flexible nature, offers many potential benefits over existing technologies including higher efficiency, lower cost and greater scalability.

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