

NEWSLETTER 03

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Fellow Shareholders,

There have been significant changes at BluGlass since the last newsletter and I am delighted to be able to take this opportunity to update you on our progress to date.

We are approaching a major milestone with the build of our commercial reactor at EMF in Ireland to be complete by mid April. This reactor will now be shipped to Sydney for installation at our plant at Silverwater. I was fortunate enough to be able to see the reactor in Ireland on my last trip and it is truly impressive as the photos (overleaf) attest.

Our Equipment team, lead by Conor Martin, our Equipment Design and Development Manager, have spent many months at EMF in Ireland over-

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seeing the assembly and testing of this reactor, and the successful completion of this project is a testament to strong working relationship we have with EMF.

I have recently returned from a very successful trip to the US and Europe. On this trip I met with other major industry players who expressed strong interest in our technology and research. The UK Nitrides consortium, including Strathclyde, Nottingham and Cardiff Universities, was particularly interested in our progress.

The interest we are getting from research institutions is a pleasing commendation for our "research scale" reactor. When developing this reactor we had seen it as being a market enabler - in that it would generate interest and demand for our technology and process, as well as being a major stepping stone in the path to developing the full scale commercial reactor. It is extremely pleasing to see this strategy working so well.

With the completion of our in-house research reactor we are now able to begin preliminary investigations into other possible uses of our technology and processes.

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I'd also like to congratulate Professor Rod Boswell on his election to the Australian Academy of Science. Prof. Boswell has been working as a consultant to BluGlass helping with the design, testing and building of plasma sources for the RPCVD commercial system being assembled at EMF in Ireland

Giles Bourne
Interim CEO

What is the UK Nitrides Consortium?

The UK Nitrides Consortium was founded in 1994 in response to dramatic developments in the field of blue LEDs using GaN based materials. The key objective of the Consortium has been to act as a forum for coordination of the UK activities in this exciting field. The Consortium has grown in size over the years and represents the pre-eminent UK body representing institutions involved in nitride research.

What is Bluglass' connection to the Consortium?

BluGlass believes the ability of the BluGlass's patented RPCVD process to grow nitrides at low temperatures has created new opportunities for hybrid technologies with significant commercial prospects in areas such as oxide nitride, mixed structures, photovoltaics (solar technology) and silicon.

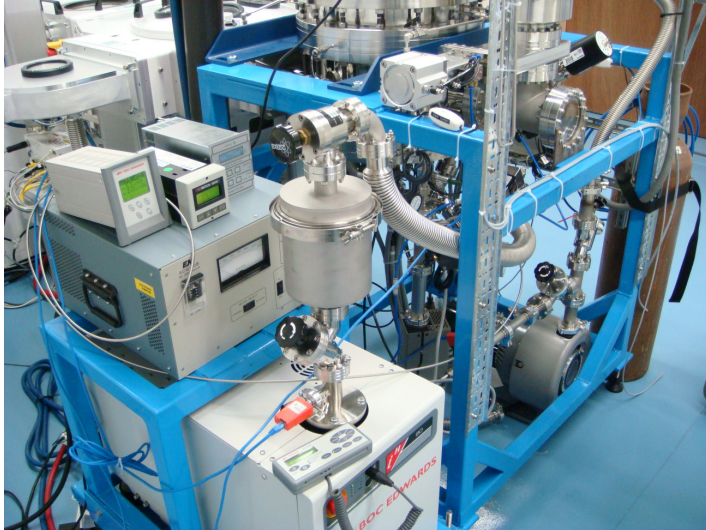
Commercial Strategy

BluGlass' business is centered on demonstrating and delivering its patented, low cost GaN manufacturing technology to the global market. The goal is that, once demonstrated at commercial scale, our process called Remote Plasma Chemical Vapour Deposition (RPCVD) will be providing the next generation of tools.

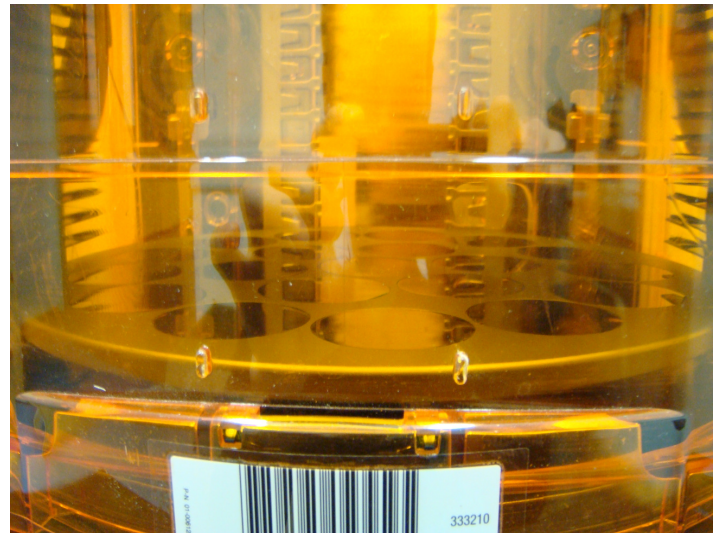
BluGlass has already proven, at laboratory scale, that its process works. The laboratory system has commercial utility in its own right for other organizations that wish to develop new semi-conductor materials and applications. As the **R&D Laboratory System** is already proven and less complex than the mass production version, BluGlass considers it a vehicle for early market entry of the RPCVD technology and is actively marketing the system to appropriate research institutions. Interest is strong and the system will begin generating sales revenue this year.

The Company's current focus is to demonstrate the RPCVD system at mass production scale and the ability to supply commercial equipment. To this end, BluGlass has forged a strong collaborative partnership with specialist manufacturer, EMF.

Over recent months, BluGlass, together with EMF has assembled and is testing the Prototype **Mass Production System** at its plant in Ireland in preparation for commissioning the system at BluGlass' headquarters at Silverwater in Western Sydney, Australia. The prototype commercial reactor is now considered "demonstration ready" for interested parties at the EMF plant. Upgrades to the BluGlass facility have been running in parallel in order to provide a state-of-the-art demonstration site in Australia, targeting key manufacturers clustered in the SE Asian region. Indoor construction at the plant is progressing well but adverse weather conditions in Sydney throughout summer have slowed the upgrade of the electricity supply to the plant. However, we remain on target for the completion date.



Process module



Wafer loading port



Gas Supply Unit

Why is the BluGlass process cheaper than existing technology for the LED application?

While the capital cost of RPCVD and MOCVD systems is similar, the operating costs are significantly lower using RPCVD. BluGlass' process has been developed to be compatible with deposition on glass substrates, whereas MOCVD must use synthetic sapphire substrates which are more expensive. In addition, ammonia gas is needed for MOCVD. This is (a) very expensive and (b) quite toxic which requires the inclusion of gas treatment infrastructure to lessen its toxicity and danger to both people and the environment. RPCVD does not use ammonia but instead uses the more common and safer nitrogen gas as its precursor.

See November presentation for more savings detail.

The differences between BluGlass' two systems

RPCVD Technology	Mass Production System (Commercial Reactor)	R&D Laboratory System (Research Reactor)
Purpose:	Mass production of optoelectronic devices such as blue and white LEDs Single purpose	Adaptable pilot scale production for different applications including quantum devices Multiple purpose
Advantage:	Optimised for producing as many LEDs of the same type as possible, in the shortest possible time	Versatile , easily adapted for research into diverse areas such as new semiconductors, combinations of materials and related emerging technologies
Target user:	Semi-conductor manufacturers and vertically integrated device manufacturers eg. OSRAM	Universities and commercial research facilities. Small-scale specialised production facilities
Capacity:	VERY HIGH <ul style="list-style-type: none"> 21 x 2 inch wafers per deposition run (compared with a single 2 inch wafer for typical MOCVD reactors) up to 315,000 LEDs per run (compared with up to 15,000 for MOCVD) 	MODERATE 4 x 2 inch wafers per deposition run
Diameter:	300mm available for deposition	100mm available for deposition
Cost:	Similar capital cost to MOCVD Cheaper materials than MOCVD	Lower capital expenditure and running costs than the commercial reactor because of lower capacity
Time to market:	Demonstration plant H1 2008 Longer sales lead time	Available through EMF, Ireland Multiple sales negotiations underway

Why focus on Gallium Nitride?

Gallium nitride (GaN) is a semiconductor material that emits light under applied voltage and is used in the production of blue/green Light Emitting Diodes (LEDs). In combination with red/amber LEDs, white light with strong outdoor performance is now feasible. High Brightness LED applications are a rapidly growing and evolving market that includes mobile phone and laptop screen backlighting, torches, car displays, traffic signals. Most exciting of all, lower cost GaN production as enabled by BluGlass could underpin significant LED penetration of the US\$100 billion general lighting market.

Key Person Profile: Introducing Giles Bourne

Giles comes to BluGlass with an impressive background in commercializing early stage technology and IP.

Originally from the UK his undergraduate degree was in Geography from the University of Leicester.

“Geography may seem like an odd background,” admits Giles, “but it gave me a very broad understanding and approach to problem solving, as well as sound foundations in data analysis. Something that’s always useful.”

“When I left university I went to Chile where I worked a number of years in a variety of start-up organisations. I learnt a lot about the challenges of commercialising early stage projects in particular those with no substantial local market that needed to go global from day one.”

Giles moved to Australia in 1997 for a role with an Australian based software company. Following that role he

worked in a Joint Venture between the Reserve Bank of Australia and Innovia from Belgium. This JV was focused on commercialising polymer bank notes – which it did successfully with the notes now in use in 24 countries around the world.

“It was around then that I did my MBA at Macquarie Uni,” adds Giles, “Bit of a coincidence with BluGlass’s technology coming out of the same place.”

Giles joined BluGlass as Commercialisation Manager in July 2007 and was recently appointed Interim CEO following David Jordan’s resignation.

“It’s been a steep learning curve,” says Giles, “But I am very fortunate to have David’s complete support on the Board, and as a consultant. We’ve recently returned from a trip overseas where David helped enormously in the conversations with the other major industry players.”

BluGlass Operating Highlights

Feb 2008:	First ultra thin layered wafers or “quantum wells” produced - a precursor to demonstrating high brightness LEDs based on BluGlass technology.
Jan 2008:	Completion of building of the prototype RPCVD commercial reactor at the EMF facility in Ireland.
Nov 2007:	Provisional agreement with Lakehead University in Ontario, Canada, to purchase BluGlass’ first research scale reactor.
Sept 2007:	BLG awarded A\$5M AusIndustry Commercial Ready grant.
Jun 2007:	World’s first blue light emission from 6 inch GaN-on-glass.
May 2007	BluGlass signs a manufacture supply agreement with Ireland’s EMF Semiconductor Systems for the BluGlass RPCVD system.
Mar 2007:	GaN deposition wafer size extended to 6 inch, a nine-fold increase on the current industry standard.
Oct 2007:	Joint Development Agreement signed with the French multinational materials group, Saint Gobain, for specially engineered substrates.
Apr 2007:	BluGlass technology is assessed by US-based independent experts, Wright Williams & Kelly, as having the potential to reduce the cost of manufacturing gallium nitride by more than 45%.
4Q 2006:	M+W Zander, Germany is appointed to advise on cleanroom and machine shop design & manufacture.
4Q 2006:	Headquarters moved to a dedicated manufacturing facility of 1,260m ² based in Silverwater, Western Sydney
Nov 2006:	BluGlass demonstrates GaN deposition at a scale double that of the industry standard by moving from 2 inch to a 4 inch wafer size.
Sept 2006:	Oversubscribed IPO (ASX:BLG) raised A\$10M
Sept 2006:	BluGlass acquires full ownership of its intellectual property through acquisition of Gallium Enterprises Pty Ltd from Macquarie University.
May 2006:	BluGlass demonstrates world’s first GaN-on-glass blue LED.
Jun 2005:	BluGlass established as a commercial spin off from Macquarie University