

9 October 2023

# BluGlass 2023 AGM Chair & CEO Address

Global semiconductor developer **BluGlass Limited** (**ASX: BLG**) is pleased to present its 2023 Annual General Meeting.

# **Chair's Report**

Good morning, everyone.

My name is James Walker, and I am the Chair of BluGlass Limited.

Welcome to our 2023 Annual General Meeting. It is now past 10am, the nominated time for the meeting and as we have a quorum, I'm pleased to declare the meeting open.

Today's AGM is a hybrid meeting. Here with me today at 383 Kent Street, Sydney, are Non-Executive Directors Stephe Wilks, Jean-Michel Pelaprat and Vivek Rao. I'm also joined by CEO Jim Haden, Chief Financial Officer Sam Samhan, Chief Technology and Operations Officer Dr Ian Mann and our Company Secretary Elizabeth Spooner.

Representatives of our auditors Grant Thornton are also present.

For those not in attendance, today's meeting is also being held online via the Automic platform. Shareholders can watch and listen to the meeting in real-time, submit questions via the chat room, and cast votes through the platform.

We encourage shareholders to take part in the meeting, both in-person and online. While questions can be submitted at any time, please submit any questions relating to specific resolutions as early as possible so that we can respond to them at the relevant time.

This morning, I'll take you through our FY23 achievements and financial performance, as well as the outlook for the year ahead. I'll then hand over to Jim for an operational update on our launched lasers, partnerships, vertical integration progress, intellectual property, and product roadmaps.

The Board and senior leadership team will then answer shareholder questions before commencing the formal business of the meeting.

## Slide 5: ACCELERATING PROGRESS IN FY23

The 2023 financial year was the most important year in BluGlass' commercialisation journey to date – one in which we executed against our technical roadmaps to launch our first suite of commercial visible GaN lasers to market, and generate early product revenues.

• Our Silicon Valley production fab has significantly fast-tracked our development progress. In less than a year, we have brought our fab online, demonstrated feasible reliability of our gallium nitride lasers, met contract manufacturer benchmarks for electrical and light output performance, and launched our first suite of commercial lasers. Further, we're continuing to improve the performance, consistency and reliability of our lasers, demonstrating enhanced products, with significant performance improvements, at Laser World in Munich in June 2023.

- During the year, we secured multiple customer orders of our GaN lasers, which are now being qualified in customer applications. Qualification is a requirement for all new semiconductor technologies, and paves the way for larger, recurring customer orders. Our customer base continues to build with high levels of interest in both our launched and next-generation products, reaffirming the need for alternative suppliers. Custom orders from repeat customers further validates our flexible manufacturing and form factor strategy, which continues to drive significant interest in the market.
- In FY23, we transferred downstream processes from four of our five contract manufacturers to our Silicon Valley fab. By bringing these core manufacturing processes in-house, we have reduced supply chain complexity, sped development, and improved the quality and consistency of our visible lasers.
- In March 2023, we appointed BluGlass President Jim Haden to the role of CEO, recognising the Company's significant progress since Jim took the helm in September 2021.
- During the year we partnered with Ganvix to diversify our offering to include development of GaN vertical-cavity surface-emitting lasers, commonly referred to as VCSELs. Ganvix is a leading GaN VCSEL developer focused on green GaN VCSELs a product not available in the market. This partnership is continuing to make good progress.
- BluGlass has also won a commercial partnership as part of the Commercial Leap Ahead for Wide Bandgap Semiconductors (CLAWS) Hub, announced by the US Microelectronics Commons under the CHIPS and Science Act. Jim will talk to the commercial and technical significance of this later in his presentation, however this is an historic win for the Company and is a strong validation of our technical and manufacturing capabilities, growing industry reputation, and our GaN laser roadmaps.

## Slide 6: FINANCIAL PERFORMANCE

In FY23, BluGlass reported an operating loss of \$11.75 million, up from a loss of \$9.35 million in the previous year. Higher operational costs reflect the full year impact of running our Silicon Valley fab, investing in converting the facility to a new semiconductor material class, whilst working with contract manufacturers to launch commercial products at the same time as vertically integrating key downstream processes.

These higher development and production costs were partially offset by a 90 percent increase in revenue and a significant step-up in our R&D tax rebate, which we expect to be an increase of 81 percent over the prior year to \$7.3 million. This rebate relates to development work conducted across our Australian and US facilities.

Our vertical integration progress over the past year was enabled through the support of new and existing investors, who contributed \$10.7 million to fund equipment and working capital. An additional \$1.9 million was received from the exercise of listed options. Ongoing shareholder support is appreciated, and not something we take for granted. We look forward to delivering value for shareholders in FY24 as we ramp-up production, scale laser product delivery, and grow our revenues.

## Slide 7: LAYING THE FOUNDATIONS FOR OUR FUTURE SUCCESS

In FY23, we laid the foundations for future success with our first laser products in-market, initial customer orders, and vertical integration of our supply chain to provide operational control all the way from laser design, to wafer production, through to delivering products to our customers in a highly desirable range of flexible form factors.

We delivered against both our technical and commercial roadmaps, and are now engaged with leading industry customers in all of our target market verticals. Over the coming year, BluGlass will continue to build on this momentum, securing new and repeat customer orders, expanding its laser offering, and growing revenues.

We have a long growth runway with visible GaN lasers expected to outpace the broader laser systems category, reaching US\$2.5 billion by 2025. Growth is being driven by global macro trends disrupting virtually every advanced industry, from quantum sensing and the metaverse, through to medical diagnostics, advanced manufacturing, and electric vehicles.

The sector has significant unmet needs with only a handful of competitors globally, and with significant barriers to entry. As a pure-play provider, with embedded flexibility and agility, we are best-placed to address growing demand with a unique value proposition focused on addressing key customer challenges.

Bringing core manufacturing processes in-house has also increased our revenue generation capacity, whilst also enabling us to progress development of our next-generation products.

BluGlass' proprietary RPCVD technology provides us with significant competitive advantages. It allows us to create novel laser architectures to address resistivity and performance loss, delivering brighter, more efficient, and better performing blue GaN laser diodes. Our RPCVD technology also facilitates new products that are not available at present, such as visible Distributed Feedback Lasers and green VCSELs. We will continue to progress the development and commercialisation of both over the coming year.

Our significant progress over the past year would not have been possible without the innovation and hard work of the entire BluGlass team. On behalf of my fellow Directors, I'd like to thank the talented team for their significant efforts in bringing products to market while vertically integrating our manufacturing supply chain.

Finally, I'd like to thank our loyal shareholders for your ongoing support over the past year. FY23 was a gamechanging year for BluGlass, and we enter the new fiscal year well-positioned to grow our laser portfolio, customer engagement, and revenue.

I will now hand over to CEO Jim Haden.

# **CEO's Report**

## Thanks James.

I'm Jim Haden, the CEO of BluGlass Limited. It's a pleasure to be here in Sydney for this year's Annual General Meeting, and I look forward to speaking with shareholders today.

This morning, I'll provide an overview of what's driving our growing addressable market, before taking you through BluGlass' technical progress, laser roadmap, and outlook.

## SLIDE 9: WHO WE ARE: LEADING PURE PLAY GaN LASER SUPPLIER

Before we start, a quick recap of who we are.

BluGlass is a gallium nitride, or GaN, laser manufacturer. GaN lasers are visible lasers that offer significant competitive advantages over traditional infrared lasers.

We're focused on the spectrum from ultra-violet around the 400nm wavelength through to green at 525nm. Just to clarify, when you hear us mention wavelengths, we're referring to the light colour the lasers emit.

Globally, we are one of just a handful of GaN laser manufacturers, and we're the only dedicated pure play. BluGlass is operating in a rapidly growing market with high barriers to entry.

Some of our target verticals are industrial, defence and biotech.

## SLIDE 10: MARKET OVERVIEW

Turning now to our addressable market.

As James mentioned earlier, the visible laser market is projected to more than double over the next two years, reaching US\$2.5 billion annually by 2025.

Growth is being driven by the ubiquitous use of lasers in advanced technology applications and manufacturing processes, as well as increased adoption of visible lasers resulting from the quantum leap in performance GaN lasers provide compared to traditional infrared lasers.

## SLIDE 11: GLOBAL MEGATRENDS DRIVING ADVANCED LASER APPLICATIONS

Laser technology underpins advanced technology capabilities, with the benefits of visible lasers behind many global megatrends - from electrification, digitisation, and decarbonisation to space exploration and next-generation medical technology.

The laser industry is not new. It's been around since the 1950's with high-powered infrared lasers and fibre optics underpinning the communications and digital transformation, and advanced industrialisation. However, until recently, high-powered visible lasers spanning the violet to green wavelengths were not readily available.

Visible lasers provide more than just an incremental improvement in laser capability for certain high-tech applications, they offer a quantum evolution in power, speed, precision, and applicability that is helping drive miniaturisation and nano-scale advanced applications.

While having a product in market in just one of these megatrends represents an enormous and exciting opportunity, visible GaN lasers underpin every one of these emerging megatrends and are becoming an increasingly essential technology capability.

# SLIDE 12: GaN LASER MARKET VERTICALS

Within the GaN laser market, BluGlass has a Serviceable Addressable Market (SAM) of US\$735 million, excluding the more commoditised market segments, such as blue-ray.

The largest of our target verticals is the industrial segment, comprising manufacturing and processing of electronic and microelectronic devices, advanced cutting and welding of metals, additive manufacturing, and other heat treatment processes. Adoption in this US\$400 million market is driven by the excellent absorption of violet (405nm) and blue (450nm) wavelengths in industrial materials.

The defence and quantum markets also represent large opportunities for us, at US\$115 and US\$100 million respectively with demand spanning from 405nm through to green at 525nm. Defence and R&D spans navigation and guidance systems, detection and sensing and advanced materials processing. Longer-term, the quantum and scientific segment is likely to see the strongest growth given applications encompass quantum computing, quantum sensing and navigation, and florescence microscopy. Laser-powered cold-atom systems are a key building block for types of quantum computers while low-noise quantum interference microscopy for ultraprecision navigation systems is required for autonomous vehicles, robotics, and defense applications.

Augmented and virtual reality are key applications within the US\$60 million display market with blue and green lasers offering substantial performance improvements over infrared.

We're also focused on the biotech and medical segment, projected to be a US\$60 million market in 2025. Biotech and medical applications will significantly benefit from higher-performance shorter and longer wavelength laser diodes, particularly in the treatment and diagnosis of cancer and disease.

# SLIDE 13: KEY PLAYERS BY SEGMENT

BluGlass supplies its visible GaN lasers to original equipment manufacturers (OEMs) and large consumer electronics manufacturers across key verticals.

This slide provides an overview of the key players and customers within each of our target verticals. While some of these are household names, other lesser-known companies such as Coherent, IPG and Trumpf are leading photonics and semiconductor businesses with market caps around ~\$3B. These companies are growing users of GaN lasers.

## SLIDE 14: HIGHLY CONSTRAINED MARKET: BLG IS SOLVING CUSTOMER CHALLENGES

Globally, BluGlass is one of just a handful of vertically integrated GaN laser manufacturers. Unlike BluGlass, our larger competitors are not dedicated GaN laser suppliers, with differentiated product portfolios predominantly focused on LED and micro-LED markets. The low mix/high volume business models of competitors has led to significant unmet customer demand with limited wavelengths, manufacturing, and packaging (form factor)

flexibility. The highly constrained laser market means customers often need to undertake significant and expensive post-purchase packaging to integrate lasers within their applications.

BluGlass' GaN laser offering is designed to meet these unmet market needs and solve our customers' biggest challenges. We are leveraging our manufacturing flexibility to provide plug-and-play, easy-to-use laser light in underserved wavelengths and a range of form factors, including laser diode bars, chips-on-submounts (CoS), and TO Cans. Our proposition reduces customer integration costs.

Longer-term, our next-generation products will feature enhanced designs and novel device architectures and integration designs. Customers are willing to pay more for high-brightness, high-efficiency, plug-and-play, customised modules that provide a brighter solution and are easier and cheaper to integrate and use in their systems.

## SLIDE 15: THE ADVANTAGES OF GaN LASER DIODES

Visible GaN lasers have many advantages over infrared lasers, primarily due to their excellent absorption in key industrial metals and organic materials. Gold, silver, and copper are great examples of GaN's absorptive properties, at 66-, 17- and 13-times higher absorption respectively than infrared lasers.

Higher absorption enables the equivalent processes to use less power, resulting in better process control and tighter, more precise beam focus, delivering cleaner, faster, and more efficient materials processing.

Visible lasers are changing the way advanced technologies are manufactured, as well as expanding the very things that CAN be made, enabling new, state-of-the-art innovations.

## SLIDE 16: TECHNOLOGY AND CUSTOMER ENGAGEMENT

Turning now to our technology progress, product roadmaps, and customer engagement.

In FY23, we established our core technology with the launch of our first suite of GaN lasers. Not only did we bring to market more products than we initially set out to release, but we also delivered higher-power products.

## SLIDE 17: US DoD ESTABLISHES MICROELECTRONICS COMMONS, INVESTS \$2B

In recent years, increased digitisation and geopolitical uncertainty have increased the importance of semiconductor sovereignty. The US and Europe have both stepped up their investment in the local development and manufacturing of semiconductors, passing respective CHIPS Acts.

As part of the US CHIPS and Sciences Act, the US Department of Defence has awarded US\$2 billion in funding for the establishment of the Microelectronics Commons, known as the ME Commons program over the next five years. The aim of ME Commons is to accelerate microchip prototyping and the 'lab-to-fab' commercialisation of key semiconductor technologies; and the DoD has nominated eight regional innovation hubs across America, awarding \$238 million to the Hubs in FY2023 for allocation in FY24.

BluGlass has been named as a member of the Commercial Leap Ahead for Wide Bandgap Semiconductors (CLAWS) Hub. The CLAWS Hub has the lowest membership of any hub, and was awarded one of the highest funding amounts for FY2023, at US\$39.4 million. We are one of just seven members, along with Wolfspeed, Coherent, General Electric, Adroit Materials, Kyma Technologies, and North Carolina A&T State University.

## SLIDE 18: CLAWS HUB ALIGNS PERFECTLY WITH BLUGLASS' LONG-TERM STRATEGY

BluGlass' position in the hub is to collaborate with the hub members to develop and commercialise photonics and optoelectronic devices and solutions for materials processing, sensing, communications, AI, future quantum technology applications and critical defence capabilities.

Partnering with the industry and academia on significant projects is a key pillar of BluGlass' growth strategy. It is a tried-and-true industry path to validating technology capabilities, growing industry influence and becoming a key

player. Our collaboration with NCSU as part of the CLAWS Hub has the potential to be company making partnership over the next five years.

Wide band-gap semiconductors, including indium gallium nitride, is BluGlass' area of expertise. They offer higher voltage and temperature capacity than traditional silicon chips and have growing applications in power electronics, radio frequency, and wireless devices; as well as photonics devices such as visible lasers. They are important for national security applications by providing energy efficiency, size, weight, power, and performance advantages in critical application areas including weapons systems, war fighter outfitting, as well as a plethora of additional defence needs.

We are now in negotiations with the Hub lead and look forward to updating the market on the finalisation of terms if and when they become available.

## SLIDE 19: MULTI-MODE VS SINGLE-MODE LASERS

As I mentioned, we've launched both single-mode and multi-mode lasers, as we will be discussing them over the next several slides, it is helpful to understand their unique characteristics and applications. In principle it's easiest if you think of single-mode lasers like a surgeon's scalpel, and multi-mode lasers like an industrial scale saw.

Single-mode lasers are used when the laser light needs to be an ultra-high-precision scalpel - highly-focused and in single-phase (single mode) with narrow spectral width for ultra-high precision sensing applications. This includes applications such as quantum sensing or biotech sensing, where a small amount of light is bounced off a single atom or a cell, and the way that light is reflected or absorbed determines properties of the cell. While these applications require just a fraction of the power of multi-mode lasers, they have more pure power per phase of light and are more complex and challenging to manufacture. BluGlass' single-mode lasers are approaching state-of-the-art.

Multi-mode lasers are used for applications that require maximum power over high precision and narrow beamwidth, like a saw. In multi-mode lasers, the light consists of multiple phases, hence the name multi-mode. Highpowered multi-mode applications include industrial cutting and welding, materials processing, and 3D printing of metals.

## SLIDE 20: BLUGLASS TECHNOLOGY ROADMAP

We have an ambitious technology and commercialisation roadmap that will position the Company as the global partner-of-choice in the visible GaN laser market and prepare BluGlass to win market share in our rapidly growing target verticals.

#### Launched core capabilities

We have now established our core technology capabilities and manufacturing capacity with the launch of our base products spanning the violet (405nm) to blue (450nm) wavelengths in both single mode and multi-mode products. This has already led to product sales and the Company engaging with several leading OEM customers across multiple target verticals.

#### Enhance and Extend Product Portfolio

At the same time, we are working to extend our wavelength range; down to the ultra-violet region towards 395nm, which will have important applications in the medical, scientific, and quantum industries; and up to the green wavelengths towards 532nm. We have already demonstrated a single-mode 397nm alpha product, which received significant interest at Laser World of Photonics in June. We continue to enhance our performance at longer-wavelengths and have demonstrated operations up to 488nm wavelengths.

As we enhance and extend our product portfolio this will open additional markets, lead to increasing sales, and continue to build our industry reputation in the market.

#### Add Novel Capabilities

We are advancing development of novel capabilities, such as GaN Distributed Feedback Lasers or DFB lasers. DFB lasers are a single-frequency device that is not commercially available today in the visible wavelengths. Their ultra-precision capabilities will have unique capacity to open important quantum sensing and quantum computing applications in violet, blue and green wavelengths. This novel capability is attracting significant customer interest. These enhanced capabilities will also attract premium average selling prices, or ASPs.

We continue to develop our unique Remote Plasma Chemical Vapour Deposition (RPCVD) technology and apply this in the development of longer-wavelength GaN lasers, DFBs, and vertical cavity surface emitting lasers (VCSELs) with our commercial partner, Ganvix. These unique capabilities enable BluGlass to attract highly strategic partnerships in the industry such as the ME Commons collaboration.

#### Higher Value Offerings

Looking further ahead, we will continue to magnify our industry competitiveness by adding enhanced functionality to our product pipeline. This includes Photonic Integrated Circuits, called PICs, and Multi-Chip-Modules. PICs are an incredibly important strategic and commercial technology capability with a plethora of applications in defence, semiconductor, scientific and consumer electronics applications.

Multi-chip modules combine multiple lasers in a single module for high-performance applications of tens to hundreds of watts of power. These modules can also be used in high power fibre optics. This enhanced capability will allow BluGlass to pursue very high-power and high-volume markets in industrial, defence, and space applications.

Again, these enhanced offerings will demand significantly higher-margins and ASPs, while reducing our customers integration and product development costs.

#### Establish BluGlass as Partner of Choice

Our growing product portfolio, novel capabilities, and enhanced functionality position BluGlass for break-out success. As we execute on our roadmap, each milestone enhances BluGlass' ability to grow market influence and drives the business towards sustainability and profitability.

As the only pure-play visible GaN laser supplier in the market, combined with our unique technology capabilities and enhanced offerings, we are continuing to position the business as the industry's partner-of-choice.

## SLIDE 21: LAUNCHED BETTER PRODUCTS ACROSS MORE WAVELENGTHS

At last year's AGM, we outlined our product roadmap with four products scheduled to launch in FY23 - violet 405nm and 420nm lasers in both single and multi-mode options. We exceeded these initial expectations, launching significantly better performing products across a wider range of wavelengths.

We set out to launch single-mode devices in the 100-200mW power range, however, the first single-mode lasers we brought to market were 250mW devices with performance and brightness exceeding our best-case scenario expectations. Our single-mode lasers are quickly approaching state-of-the-art, and we have received significant customer interest in these devices.

We also extended our wavelength range, launching 450nm devices in the high-volume blue wavelength, and our first ultra-violet 397nm single-mode device. Additionally, we fast-tracked our higher-power multi-mode device development, showcasing 3W multi-mode prototypes in 405nm and 420nm devices.

Our industry customers and partners have told us that when they saw what we had set out to deliver at last year's conferences, they did not think we would be able to meet our own goals. To meet with us less than a year later at Photonics West and Laser World where we had not just met, but exceeded expectations, has enhanced confidence in our ability to truly be a challenger brand in the highly constrained gallium nitride market.

Our progress in bringing products to market would not have been possible without the unique contributions of our innovative epi-team in Australia, combined with the high levels of workmanship from our design, development, and manufacturing teams in Fremont (wafer processing) and Nashua (packaging and test), respectively. Greater operational control across the supply chain has significantly lifted the standards of our visible laser diodes and allowed us to launch these enhanced products.

## SLIDE 22: BLUGLASS LASER PORTFOLIO AND DEVELOPMENT PIPELINE

We expect our rapid rate of development and productisation to continue, gaining momentum as we finalise vertical integration of our supply chain.

On the left-hand side, we have our six launched products and three alpha products currently available for customer purchase and testing.

As we continue to advance our technology roadmaps, our product portfolio expands to include higher-power single and multi-mode lasers, as well as extending our wavelength range from violet and blue to cyan, aquamarine, and towards green. Each wavelength, or colour, has unique properties and advantages, opening more markets and applications. All our higher-value and next-gen products in development have significant customer interest, supporting our development focus.

Our broader product offering, and improved laser performance will also increase our ability to meet customer demand, win market share, and drive higher average-selling-prices (ASPs), further enhancing our revenue generation capability.

## SLIDE 23: WORKING WITH CUSTOMERS ACROSS OUR TARGET VERTICALS

We have secured multiple customer purchase orders from industry leading original equipment manufacturers (OEMs), a national lab, and other leading international research institutions operating in most of our target verticals. These customers are working to qualify our laser products in real-world applications. I will provide more info on the qualification process shortly.

The types of applications our lasers are being tested in can be put into two distinct categories:

- Existing application
  - Looking for alternative supplier to meet unmet needs for existing products,
  - or flexible form factors for next-generation products
- New application in development
  - Working to have BLG designed-in a novel device

Attracting both distinct customer engagements validates our differentiated market approach, highlighting customers are looking for a collaborative, flexible supplier who can meet custom needs, deliver underserved wavelengths, or provide more reliable supply through our dedicated pure-play GaN laser offering. We are highly encouraged by the calibre of customers choosing to work with us. We are building solid future foundations, establishing highly valuable, strategic relationships with sizeable partners.

BluGlass is also in discussion with several distributors in key jurisdictions, including US, Europe, Israel & Southeast Asia. We look forward to establishing valuable distributor relationships that enable BluGlass to address higher-mix, lower volume customer applications globally in a scalable and sustainable way.

## SLIDE 24: CUSTOM PROJECTS SPEED PATH TO PROFITABILITY

As orders of our GaN lasers grow, and we continue to qualify our products in customer applications; BluGlass will also collaborate with industry partners and government agencies on large custom projects, tied to substantial revenues. Our recent membership in the CLAWS Hub is a good example of a custom project. These projects complement our direct-to-market laser offering, align perfectly with our long-term strategic roadmaps, enhance our technology capabilities, and provide a short-term pathway to profitability as we continue to scale our laser production and delivery.

Many of these projects involve the development of novel applications and capabilities with this know-how expected to benefit our next generation products.

## Slide 25: IP UPDATE

Patents and trademarks are critical to our longer-term product roadmap and growth strategy, protecting technical innovations that provide competitive advantages.

In FY23, BluGlass made the strategic decision to rationalise its patent portfolio to exclude select mature patents that are either no longer core to the Company's current laser device and RPCVD hardware, or are filed in non-key semiconductor manufacturing jurisdictions.

Our key technical breakthroughs remain protected, including tunnel junction, novel laser device, and RPCVD hardware patents – all of which provide us with a unique point of difference to our competitors. Our streamlined IP portfolio now comprises 53 internationally granted patents across eight patent families, protected in key semiconductor manufacturing jurisdictions, including Japan, Taiwan, China, USA, and Europe.

The refined approach will reduce our future IP management costs.

## Slide 26: OUTLOOK & CATALYSTS

Turning now to our outlook for the year ahead.

## Slide 27: UPCOMING MILESTONES

BluGlass will continue to build significant momentum in the year ahead; completing vertical integration in our Silicon Valley wafer fab, securing repeat customer orders, qualifying our lasers within customer applications, and signing distribution agreements with regional distributions.

We'll also be launching brighter and better performing lasers in our core wavelengths, demonstrating products at 470nm, 488nm and 525nm.

# Slide 28: FREMONT IN-SOURCING PROGRESS

During the year, BluGlass transferred core downstream manufacturing processes from four of our five contract manufacturers to our Fremont fab in Silicon Valley. We are in advanced stages of integrating our remaining contract manufacturer, with thinning and cleaving the only remaining processes for integration.

Throughout the insourcing process we have implemented iterative improvements to enhance the repeatability and performance of our GaN lasers and we continue to refine our manufacturing supply chain to further enhance consistency and product availability. We have invested in additional engineering team members at Fremont to support our growing capabilities and preparing the business for growth.

Vertical integration and insourcing our supply chain provides enormous technical and commercial benefits in both the short and long-term for the Company, accelerating learning cycles, improving quality and performance of our products and development of novel and next-generation devices, while at the same time providing the Company with the capability and capacity to win strategic partnerships, such as the CLAWS hub.

## Slide 29: THE WORLD'S LEADING PURE PLAY VISIBLE LASER SUPPLIER

BluGlass begins the new financial year with all the building blocks in place to disrupt the growing GaN laser segment - a highly constrained market with very few players and extreme barriers to entry. We have our first commercial products in-market, are working with several industry leading OEMs to qualify our lasers in real-world customer applications, secured a highly coveted member position within the US Department of Defense's ME Commons Hub, and are continuing to improve our core laser portfolio while developing next-generation products.

Importantly, we are now vertically integrated with full operational control across our supply chain - growing the semiconductor materials in our Sydney fab, fabricating the lasers at Fremont, and testing and packaging at Nashua – enabling us to meet demand for plug-and-play and custom lasers. Our current facilities provide us with the installed capacity to produce up to US\$170M worth of product per year or ~AU\$260M.

BluGlass' offering has been designed to tackle our customers' challenges head-on with flexible product, design, and manufacturing capabilities. Our world leading GaN growth technology is protected by 53 internationally granted patents, and facilitates novel laser architectures to create brighter, better performing lasers.

GaN lasers are a critical emerging technology, and we are establishing ourselves as a supplier of choice as adoption of visible laser increases to support global megatrends.

This announcement has been approved for release by the Board of BluGlass Limited.

## For more information, please contact:

Stefanie Winwood | +61 2 9334 2300 | swinwood@bluglass.com.au

# About BluGlass

**BluGlass Limited (ASX:BLG)** is a leading supplier of GaN laser diode products to the global photonics industry, focused on the industrial, quantum, defence, bio-medical, and scientific markets.

Listed on the ASX, BluGlass is one of just a handful of end-to-end GaN laser manufacturers globally. Its operations in Australia and the US offer cutting-edge laser diode development and manufacturing, from small-batch custom lasers to medium and high-volume off-the-shelf products.

Its proprietary low temperature, low hydrogen, remote plasma chemical vapour deposition (RPCVD) manufacturing technology and novel device architectures are internationally recognised, and provide the potential to create brighter, better performing lasers to power the devices of tomorrow.

BluGlass' technical innovations are protected by 53 internationally granted patents and 17 trademarks in key semiconductor manufacturing jurisdictions.