

4 October 2022

BluGlass 2022 AGM Exec Chair & President Address

BluGlass Limited (ASX: BLG) is pleased to present its 2022 Annual General Meeting.

AGM Presentation: Chair's Report

Good morning, everyone.

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

Welcome to our 2022 Annual General Meeting. As it is now past 11am, and a quorum is present, I declare the meeting open.

Today's meeting is a hybrid meeting meaning that in addition to the attendees today we also have attendees via our online meeting platform. This allows shareholders and proxies to attend the meeting virtually.

To vote at this meeting, you need to have registered your shareholding with Automic. If you haven't already done so, you can follow the instructions on screen to register and log in to enable you to vote at this meeting.

Questions can be submitted at any time. To ask a question press on the Q&A icon. This will open a new screen. At the bottom of that screen there is a section for you to type your question. Please start your question by typing your shareholding SRN or HIN. This will allow the moderator to identify you as a shareholder. If you would like to ask your question verbally, type your SRN or HIN and then type "I'd like to speak". Once you have finished typing, please hit enter on your keyboard to send.

Please note that while you can submit questions from now on, I will not address them until the relevant time in the meeting. Kindly start your question with the agenda item number to which it relates.

Please also note that your questions may be moderated or if we receive multiple questions on one topic, amalgamated together. Due to time constraints, we may run out of time to answer all your questions; however we will endeavour to answer any relevant question raised.

Voting today will be conducted by way of a poll on all items of business. To provide you with enough time to vote, I now declare voting open on all items of business. You can submit your votes at any time. I will give you a warning before I move to close voting.

I trust you'll allow us some latitude if things don't go as smoothly as possible today.

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 President Jim Haden, Chief Technical Officer Ian Mann, Chief Financial Officer Rob Ambrogio, and our Company Secretary Emmanuel Correia.

Representatives of our auditors Grant Thornton are also present.

This morning, I'll take you through our FY22 highlights, an overview of our financial performance, and outlook for the year ahead. I'll then hand over to Jim for an operational update on our laser diode progress, Silicon Valley fab integration, and product roadmap.

Developing the next evolution in GaN technology Plug-and-play and custom laser diodes

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

SLIDE 5: 2022 HIGHLIGHTS

In FY22, BluGlass delivered several key commercial and technical milestones which set the business up for longterm success. We enter FY23 in a stronger position than ever before, well on our way to becoming a leading commercial gallium nitride (GaN) laser diode manufacturer.

- In March 2022, we acquired a purpose-built laser diode production facility and expert manufacturing team in Silicon Valley. It is not an understatement to say that acquiring our own captive fab and moving to vertically integrate our supply chain is a game-changing strategic move for the business. Once fully operational, our Silicon Valley fab will accelerate development turns and significantly increase production and revenue capacity while reducing manufacturing costs.
- Our California fab and team are now operational in several key process steps and the facility is now contributing to our technical product roadmap. While we're continuing to convert the manufacturing processes suitable for GaN diode manufacturing, our team will be systematically bringing core production processes fully in-house to reduce supply chain complexity and improve the quality and consistency of our laser diodes. By bringing these processes in-house, we will reach profitability faster, reduce production costs, and increase margins.
- During the year, we significantly improved the performance of our laser diodes and launched alpha
 products for customer evaluation in real-world applications. Alpha products allow the business to
 incorporate valuable customer feedback into products ahead of beta product launches and mass
 production phases. Ongoing high levels of interest in our alpha and beta products when available are
 indicative of the significant unmet demand in the market and the quality of the performance data we
 have published to date.
- We are executing on a clear technology and commercialisation roadmap to transition the Company to a commercial manufacturer of bright, efficient, and reliable GaN lasers.
- To this end, in FY22, we significantly enhanced the technical expertise of our leadership team, appointing industry veteran Jim Haden as President. We also attracted highly experienced GaN laser diode talent to lead our operations in Silicon Valley. Jim will provide more detail on these appointments later. The quality, expertise, and experience of our seasoned manufacturing and commercialisation teams are key to ensuring the future success of BluGlass.
- And finally, in recognition of the momentous steps forward the business has taken, BluGlass was invited to join the world's leading gallium nitride (GaN) lighting and electronics consortium. The invite-only collaboration between industry leaders and the pre-eminent University of California, Santa Barbara's GaN researchers, will be instrumental in accelerating product development of next-generation laser products.

SLIDE 6: FINANCIAL PERFORMANCE

In FY22, BluGlass reported an operating loss of \$9.35 million, up from a loss of \$6.29 million in the previous year. The increase reflects higher operational costs as we bring our Silicon Valley fab online whilst simultaneously progressing the development of our GaN laser diodes with contract manufacturers.

Increased development costs will be partially offset by an increase in revenue and in BluGlass' FY2022 R&D tax rebate. This approximately \$4M cash injection is expected to be received in October/November 2022, and will include offsetting some of our eligible US expenses. Our US arm, BluGlass Inc, is also receiving expert advice with regards to our eligibility to receive funding under the newly launched CHIPS and FABS Acts in the US.

Our acquisition of a purpose-built production fab would not have been possible without the support of new and existing investors contributing \$7.1 million. The continuing support from shareholders is appreciated, and we remain confident in our ability to deliver value for you in the coming year and beyond. Thank you particularly to shareholders exercising bonus options at present, which are contributing directly to the execution of our strategy.

SLIDE 7: IP UPDATE

BluGlass' extensive intellectual property portfolio reflects the Company's rich innovation heritage. In FY22, BluGlass was granted a further seven patents in key semiconductor manufacturing jurisdictions. Our IP portfolio now comprises 93 internationally granted patents across eight patent families, protecting our technical breakthroughs and innovations, including our unique manufacturing process and novel laser architectures.

BluGlass' patents and trademarks are critical for future success, particularly as specialised manufacturing processes are key differentiators within the semiconductor manufacturing and laser diode industries. Our RPCVD technology provides BluGlass with a truly unique point of difference to our competitors and the potential to create higher value, brighter and better performing laser diodes.

SLIDE 8: OVERVIEW & STRATEGIC POSITION

BluGlass is executing on a clear technology and commercialisation roadmap, and we remain focused on launching highly anticipated products to market, securing customer orders, and generating revenue. We are continuing to transition the business to a commercial laser diode manufacturer with high-quality laser products, with initial product launches in the violet and blue wavelengths including 405nm, 420nm and 450nm products.

Critically, our own captive fab provides greater operational control and simplicity, caters to our medium to longerterm needs, and transforms BluGlass' growth opportunities. It removes our reliance on third party contract manufacturers, and the associated lengthy delays in product cycles and performance improvements. It is essential to enabling BluGlass to execute on our vision of becoming the industry's 'easiest-to-use' laser light, as we build competitive advantages into our manufacturing process. Importantly, it will significantly reduce production costs and increase our revenue generation capacity by four-fold to US\$160 million per annum.

To firmly place the business on the path to becoming a leader in the field, we have invested in attracting and retaining experienced laser diode experts to lead the development, optimisation, and commercialisation of our innovative pipeline of laser products. Significant performance and reliability improvements and the launch of alpha products over the past year, despite the constraints of our contract manufacturers, reaffirm we have the right team in place. Longer term, we have a significant opportunity to leverage our RPCVD technology to offer brighter, more efficient, and better performing GaN laser diodes in a variety of colours and wavelengths.

On behalf of the Board, I'd like to thank our loyal shareholders for their support over the past year. BluGlass' Board and management team share your frustrations that we have not yet launched our first commercial laser diodes but our progress over the past year means we enter FY23 as a very different business.

We're operating in a large and growing addressable market with very few competitors and high barriers to entry. Our progress in FY22 means we now have the right team, strategy, and facilities in place to solve our reliability challenges, launch products, generate revenue and take market share within a high-value, high-margin category.

Semiconductors are the single most important technology underpinning leading-edge industries. They're essential for the proper functioning of everything from smartphones to electric vehicles through to medical equipment and wireless communications. They power technology in every frontier, from terrestrial, aerial, to outer space, as well as marine and submarine applications – semiconductors power it all.

Australia's limited participation in the global semiconductor ecosystem has historically put it at a geopolitical disadvantage; however, that is set to change and change rapidly in the decades ahead with the development of Australia's national semiconductor 'moonshot' initiative. The Australian Strategic Policy Institute (ASPI) states that "Having unfettered access to microchips is a matter of economic and national security, and, more generally, of Australia's day-to-day wellbeing as a nation. In an increasingly digitised world, policymakers must treat semiconductors as a vital public good, almost on par with other basic necessities such as food and water supplies and reliable electricity". BluGlass continues to assist ASPI in its policy development. As Australia's first vertically integrated compound semiconductor manufacturer, it has never been a more exciting time to be at the forefront of Australia's semiconductor industry.

Finally, I'd like to acknowledge and thank the dedicated and talented team at BluGlass for their continued leadingedge innovation and hard work over the past year. I will now hand over to President Jim Haden.

AGM Presentation: President's Report

Thanks, James.

For those of you who haven't met me, my name is Jim Haden, and I'm the President 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 and over the coming days.

Today, I'll provide an update on our operational progress over the past year before taking you through the market opportunity for BluGlass' technology, our go-to-market strategy, laser diode roadmap, and outlook.

Before I begin, I would like to point out that I will not be providing the level of technical detail our shareholders may be accustomed to. As we transition from our R&D heritage to commercialisation of our laser diodes, it is increasingly important that we do not disclose technical innovations and novel manufacturing processes to the market. These competitive advantages are held closely as BluGlass' intellectual property. While this is a forum for investors, we know our competitors are keeping a close watch on our progress.

SLIDE 11: YEAR IN REVIEW

Moving now to our progress over the past year.

In August of 2021, BluGlass demonstrated the world's first Dual n-Wave laser utilising our patented RPCVD technology. This was an important milestone for the business as it paves the way to significantly reduce the considerable performance loss currently experienced in GaN laser diode applications, which can account for up to 50% of the energy used in GaN laser diodes today. This innovation has the potential to enable significantly more efficient and better-performing laser diodes in the future.

I joined BluGlass in September last year, bringing more than three decades' technical laser experience to the Company. Importantly, I have hands-on experience solving performance and reliability challenges and have previously worked for several industry leaders, including Spectra Diode Labs, JDS Uniphase, Coherent, nLIGHT and Kyocera SLD.

Once in the role, I immediately began looking for ways to increase our cycles of learning, a necessary step to becoming competitive. It quickly became apparent that our own manufacturing facility was the key to increasing development turns and reducing supply chain complexity. We were fortunate to find and acquire a purpose-built laser diode fab and skilled team in April 2022. This was an extremely rare opportunity, and it fundamentally changes our product and market opportunities.

In the same month, we published our significantly improved laser diode performance data at a key industry event - World of Photonics (Laser Munich) - generating considerable customer interest. This interest highlighted the genuine need for an alternative supplier in the market.

In June, we shipped our first packaged alpha laser diodes to an initial customer for testing within their nextgeneration applications. This was an important milestone for BluGlass. Alpha product testing by customers combined with internal testing enables us to incorporate valuable feedback into our final design before launching beta products.

In mid-July, our recently hired fab team received the regulatory green light to begin laser process development at our new Silicon Valley fab. Encouragingly, our Silicon Valley fab and team has already made significant contributions to our development roadmap.

Finally, BluGlass joined UCSB's world's leading GaN consortium at the invitation of Drs Steve DenBaars and Nobel prize winner Shuji Nakamura. Consortium membership provides us with access to the University of

California's world-leading facilities and faculty, and our Silicon Valley team has already commenced activities with the UCSB team.

SLIDE 12: DEVELOPMENT PROGRESS - FOUR KEY INGREDIENTS TO RELIABLE LDs

As we've previously mentioned, there are four key ingredients essential for manufacturing high-performance, reliable, commercial laser diodes – epitaxy, metals, facets, and bonds.

During the year, we undertook a program to mature targeted aspects of our business, instilling quality controls at key steps of the fabrication cycle to guide improvements in the design and performance of each of these four fundamental components. These four ingredients interact to create the electrical, optical, and thermal characteristics required for high-performance, reliable commercial laser diodes. We continue to improve our products at each key step based on extensive testing, downstream bonding and packaging efforts, and customer feedback to drive our improvement cycle and progress towards launching our first commercial laser diodes.

This focus resulted in initial improvements in light-output, electrical performance, and thermal management. They also enabled the Company to publish specification sheets for 405nm and 420nm products in both single and multi-modes; and launch our first alpha products for customer testing.

Low loss, high gain epitaxy

During the year, BluGlass demonstrated our best epitaxial optical and voltage performance to date, leading to our traction at tradeshows. Since then, guided by subsequent results, we have developed two new improved epidesigns to enhance light-output power at lower input power: a key component to total thermal management, efficiency, and reliability. We anticipate these new epi designs will lead to higher yields and significantly improved device performance and reliability.

Low resistance metals and ohmic contacts

Building on aspects of our initial improvements to our metal designs, we have continued our short loop process development to lower resistance for both negative and positive metal contacts. Low-resistance and high-adhesion metals are essential for electrical and heat management of the laser diode, and for ensuring optimum performance and longevity.

Clean facets & low loss AR and HR Coatings

In FY22, we dedicated significant efforts to improving our manufacturing process to achieve clean wafer cleaves and defect-free facets. The facet is the optical face of the laser. It is made by scribing and 'breaking' the laser wafer into individual laser bars or chips. It is a delicate and challenging process, but essential to enable proper functioning of the laser. We have demonstrated significant improvements in our facets, which have been further expedited by our Fremont team, who are now working closely with both our facet and coating contract manufacturers. This collaboration is yielding further facet optimisation improvements.

Sound thermal & mechanical bonds

We've also made strong progress in the optimisation of our bonding and packaging processes. During the year, we established our TO-9 Can packaging processes (a high-demand packaging form factor for customers) as well as 'epi-down' fabrication processing in-house at Nashua and with our CMs. Feedback from both our teams (BLG Nashua and the CM) has guided subsequent chip design and process refinements that are now in development.

Epi-down processing is commonly implemented in the industry to significantly improve laser diode thermal management. This approach results in a significantly reduced thermal path and better heat management, paving the way for higher-performance and higher-value products. The improved bonds we have achieved will lead to higher light-output and lower temperature operation, both of which directly contribute to better performance and longer lifetime.

We are now beginning to reap the rewards of our faster learning cycles, combining all the advancements in our epi, metals, facets, and bonds to create the next iteration of our product portfolio. With faster learning, we expect to leap-frog the performance and reliability we have achieved to date.

SLIDE 13: VERTICALLY INTEGRATING - ACQUIRED SILICON VALLEY FAB

Although we have already touched on the acquisition of our Fremont facility above, I wanted to briefly discuss some of the key advantages that vertically integrating means for the business.

The value of our greater agility, product and development speed, and increased capacity can't be overstated. The fab capacity perfectly matches our epitaxy capacity at Silverwater, of approximately 10,000 wafers per annum, to increase our revenue capacity four-fold (relative to our CMs) to US\$160M. As our projected volume increases, transitioning to the fab also reduces our wafer manufacturing costs by more than 50%, promising to significantly accelerate our path to profitability.

Along with the acquisition of the fab assets, we onboarded a truly expert team who have extensive laser diode industry expertise, many with decades of experience, and are experts at operating what is now our facility and equipment. The workmanship we are already seeing from our talented team from the very first process runs is outstanding.

Acquiring the fab was a truly matchless opportunity for BluGlass. Furthermore, we did so at a fraction of the more than US\$40M it would cost to build today. We also onboarded a highly talented team that would have been exceedingly difficult to assemble from scratch.

SLIDE 14: SILICON VALLEY FAB COMMENCES CONTRIBUTING TO TECH ROADMAPS

Encouragingly, we are already bringing the advantages of a captive fab and expert team to bear. Our fab is now operational in key processing steps and contributing to our technology roadmaps.

Demonstrating our new agility, BluGlass obtained permits to operate our fab in late July and launched our first GaN laser process runs just six weeks later, in September.

Our own fab has provided us with extended operational control, and the workmanship from our very first run is outstanding, demonstrating significant improvements in process quality, resulting in reduced defects. These wafers have since been shipped on to the downstream CM for the remaining outsourced steps to be completed before being tested at Nashua. While the facility is not yet fully-online, it is already exponentially expediting the process, and our next wafer lots have begun processing in-house.

Additionally, due to our increased capacity, we have accelerated our advanced roadmaps, commencing with our first RPCVD wafers being shipped from Silverwater to Fremont.

SLIDE 15: FREMONT FACILITY TOUR

While these photos were taken when the facility was pre-operational, they illustrate some of the processing capability of our cleanrooms at Fremont.

SLIDE 16: SHIPS FIRST ALPHA PRODUCTS TO CUSTOMER

In June 2022, we shipped our first fully packed alpha products to a customer.

This advanced prototype product, packaged in a TO-Can, is a mature product design, which has undergone internal preliminary performance and lifetime reliability testing and is progressing towards commercial reliability. We are now in the process of refining our chip, incorporating improvements in each of the four key ingredients, to launch our first commercial products and commence Beta fabrication and reliability validation.

SLIDE 17: BLUGLASS JOINS WORLD LEADING GaN CONSORTIUM

Our acquisition of the Fremont fab generated considerable attention from prospective customers and the wider industry. It also led to an invitation to join the University of California, Santa Barbara (UCSB)'s Solid-State Lighting, Electronics and Energy Centre (SSLEEC) by pre-eminent industry leaders, Professor Steven DenBaars and Nobel Laureate winner, and the inventor of GaN-based semiconductors, Professor Shuji Nakamura. The SSLEEC is the world's leading GaN consortium, and member companies are recognised as industry leaders around the world.

Our membership provides BluGlass with access to the pre-eminent faculty at UCSB, as well as their world-class GaN wafer processing facility.

This invitation is a testament to our ground-breaking innovation in RPCVD epitaxy, novel laser architectures, and longer-wavelength GaN devices, combined with our new ability to independently manufacture and commercialise our technology.

Professors Nakamura and DenBaars are very excited to work with our unique RPCVD technology, believing it will accelerate development of advanced GaN laser diodes.

MARKET OPPORTUNITIES

SLIDE 19: THE ADVANTAGES OF GaN

GaN-based laser systems have many advantages over their infrared counterparts.

This is largely due to their excellent absorption properties of key industrial metals and organic materials. With higher absorption, the equivalent processes use less power, resulting in better process control and, in turn, cleaner, faster, and more efficient materials processing.

These capabilities are not only changing the way advanced technologies are manufactured, but also expanding the realm of possibilities of the very things that CAN be made; enabling new, state-of-the-art innovations around the world.

SLIDE 20: TARGET MARKETS BY APPLICATION:

Due to these advantages, the GaN laser market continues to grow rapidly within the broader category - the enormous laser market is expected to surpass US\$25 billion annually by 2025. We expect GaN lasers to account for roughly 10% of this total market in the same period; representing a US\$2.5B per year market opportunity.

Within the GaN laser market, BluGlass has a Serviceable Addressable Market (SAM) of US\$735M excluding the more commoditised market segments, such as blue-ray and some GaN laser displays. As you'll see, we're focused on three key vertical where we believe we can effectively compete - Industrial, Scientific, and Biotech - worth a combined \$380 million by 2025. I'll touch on each of these exciting markets in later slides.

SLIDE 21: INDUSTRY CHALLENGES - BLUGLASS VALUE PROPOSITION

As James mentioned earlier, BluGlass is one of just a handful of vertically integrated GaN laser diode manufacturers. While our larger competitors are very successful, they do not provide visible lasers with many of the wavelengths required or desired by customers; or in form factors that customers prefer. This often means customers need to undertake significant and expensive post-purchase packaging to implement.

Potential customers are telling us that there is a significant unmet market need for increased manufacturing flexibility. They are looking for cost-effective solutions that are easy to integrate - an offering not readily available in the market at present. Further, within those solutions, customers require a combination of greater power, brightness and efficiency per dollar invested.

These unmet customer needs provide an opportunity for BluGlass to compete with the large incumbent players such as Nichia and ams Osram. We will do so by leveraging our manufacturing flexibility and advantageous partnerships to provide plug-and-play, easy-to-use laser light in unique form factors and integrated packaging.

Customer integration is at the core of our easy-to-use laser light proposition. We're solving a key customer challenge by providing greater manufacturing flexibility and customisation, including 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.

BluGlass will initially fulfil these unmet needs by addressing underserved visible wavelengths from violet (405nm, 420nm), to blue at 450nm. Longer-term, BluGlass will provide multiple unique benefits to customers including high-efficiency and expanded wavelengths, from ultraviolet (380-400nm) all the way through to green (510-532nm), while delivering easy-to-use laser light with flexible manufacturing options, reducing integration costs.

SLIDE 22: BLUGLASS TARGET MARKETS - INDUSTRIAL SEGMENT

The industrial market is the largest of our three target verticals, representing a US\$240 million opportunity. This market spans industrial manufacturing and processing of electronic and microelectronic devices, advanced cutting and welding of metals, additive manufacturing, and other heat treatment processes.

Market adoption in this segment is driven by the excellent absorption characteristics of violet (405nm) and blue wavelengths (450nm) in industrial materials.

These laser diodes are used in the manufacturing of virtually every high-tech application on the planet today, from smartphones and electric vehicles to robotics, aviation, and energy storage.

A few of our key target customers in the industrial segment include Panasonic, IPG, nLIGHT, and Nuburu.

SLIDE 23: BLUGLASS TARGET MARKETS - SCIENTIFIC SEGMENT, FOCUS ON QUANTUM

While the scientific market for GaN lasers is presently a smaller opportunity, predicted to be worth US\$80 million in 2025. However, its future growth is being driven by very promising applications, including quantum computing and quantum sensing; and we see significant opportunities in this market segment.

Laser-based quantum sensors are superseding traditional sensing technologies. Some of the highly promising applications in this space are atomic clocks, sensitive quantum gravitometers, and low-noise quantum interference microscopy for ultra-precision navigation systems needed to advance emerging technologies such as autonomous vehicles, robotics, and defense applications.

Another key market that needs no introduction is quantum computing. Laser-powered cold-atom systems are a key building block for types of quantum computers. Cooling lasers freeze the atoms and hold them still, mid-air, using the Doppler cooling technique. The cooled atoms will work as qubits, the basic building block for quantum computing.

Our key target customers in the scientific segment include Toptica Photonics, Bosch, and Coherent.

SLIDE 24: BLUGLASS TARGET MARKETS – BIOTECH SEGMENT

We're also focused on the biotech and medical segment, where demand ranges from 405nm violet lasers through green at 532nm. While this is the smallest of our target verticals, estimated to be worth \$60 million 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.

These important applications include flow cytometry, which is used in the testing of cells from bone marrow, lymph nodes, and blood samples. It provides highly accurate cancer diagnosis, including the ability to detect the exact type of leukemia and lymphoma in cells to significantly improve patient outcomes.

Optical Coherence Tomography is another key application, using light to provide high-resolution, cross-sectional imaging of subsurface tissues.

A few key target customers in this vertical include Modulight, BioLase and IPS Lasers.

STRATEGY & ROADMAPS

SLIDE 26: BRINGING FREMONT ONLINE - MORE SPEED, BETTER CAPABILITY

Key to resolving our reliability challenges and launching commercial products is bringing our Fremont facility up to speed, vertically integrating our outsourced manufacturing processes. Our own captive fab significantly increases development turns and production capacity while simultaneously reducing production costs. It is central to both our technical and commercial roadmaps.

Since acquiring the purpose-built laser diode fab in April this year, we have moved quickly to commence operations at the facility. Conversion to GaN is well underway, all requisite regulatory permits have been obtained, and we have attracted and retained a highly experienced team to operate the facility. At the same time, our team has extensively analysed material processed at our contract manufacturers to identify high-risk areas to optimise and streamline our internal development.

The fab has made significant headway with our p-side short loops and we have produced our first laser diode processing lot at Fremont. This represents a significant leap forward for the business.

In parallel, we have launched efforts to develop our facet coatings in-house and hope to have these fully qualified by early next year. It is worth noting here that each process we internalise is the equivalent of a specialist supplier being integrated into the business. By bringing these core processes in-house, we reduce the complexity of our supply chain and improve problem-solving, quality, yields, and speed of development.

Finally, our team is working very closely with our n-side processing contract manufacturer. We will target bringing the n-metalisation process in-house during October and November. Followed by thinning and cleaving. Our intent is to eliminate our production dependency on these front-end contract manufacturers during this fiscal year.

SLIDE 27: TECHNOLOGY & COMMERCIALISATION ROADMAPS

When I joined BluGlass in September last year, the Company's violet and blue laser diodes were in the alpha phase. An alpha product is an advanced prototype still in the design iteration phase.

As you'll recall, there are four key components required for reliable laser didoes – epitaxy, metals, facets, and bonds. Our epitaxy is produced in Sydney, metals, and facets are completed by our US-based contract manufacturers, and bonding is performed at our Nashua facility. As these components are interconnected, high-performance laser diodes require all four to be optimal.

Over the past year, our focus has been to evaluate and improve each of the four key laser diode ingredients. In FY22, we have significantly improved the performance of these core components, secured a high-quality contract manufacturer to accelerate our packaging and bonding efforts, and enhanced our testing capability in Nashua.

We are now combining improvements at our contract manufacturers with those being made at our own facilities to accelerate development. In fact, wafers from our Fremont fab have now leap-frogged our contract manufacturers and will soon account for a higher proportion of products being tested at Nashua for performance and reliability. We anticipate this will lead to beta products, fixed design, and volume production to launch our first commercial laser diodes by early next calendar year.

While lengthy development cycles at our contract manufacturers have been frustrating, the speed at which our Fremont facility has come online, and leap-frogged the output of our CMs, reaffirms that we are very quickly recovering lost ground and will be in a much stronger position to provide a continuous flow of innovative products

to the market.

When we sought to acquire the fab, we promised increased production, development capacity, and faster learning cycles. We are already seeing the benefits of this capability with our very first processing lots. Additionally, the Fremont fab has also allowed BluGlass to accelerate our advanced roadmaps, with our first wafers designed for longer-wavelength operation and utilising our proprietary RPCVD technology, being shipped from Silverwater for processing.

We look forward to realising our competitive advantages as we combine the improved workmanship of our expert Fremont process team and our unique epi-growth with our most recent improved metal, facet cleaving, chip design, and bonding processes.

SLIDE 28: DELIVERING AGAINST CLEAR PRODUCT DEVELOPMENT PIPELINE

During the year, our violet and blue performance data of alpha products generated considerable interest at leading industry conferences, Photonics West in San Francisco and Laser World of Photonics in Munich.

Since then, we have accelerated our cycles of learning and the promise of improved performance of our GaN laser diodes. We are in advanced development with products spanning violet and blue wavelengths and are now working on longer wavelengths through green lasers.

The valuable progress we are making is a testament to the team and validates our significant investment in acquiring the facility and staff.

We look forward to reporting performance progress over the coming months as we combine our short-loop improvements into full-cycle development lots over the next few iterations, both with our contract manufacturers and in-house at Fremont.

OUTLOOK

SLIDE 30: SUMMARY & OUTLOOK

Our priority remains the optimisation of our lasers to improve performance and reliability and launch our first commercial GaN laser diodes to market ahead of securing customer orders, ramping-up production, and generating increased revenues. In parallel, we will vertically integrate our supply chain, enabling us to improve laser diode quality and consistency, build a competitive advantage, and reduce costs. We will also build and maintain vital partnerships, such as those at Yale, UCSB, key vendors, strategic customers, and select CMs, as we continue to execute our strategic goals.

I would like to take this opportunity to thank our valued shareholders for your belief and ongoing support. I joined BluGlass because of its inherent technical innovation and significant market opportunity. The inroads made in the past year have further strengthened my confidence in the Company's technology and bolstered the business's outlook considerably. While our strategy and value proposition remain consistent, the business has fundamentally changed over the past year. In just a few months, our captive fab has demonstrated the significant benefits of operational control from quality, development speed, agility, and cost perspectives.

This time next year, the business will look very different again, with a more vertically integrated supply chain, GaN laser diode products in the market, and a pipeline of higher-value products progressing through development. We are presently in a considerable technology boom, and the opportunities for BluGlass to help drive this advancement have never been greater.

Finally, BluGlass' technical progress over the past year would not be possible without our talented team. To the entire BluGlass team, thank-you for your hard work and dedication.

I'm happy to take questions later but for now, I'll hand the floor back to James.

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

For more information, please contact:

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About BluGlass

Developing leading-edge semiconductor manufacturing technology and devices for more than a decade, **BluGlass Limited (ASX:BLG)** is a provider to the global GaN photonics industries, delivering cutting-edge, custom **laser diode** development across the industrial, defence, display, and scientific markets.

Listed on the ASX, we are an Australian public company established to power the smarter, cleaner, more efficient photonics of tomorrow with our proprietary low temperature, low hydrogen, **remote plasma chemical vapour deposition** (RPCVD) manufacturing technology.

Backed by an extensive network of supply-chain partners, BluGlass is developing a suite of laser diode products, from small batch custom lasers through to medium-high volume off-the-shelf products.