BLUGLASS (ASX:BLG)

Annual General Meeting

22 November 2021

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FORWARD LOOKING STATEMENT

This document has been prepared by BluGlass Limited to provide readers with an update of the Company and the Company's technology.

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This document includes certain information which reflects various assumptions, subjective judgment and analysis, and is subject to significant business, economic and competitive uncertainties, risks and contingencies, many of which are outside the control of, and are unknown to, BluGlass Limited. The assumptions may not prove to be correct. Recipients of the document must make their own independent investigations, consideration and evaluations prior to making any decisions to invest in the Company.

Information on Service Addressable Markets (SAM) is based on internal BluGlass modelling and assumptions, both of which depend on successful R&D outcomes and results achieved within estimated timetables. BluGlass recommends a cautious interpretation be taken by investors.

JAMES WALKER
CHAIR'S REPORT

2021 PROGRESS HIGHLIGHTS

JULY 2020

Awarded a **$250K Advanced Manufacturing Growth Centre (AMGC) grant** to manufacture smarter and faster plasma sources

JULY 2020

Commissioned the first large-scale RPCVD platform, the BLG-500 with AIXTRON SE, capable of multiple 6-inch wafer production

OCTOBER 2020

Won a US government funded contract with Yale University to contribute novel laser diode development for the US Defense Advanced Research Projects Agency (DARPA).

MAY 2021

Renowned laser diode pioneer (co-founder of Nuburu), **Jean-Michel Pelaprat joined the BluGlass Board**

JUNE 2021

During the year 11 patents were granted taking our IP portfolio to **86 internationally granted patents**

JULY 2021

Raised $8.4M to fund laser product delivery

AUGUST 2021

World first demonstration of RPCVD tunnel junction laser diodes designed to enable higher power and more efficient lasers

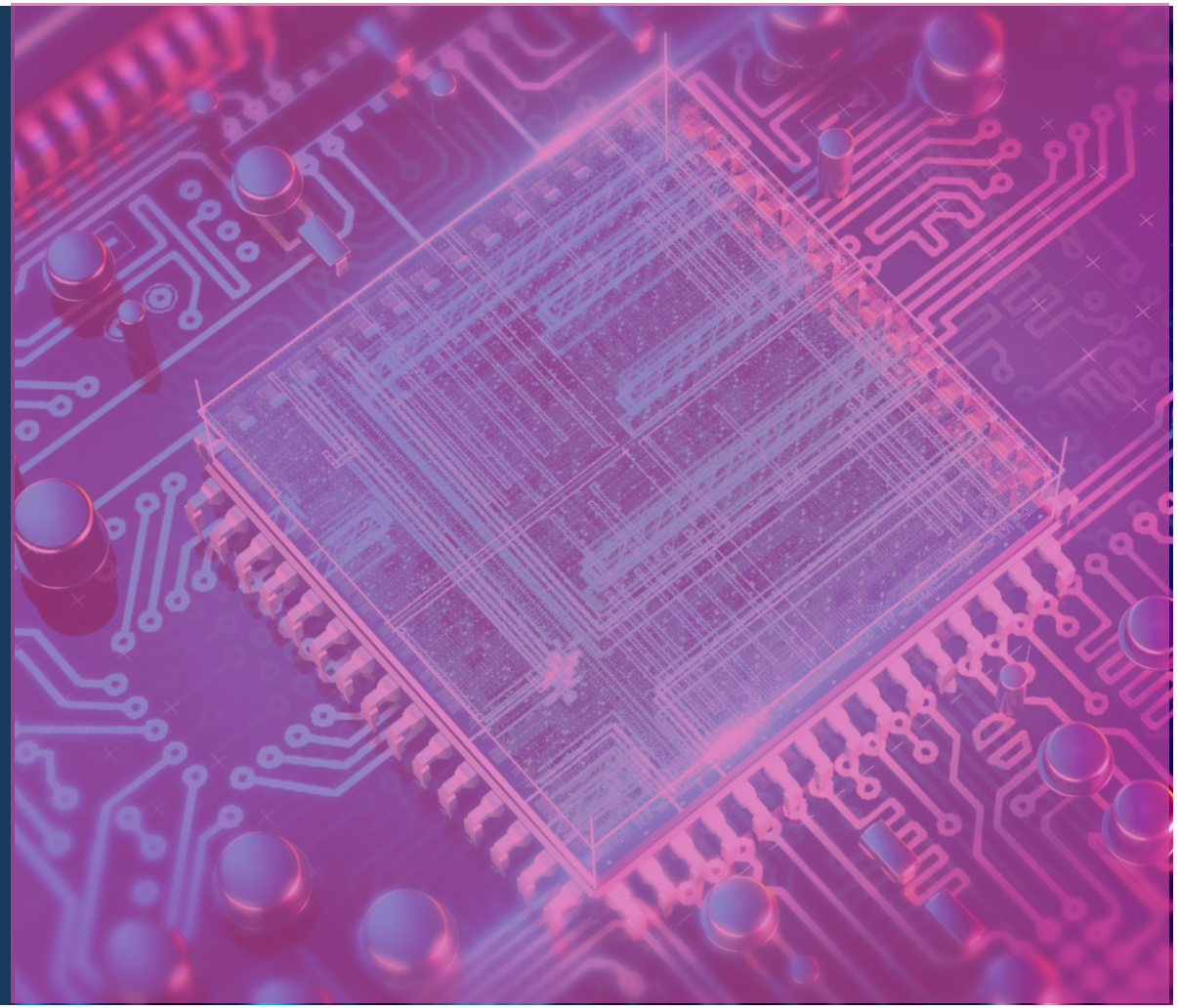
SEPTEMBER 2021

Industry veteran, Jim Haden appointed as BluGlass President

2021 CHALLENGES

Technology setbacks and supply chain issues delayed the launch of our first direct-to-market GaN laser diodes

- Reliability testing showed packaging flaws, optical facet degradation, and issues with metalisation
- Using analytical techniques to focus on failure modes to identify components and processes causing issues
- Several products in final stages of manufacturing supply chain
- Prototypes performing in line with commercial specifications for output power and wavelength
- Appointed industry veteran Jim Haden to deliver products to market and transition to profitable commercial enterprise



FINANCIAL PERFORMANCE

	2021	2020	YtY Movement 2021-2020
		$	%
Sales Revenue	**363,573**	**655,830**	**Down 45%**
EpiBlu Foundry Revenue	225,492	505,830	Down 55%
Laser Diode Revenue	138,081	150,000	Down 8%
Other Income	**662,111**	**149,976**	**Up 340%**
Interest	4,782	29,976	Down 526%
Government grants	657,329	120,000	Up 447%
Net Assets	7,509,329	12,393,472	Down 40%
Consolidated Loss	6,288,710	5,994,113	Up 5%
Monthly Burn Rate	754,000/month	617,000/month	Up 22%
R&D Tax Rebate (Receipt for prior year R&D spend)	3,320,000	2,735,000	Up 21%
Cash Position (as at end of FY)	4,176,300	5,430,240	Down 23%
Cash Position (as at 2 November 2021)	8,189,955	5,636,870	Up 45%

GLOBAL PATENT PORTFOLIO – IP UPDATE

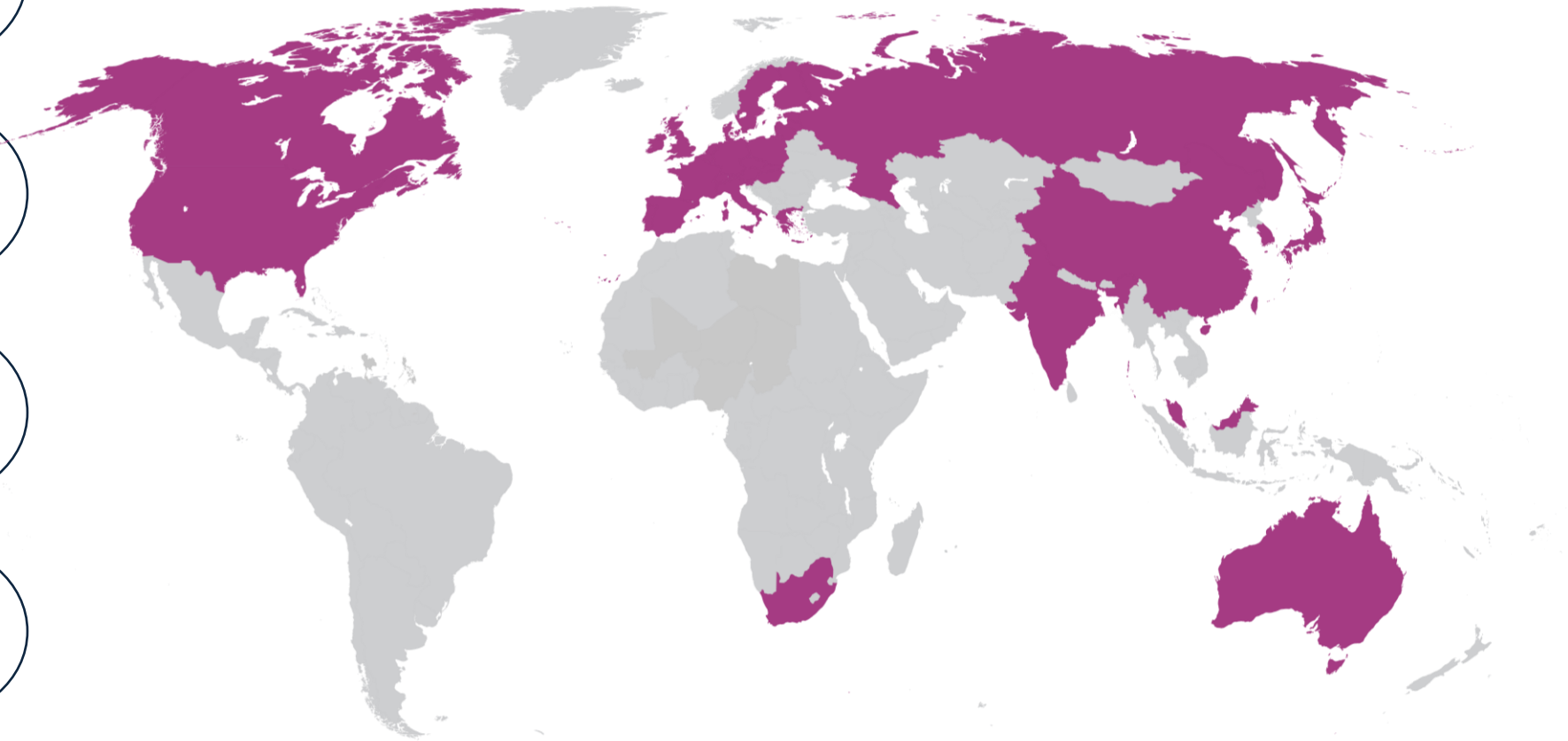
86 Internationally Granted Patents

16 Applications in PCT Phase

08 Active Patent Families

17 Trademarks

BluGlass Intellectual Property Map – Protecting key semiconductor manufacturing jurisdictions



OUTLOOK TO 2022 AND BEYOND

New Internationally Experienced LD Talent

- **Appointed industry veteran Jim Haden as BluGlass President**
- Laser industry pioneer**, Jean Michel Pelaprat** (Co-founder of Nuburu) joins the BluGlass Board
- Senior Laser Diode Scientist Dr. Arkadi Goulakov and US Facilities & Equipment Manager Peter Tienhaara join our US team

Systematically Overcoming Challenges

- Focus on delivering four key ingredients (Epi, Metals, Facets, Bonds) **to launch our first laser diode product**
- Transition to a structured phase gate product introduction process
- Capitalise on BluGlass' epitaxial foundation and capacity

Clear Roadmap to Deliver Products & Revenue

BluGlass anticipates that **early sales of our first direct-to-market laser diode samples will occur mid 2022** (single chip modules and or chip on submounts). Sales and revenue generation is anticipated to ramp up from 2023 and beyond

Large and Growing Laser Diode End Markets

Global laser revenue is forecast to exceed US$25B by 2025*, growing rapidly due to increasing smart technology adoption (EVs, renewables, smart phones, TVs and cars, and 3D printing) .
The GaN segment is growing faster than anticipated, **forecast to reach US$2.5B by 2025***

*Source: Strategies Unlimited 2020

JIM HADEN PRESIDENT'S REPORT

INDUSTRY OVERVIEW - LASER REVENUE GROWTH FORECAST (2019 – 2025)

Laser revenue near triples in past decade

Driven by the adoption of high-tech applications around the globe such as:

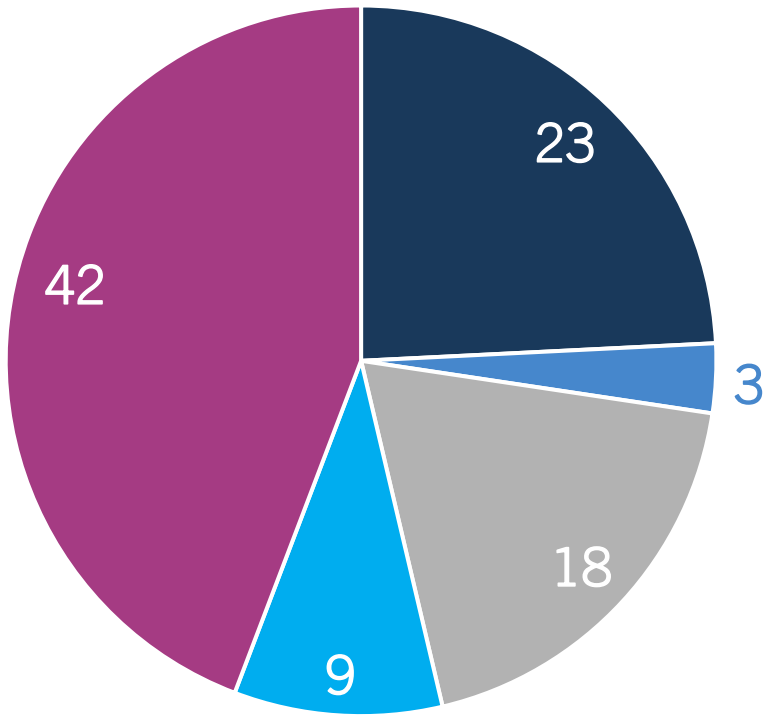
smart phones and TV's, 3D printing, electric vehicle and renewable energy storage, as well as significant growth across the industrial materials processing (automotive, aviation and others)

With growth set to increase pace over the next decade

Source: Strategies Unlimited 2020

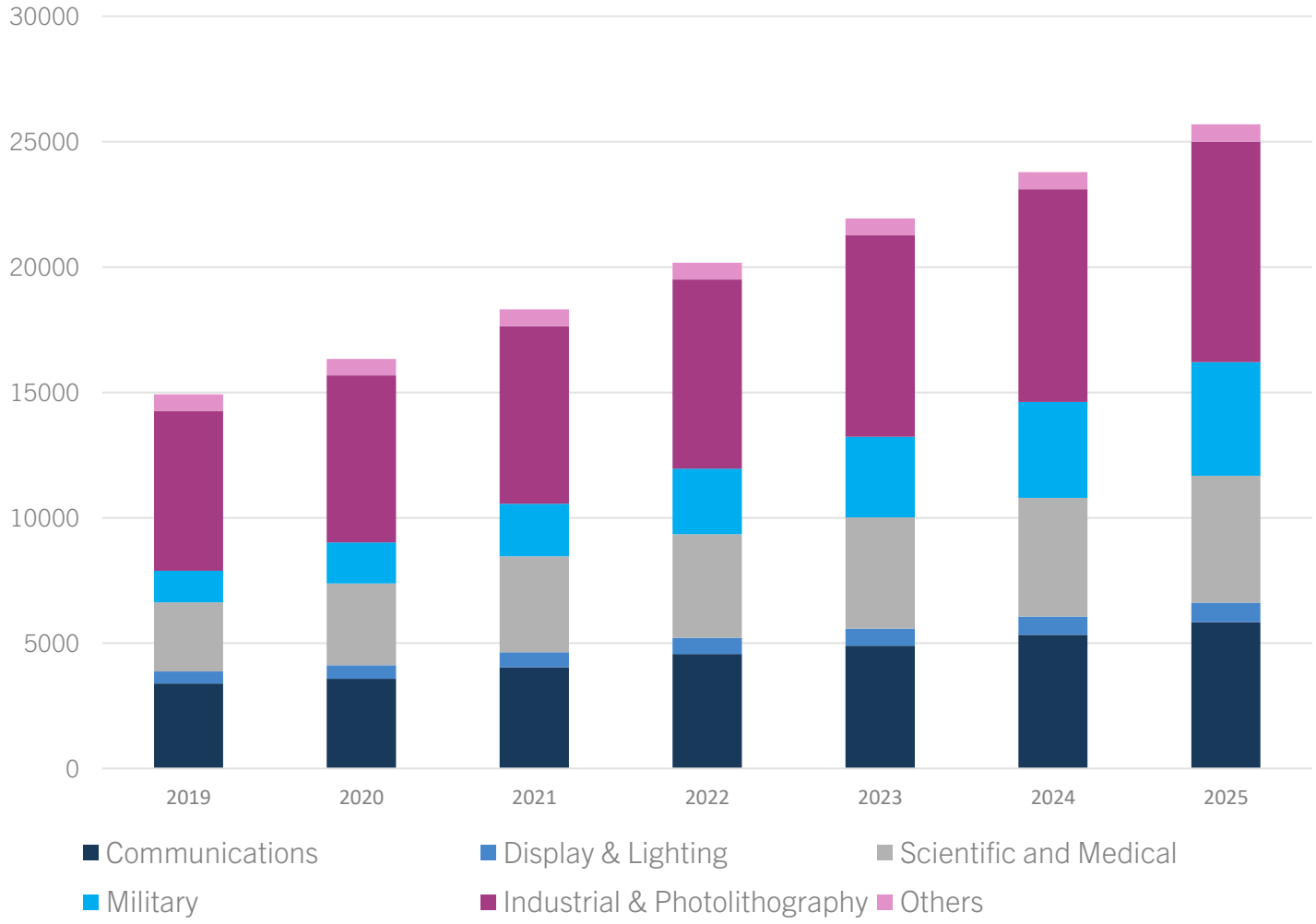
MARKET OVERVIEW – GLOBAL LASER REVENUE FORECAST BY SEGMENT (2019-2025)

Global Laser Revenue % by Market Segment 2019



Source: Strategies Unlimited 2020

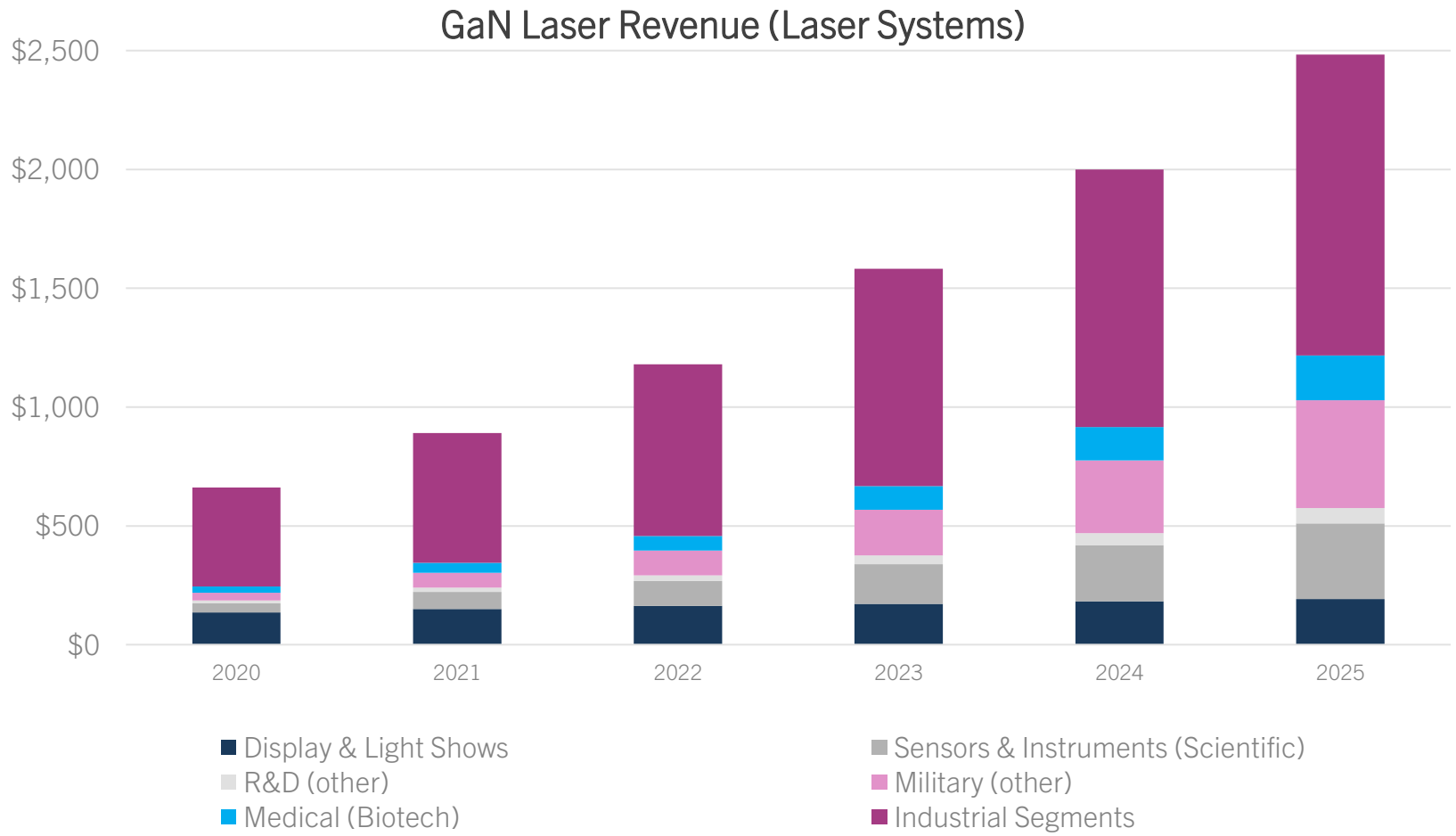
Global Laser Revenue by Market Segment (2019-2025) (US$M)



MARKET OVERVIEW – GLOBAL GAN LASER REVENUE FORECAST BY SEGMENT (2019-2025)

US$2.5B

GaN Laser Systems Revenue opportunity by 2025



Source: Strategies Unlimited and Internal BluGlass modelling based on industry sources

MARKET OVERVIEW – BLUGLASS SERVICE AVAILABLE MARKET (2020-2025)

BluGlass Service Available Market opportunity by 2025 is

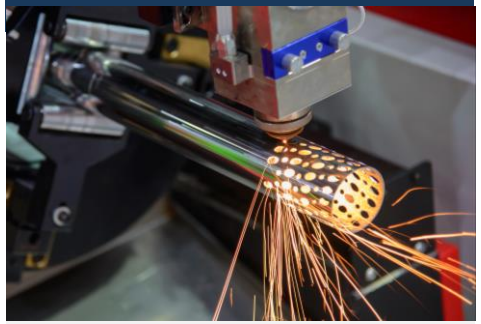
US$735M

BLG has an estimated **installed EPI Capacity** to support US$170M in revenue

Source: Strategies Unlimited and Internal BluGlass modelling based on industry sources

INDUSTRY OVERVIEW – GaN MARKET VERTICALS

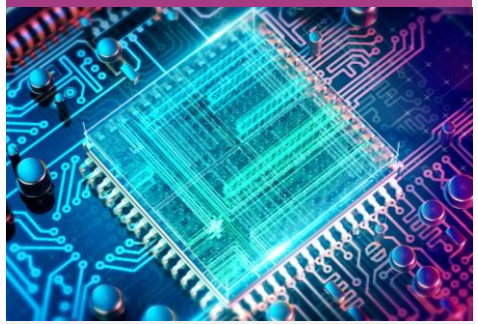
Industrial Markets



(405nm, 450nm, 525nm)

Applications:
- Welding cutting
- Machine vision
- Machine sensing
- 3D printing
- Micro-electronics
- Semiconductors

Scientific Markets



(405nm, 420nm, 450nm, 490, 525nm)

Applications:
- Raman spectroscopy
- Quantum computing
- Confocal fluorescence microscopy
- Optical clocks
- Forensics

Biotech/Life Science Markets

(405nm, 420nm, 450nm, 490, 525nm)

Applications:
- Flow cytometry
- Medical diagnostics
- DNA sequencing
- Endoscopy
- Bio-fluorescence

Display Markets

(450nm, 525nm)

Applications:
- Pico projector
- Business/Cinema projector
- Heads-up display
- Augmented reality/Virtual Reality

Lighting Markets

(450nm)

Applications:
- Automotive
- General lighting
- Spotlight/Torch

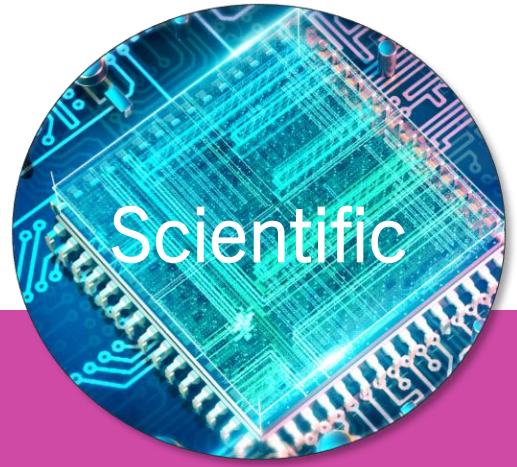
INDUSTRY OVERVIEW – BLUGLASS TARGET MARKETS

BluGlass' Industrial Product Addressable Market by 2025 is

US$240M

Target Applications: Welding, Marking, 3D Printing

Customer Landscape includes: IPG Photonics, nLight, Nuburu, Optical Engines



BluGlass' Scientific Product Addressable Market by 2025 is

US $80M

Target Applications: Quantum Computing/Sensing, Spectroscopy

Customer Landscape: Coherent, Toptica Photonics, Novanta-Laser Quantum

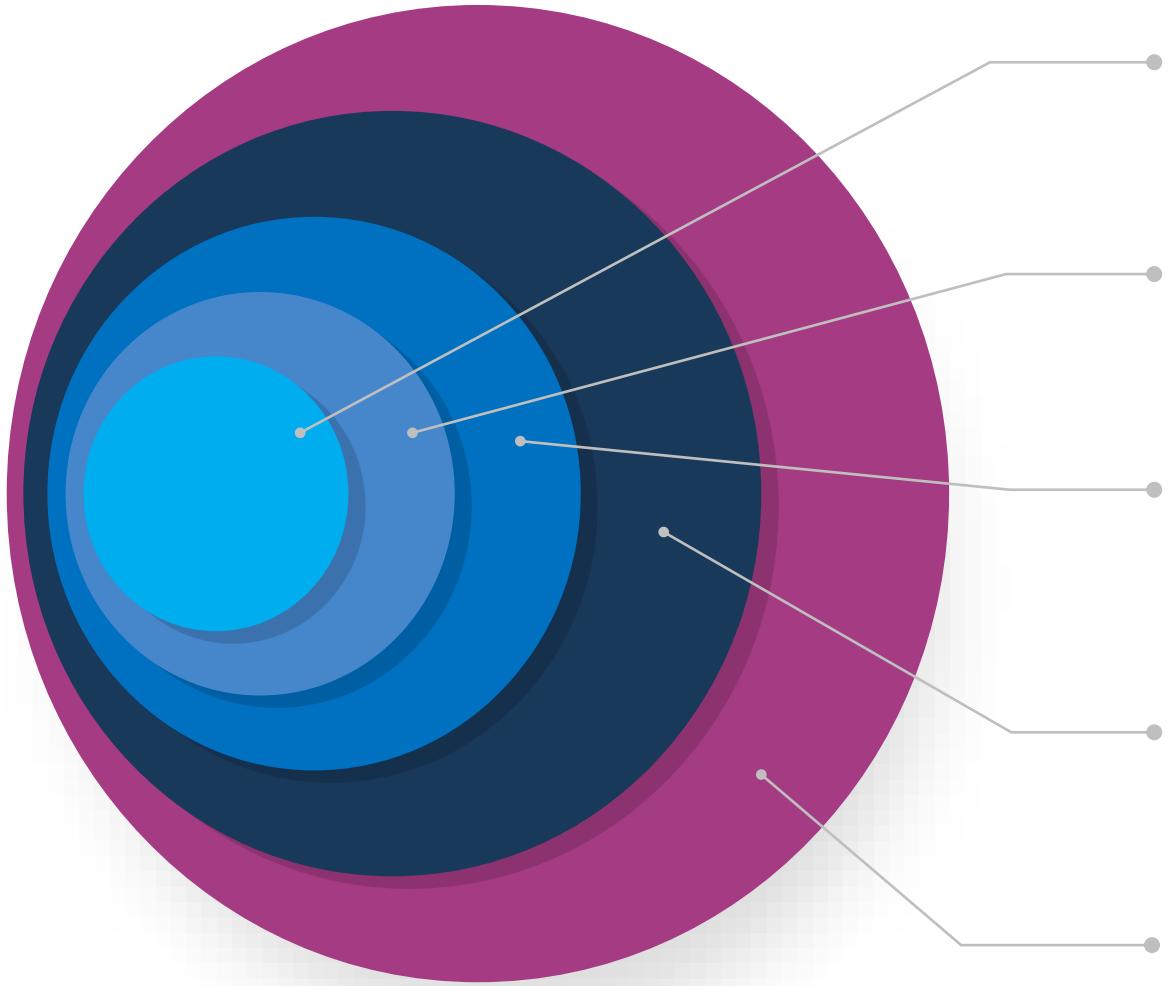
BluGlass' BioTech Product Addressable Market by 2025 is

US $60M

Target Applications: Flow Cytometry, DNA Sequencing, Photodynamic Therapy

Customer Landscape includes: (OEM's) Akela Laser, Laser Components, PicoQuant

INDUSTRY CHALLENGES - ECONOMIC DRIVERS



Increased manufacturing flexibility

Customers are looking for cost effective solutions that are easy to integrate

Power ($/W)

Price per Watt of power is a key metric. Like the price per computing power, the laser market demands reduced $/W

Brightness ($/W/mRad)

However, customers will pay higher prices for brighter sources

Efficiency ($/% Efficiency)

The power conversion efficiency is a key economic driver when considering total cost of ownership

Customer Integration ($/Customer module)

Modules that provide brighter solutions ease our customer's integration burden (material, labor, and overhead)

INDUSTRY CHALLENGES – BLUGLASS VALUE PROPOSITION

BluGlass' target market position

Providing plug and play easy-to-use laser light through:

- Unique form factors and vertically integrated packaging
- Novel laser architectures including multichip modules and RPCVD enhanced lasers to achieve brighter, cost effective, higher efficiency and higher power laser light
- Flexible and custom manufacturing

Why there is a need for BluGlass

Existing large players do not provide flexible form-factors and wavelengths – requiring significant customisation and post purchase packaging by customers

How BLG meets these needs: Short-Term

Focused on addressing customer requests to serve unmet needs across 405 to 450 nm laser diodes with standard packages

How BLG meets these needs: Long-Term

We will address unmet needs, offering an expanded range of wavelengths, form factors and package integration options

Deliver novel laser architectures designed to increase efficiency, power, and brightness while reducing customer integration costs – providing the industry's leading easy-to-use laser light

PLAN TO TRANSITION BLUGLASS TO PRODUCTION & PROFITABILITY

Achieve a competitive advantage:

outperforming rivals through a combination of strategic positioning and operational effectiveness

- Strategic positioning: Perform different activities or similar activities in different ways (core competencies such as our proprietary and patented epitaxial-growth techniques)
- Operational Effectiveness: Develop and perform operational competencies better than our competitors (supply chain management and what to insource)

SHORT AND LONG-TERM STRATEGIC REQUIREMENTS

Short-term Objectives

- Develop an initial laser diode solution that provides satisfaction to the immediate market
- Put the company on a path of continuous improvement

Satisfy all three conditions of a successful strategy:

- Profit
- Security
- Market Satisfaction

Long-term Objectives

PLAN TO TRANSITION BLUGLASS – PRODUCT

1. PRODUCT

Provide continuous flow of in-demand products to the market:

- Focus on delivering four key ingredients (Epi, Metals, Facets, Bonds) to launch our first laser diode product
- Capitalise on our epitaxial foundation
- Conduct non-product module short-loops to qualify contract manufacturers & product
- Longer-term: Transition to a structured phase gate product introduction process

PLAN TO TRANSITION BLUGLASS – CULTURE & TALENT

2. CULTURE

Transition from licensing to a product development and production culture:

- Maintain culture of entrepreneurial innovation
- Instil a culture of production discipline
- Apply production protocols:
  - Statistical Process Control (SPC) & yield correlations
  - Module metrics for success indicators

3. TALENT

Attract and retain BluGlass' world-class innovative team:

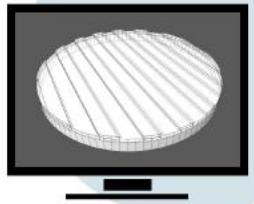
- Ensure we have the right talent optimized based on our needs and funding
- Align goals to top-level for each employee

BLUGLASS LASER DIODE MANUFACTURING STEPS

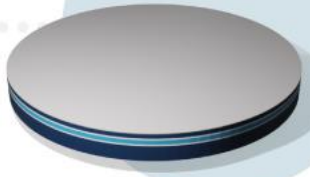
Inhouse steps

Currently out-sourced steps

DESIGN/MODEL

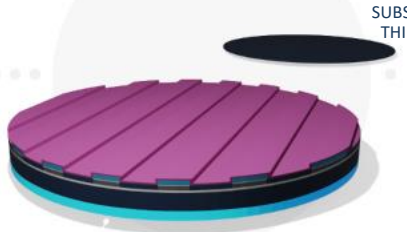


EPITAXIAL WAFER GROWTH

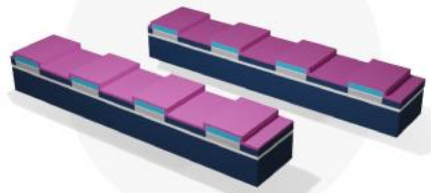


WAFER FABRICATION

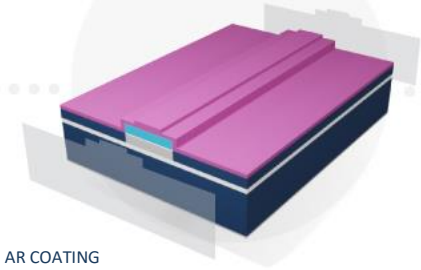
WAFER FABRICATION STEP 2



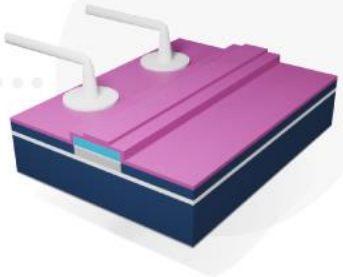
CLEAVE



HR COATING

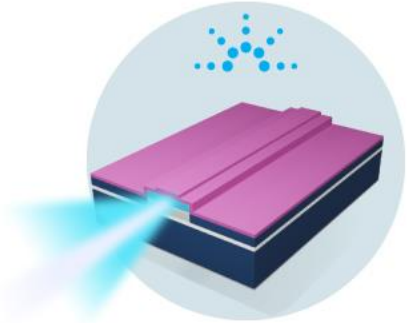


FACET COAT



CHIP ON SUBMOUNT (CoS)

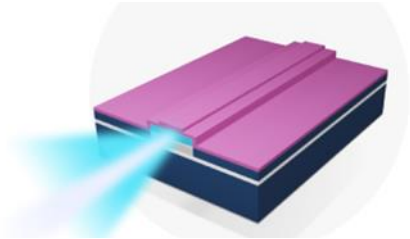
RELIABILITY TESTING

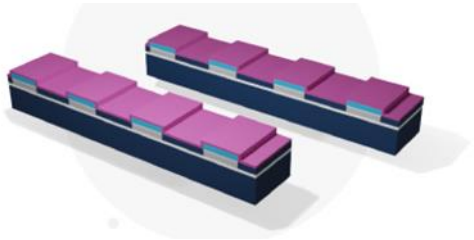


LASER DIODE PRODUCT READY FOR PACKAGE INTEGRATION

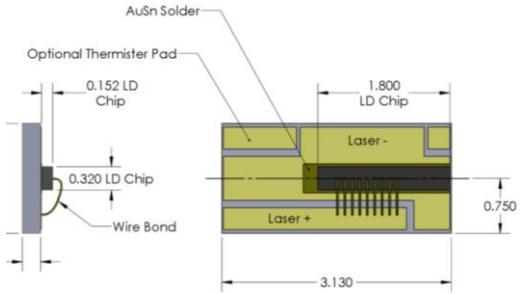
BLUGLASS LASER DIODE FORM FACTOR OFFERINGS

Single Emitters & LD Bars



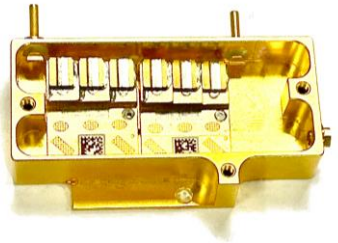


Chip-on-Submount (CoS)

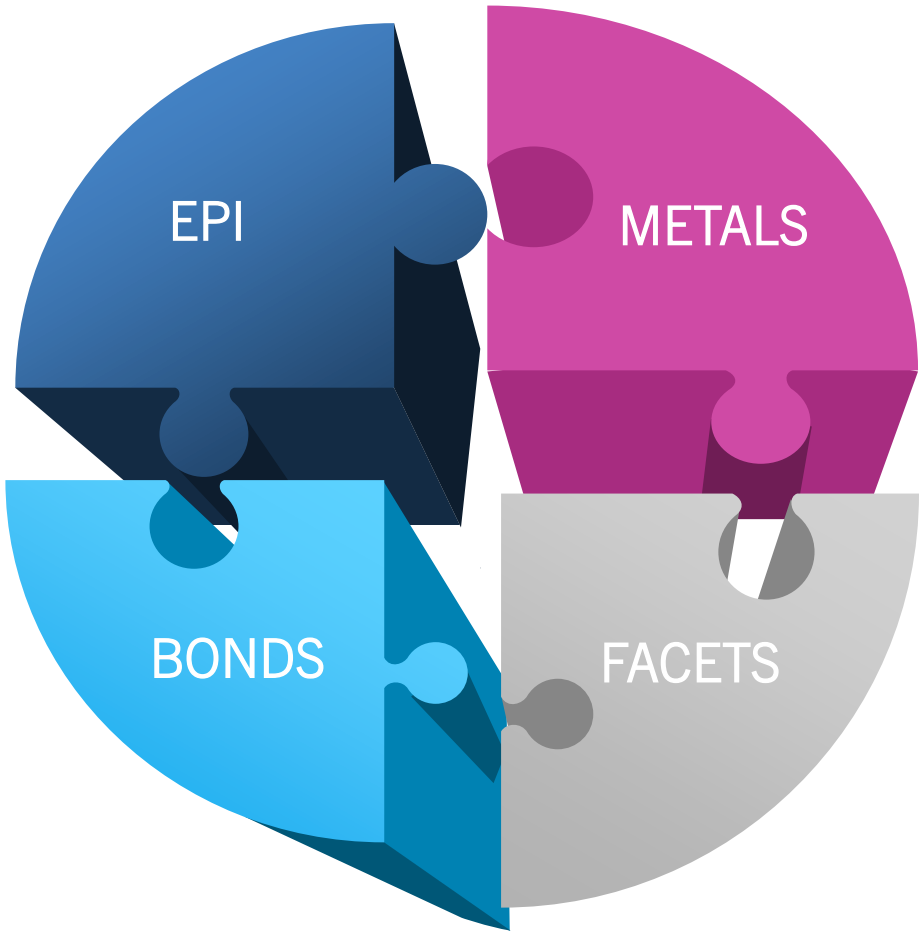


Individually Packaged Devices

Multi-Chip Modules



THE FOUR KEY INGREDIENTS FOR RELIABLE COMMERCIAL LASER DIODES



01. EPI - Low loss, high gain epitaxy

- Develop quick turn epitaxial diagnostic growth metrics
- Establish feedback loop to refine laser structure and growth conditions
- Refine reactor strategy and allocation. Our estimates suggest we have the epi capacity to reach 20%-25% of our 2025 service available market (US$735M SAM)

02. METALS - Low resistance ohmic contacts

- Design low resistance n & p metal layers required for high-efficiency operation
- Refine cleaning and annealing processes to ensure good adhesion, uniform resistance, and subsequent cavity pumping

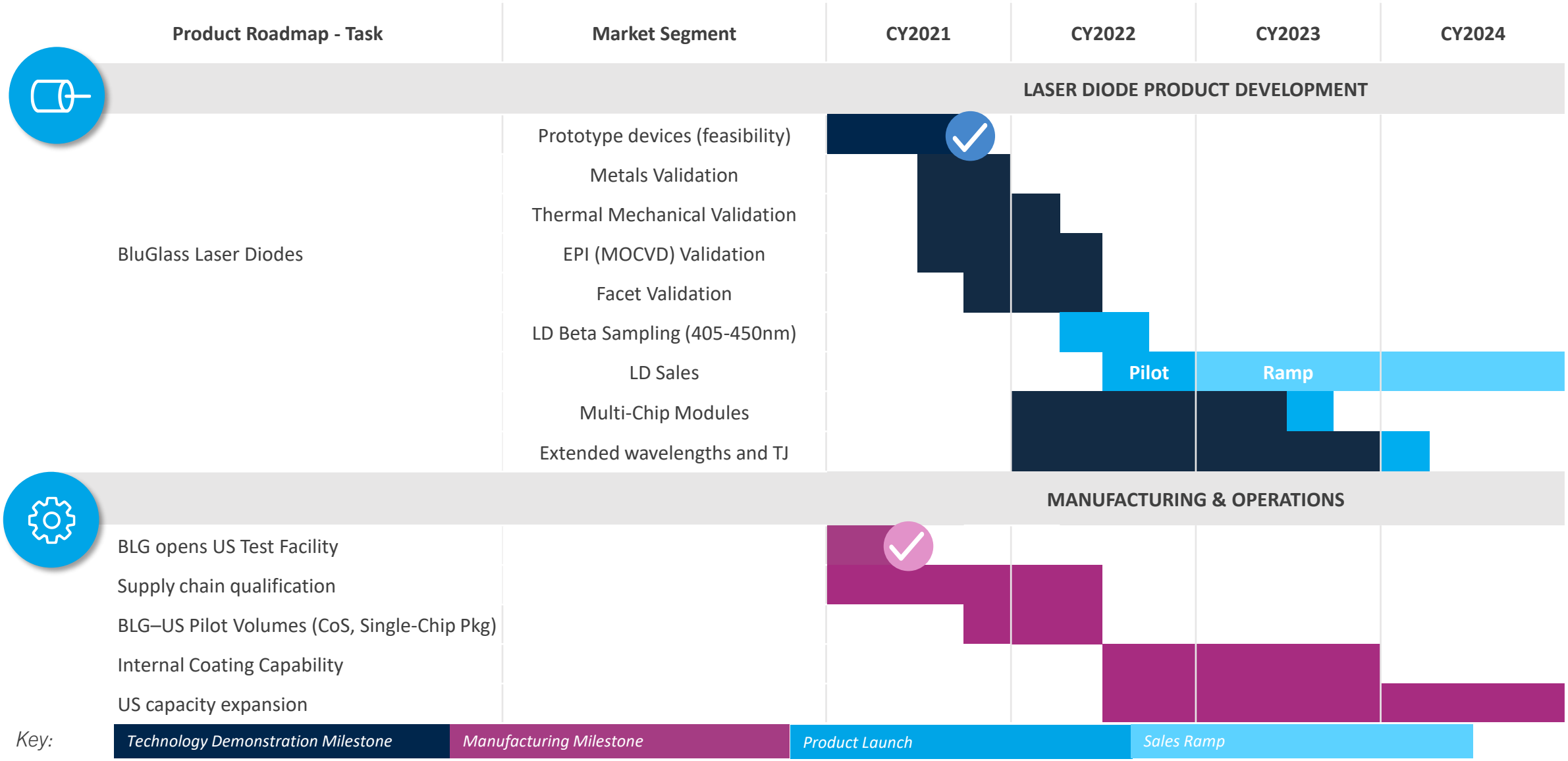
03. FACETS – Clean cleave and low loss AR and HR coatings

- Resolve observable facet damage
- Refine AR and HR coating processes

04. BONDS – Thermal mechanical bond

- Sound thermal bond to enable heat flow away from the laser
- Sound mechanical bond to withstand heating and cooling events during normal laser cycling

LASER DIODE PRODUCT AND OPERATIONS TIMELINE



BLUGLASS LASER DIODE PRODUCT SALES ECONOMIC SCENARIOS

Aggregate Market Share of % of TAM is based on the timely achievement of technical milestones.

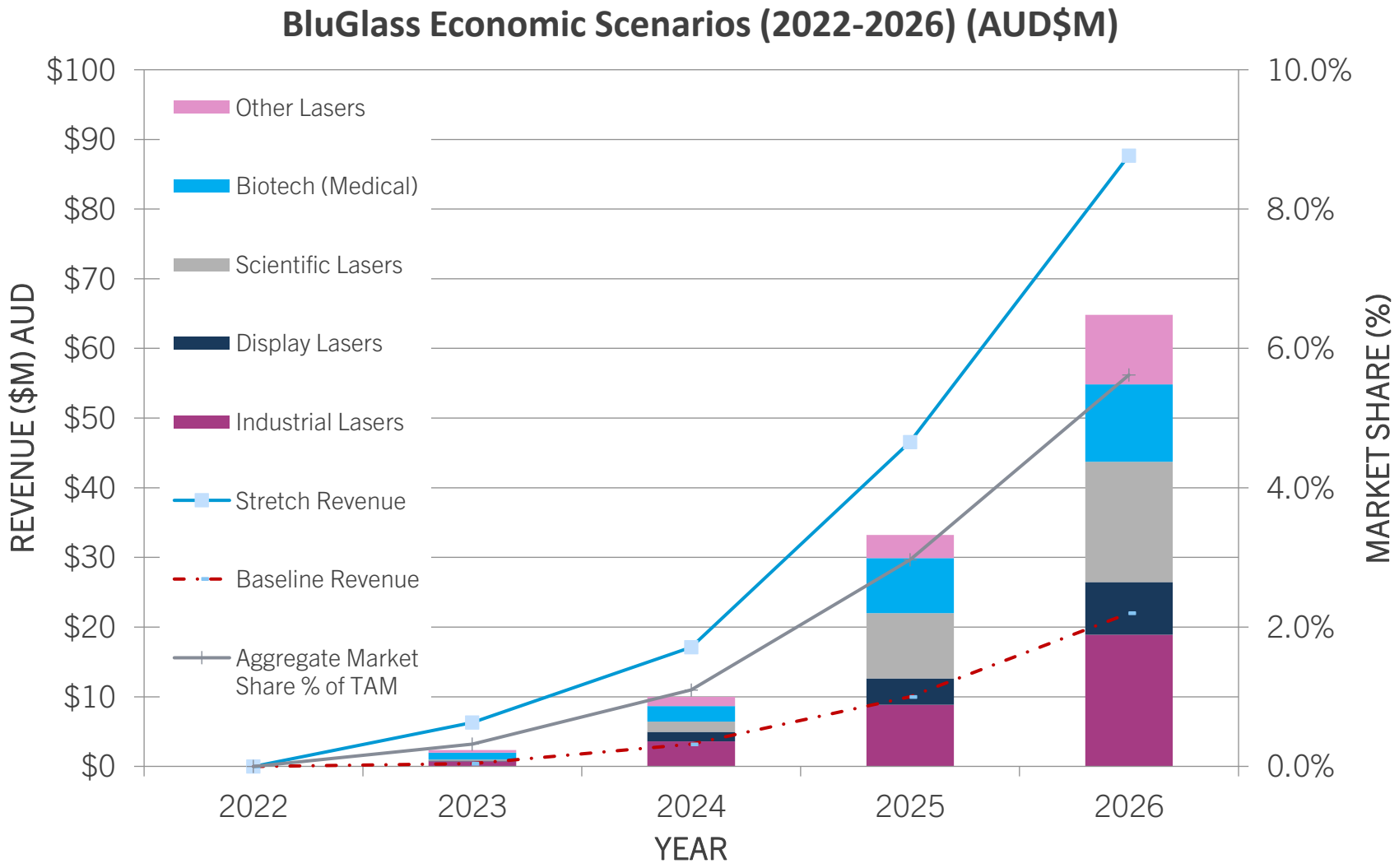
Stretch revenue is based on the timely achievement of BluGlass' technical milestones and accelerated customer demand and market growth.

Baseline revenue is based on a delay in the attainment of certain technical milestones that reduces the number of laser diode products for sale or slower customer demand and market growth.

Assumptions used in creating these scenarios:

BluGlass' economic scenarios rely on key technology (including RPCVD & tunnel junction performance), financing, supply chain and market penetration assumptions.

Any failure to achieve the assumed outcomes will have a material affect on the economic scenarios outlined here. In particular, BluGlass has not yet solved reliability in order to launch its first laser diode products, and any target market revenues outlined should be considered speculative until proven.



Source: Internal BluGlass modelling based on industry sources, including Strategies unlimited, Markets & Markets, Laser & Photonics Marketplace 2020

SUMMARY AND OUTLOOK

Bringing Innovation

TO LIFE

Solving reliability to launch range of laser diode products to market

BluGlass is focused on delivering the four key elements to achieve reliable, commercial products ready for sale:
(Epitaxy, Metals, Facets and Bonds)

Strategic positioning

BluGlass is delivering products to address significant unmet needs in the industry to provide

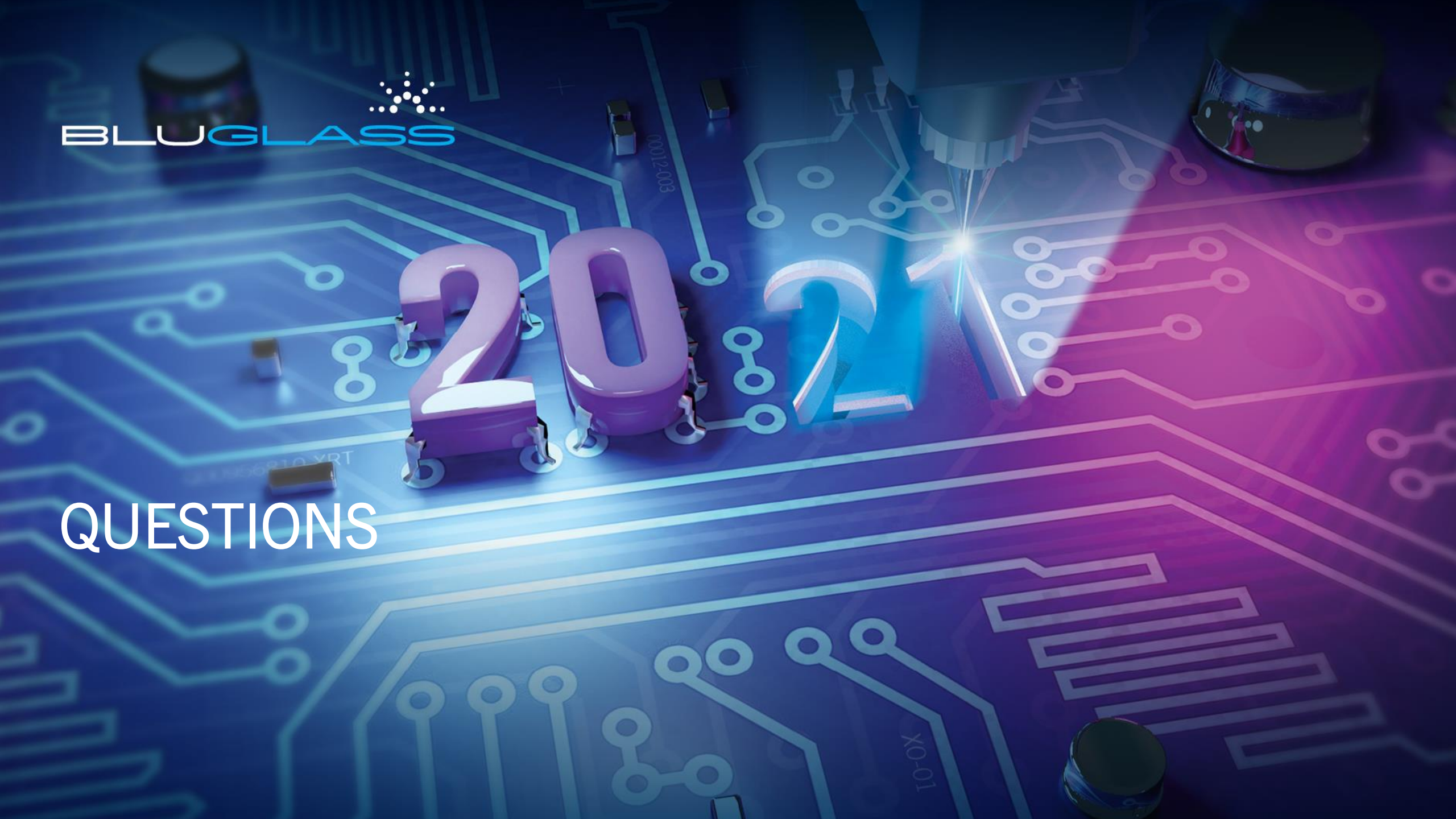
- unique form factors
- vertical package integration
- novel laser architectures including multi-chip arrays and RPCVD enhanced lasers

Large and growing end markets

BluGlass' end market opportunity is growing rapidly to represent a $2.5B market with very few competitors (market is comprised of three main suppliers presently)

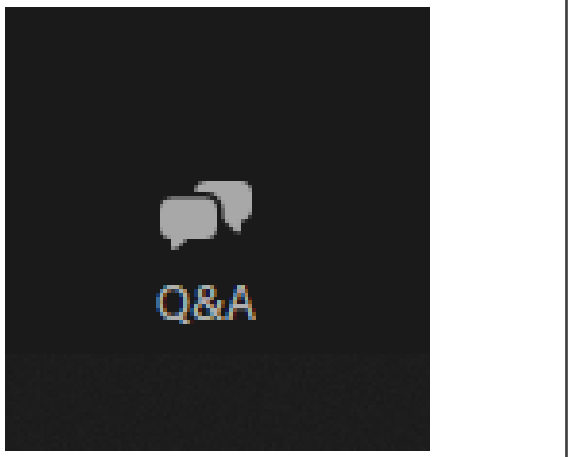
Providing plug-and-play easy-to-use light

By delivering unique form factors and vertical package integration and novel laser architectures including multi-chip arrays and RPCVD enhanced laser

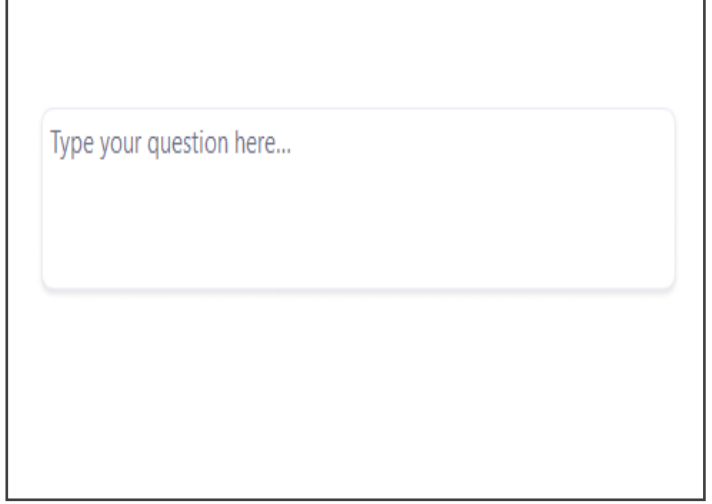

BLUGLASS
2021
QUESTIONS

Online Q&A

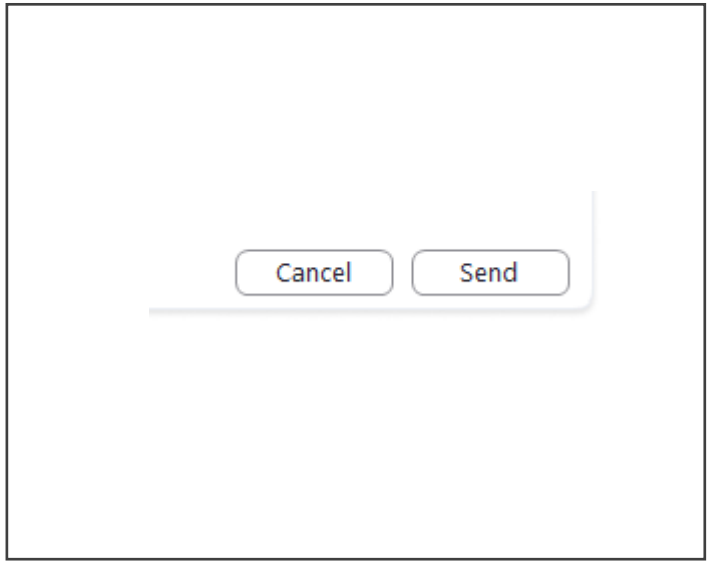
1. Click on the Q&A icon



2. Type your question in the new Q&A window



3. Hit enter on your keyboard to submit your message



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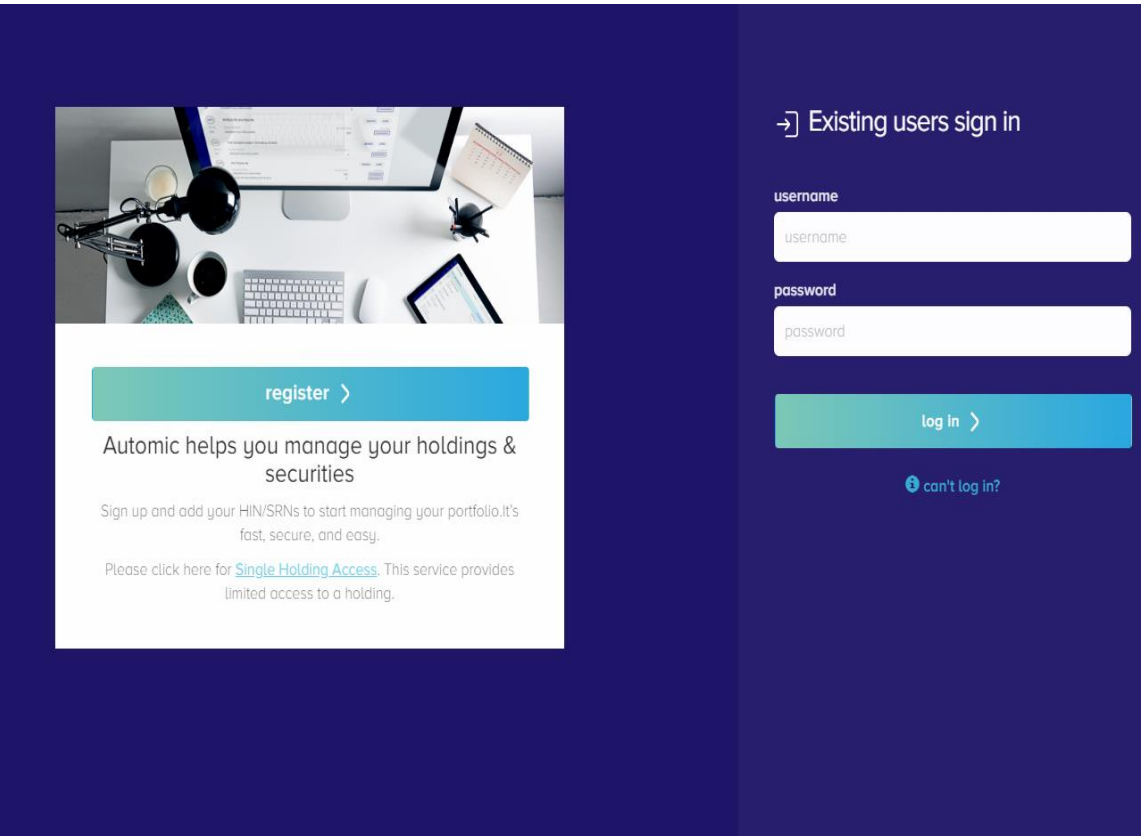
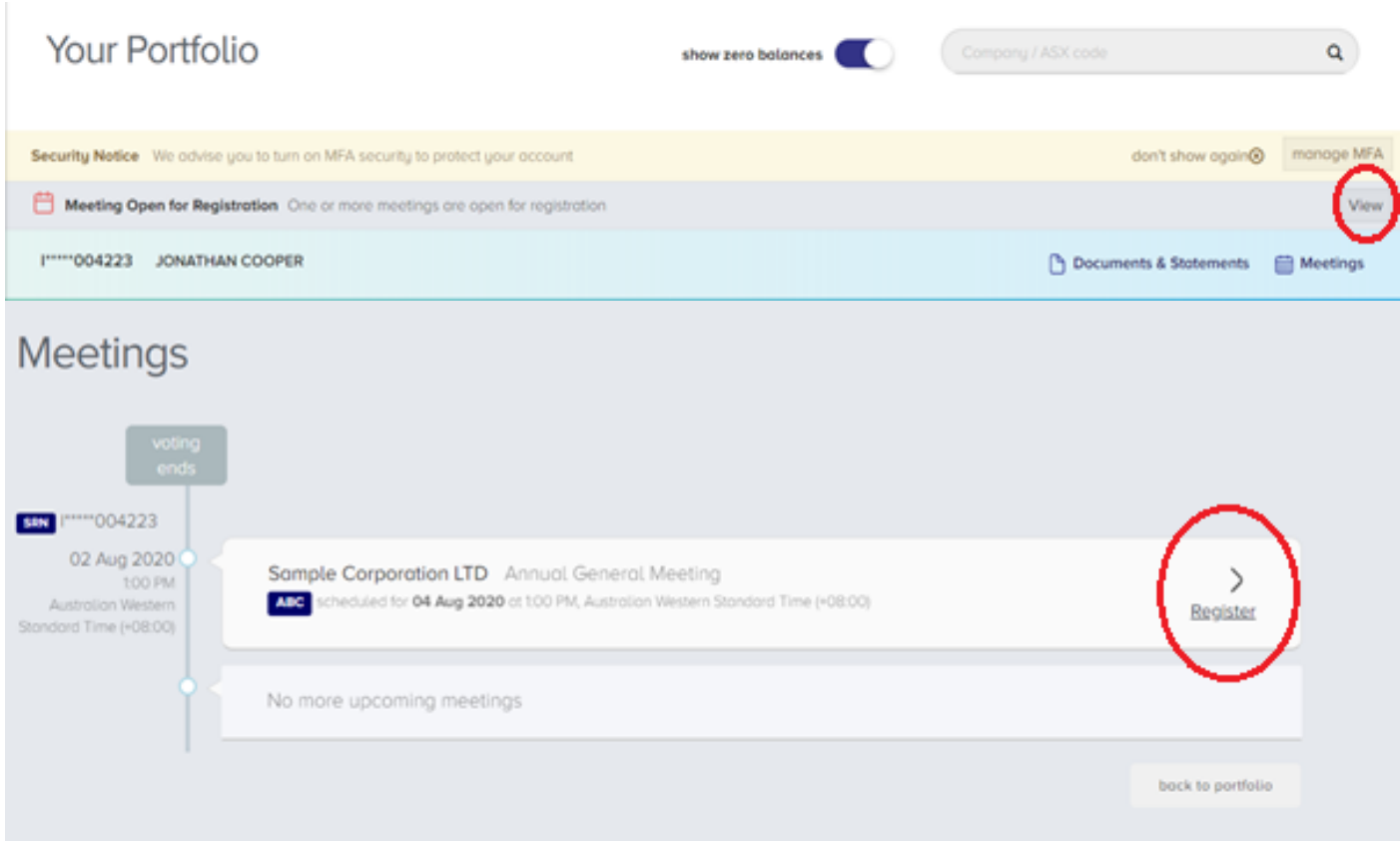
BLUGLASS
2021
OFFICIAL BUSINESS

Voting Instructions: Automic Portal



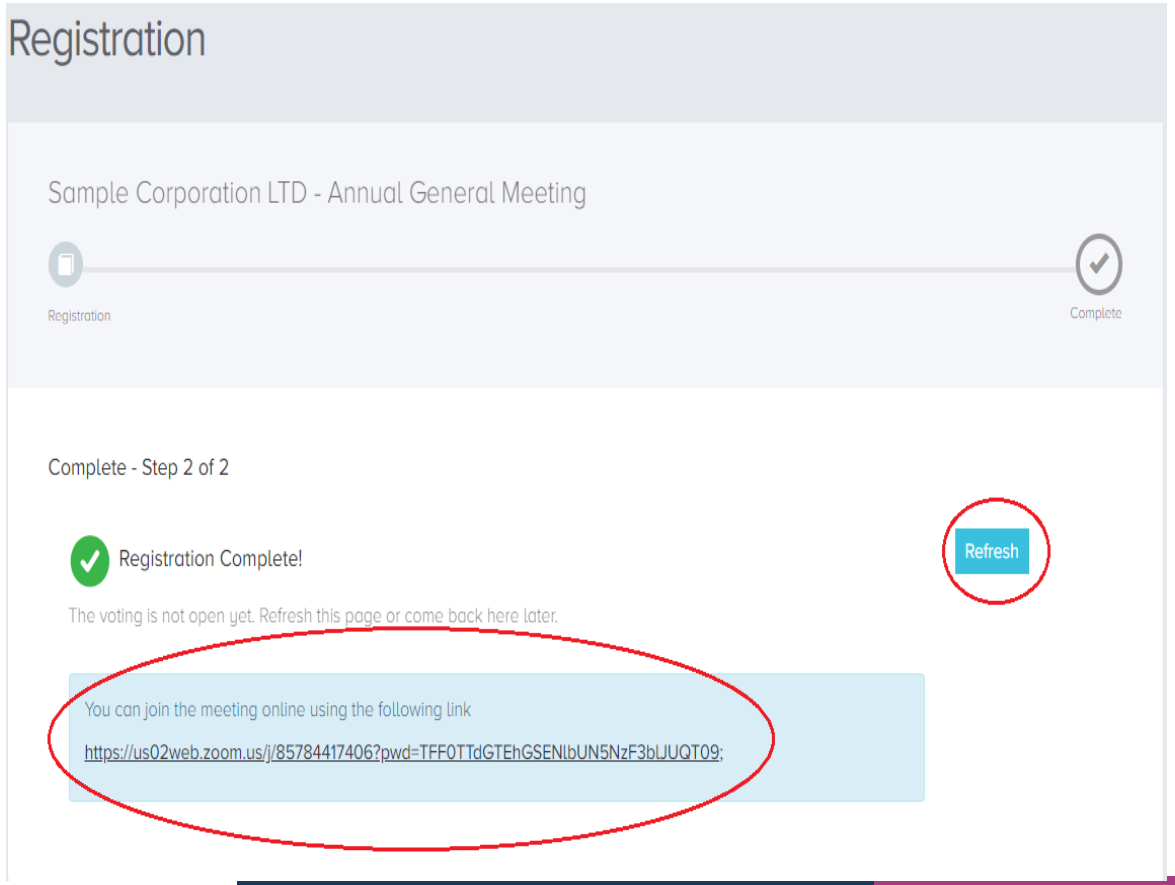


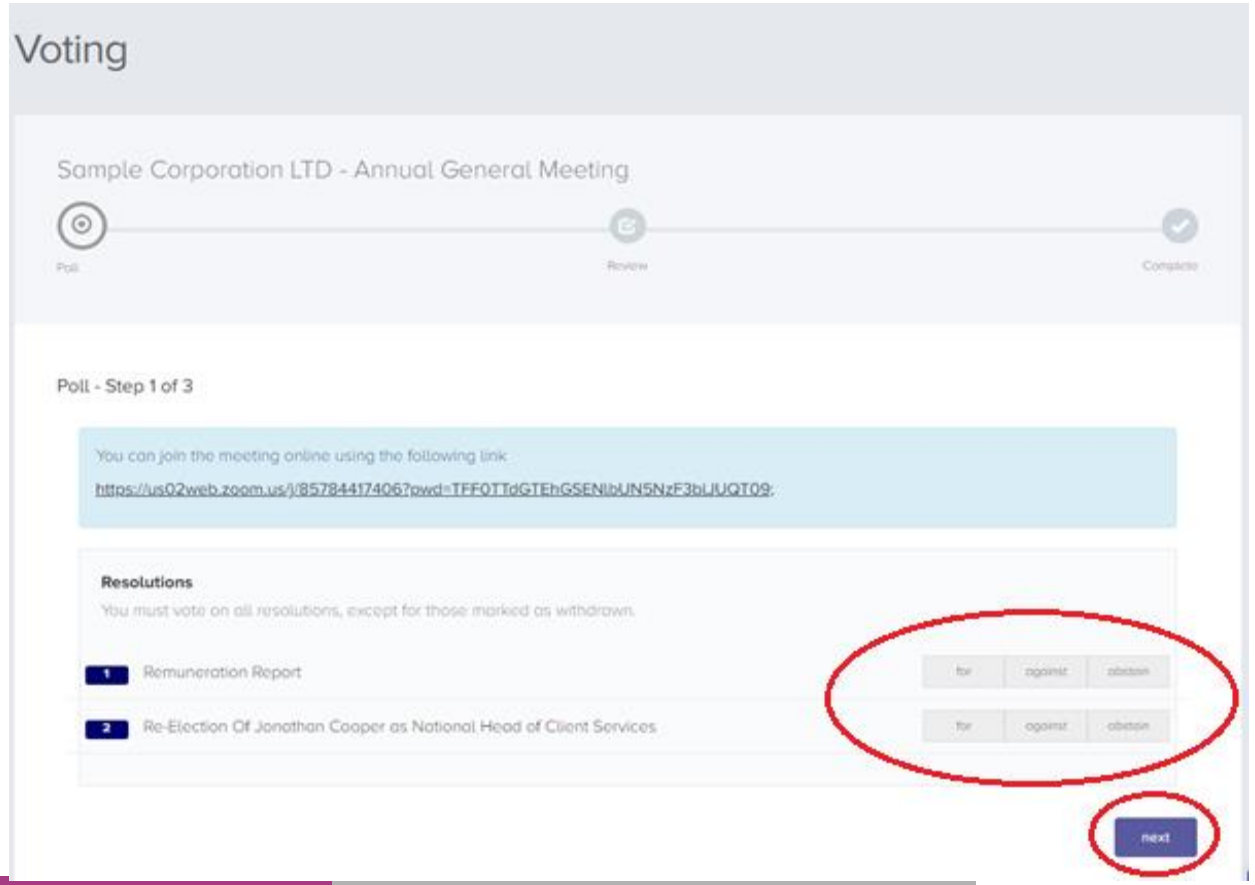
1
Go to https://investor.automic.com.au/#/home

2
Once logged in you will see that the meeting is open for registration. Click on “view”

3
Click on “register” to register your attendance for the meeting

Voting Instructions: Automic Portal





4

Once the Chair of the Meeting declares voting open, you should select “refresh”

5

To vote simply select the direction in which you would like to cast your vote, the selected option will change colour.

6

Once voting is declared closed you must select “next” and then “confirm” to submit your vote.

THANK YOU

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