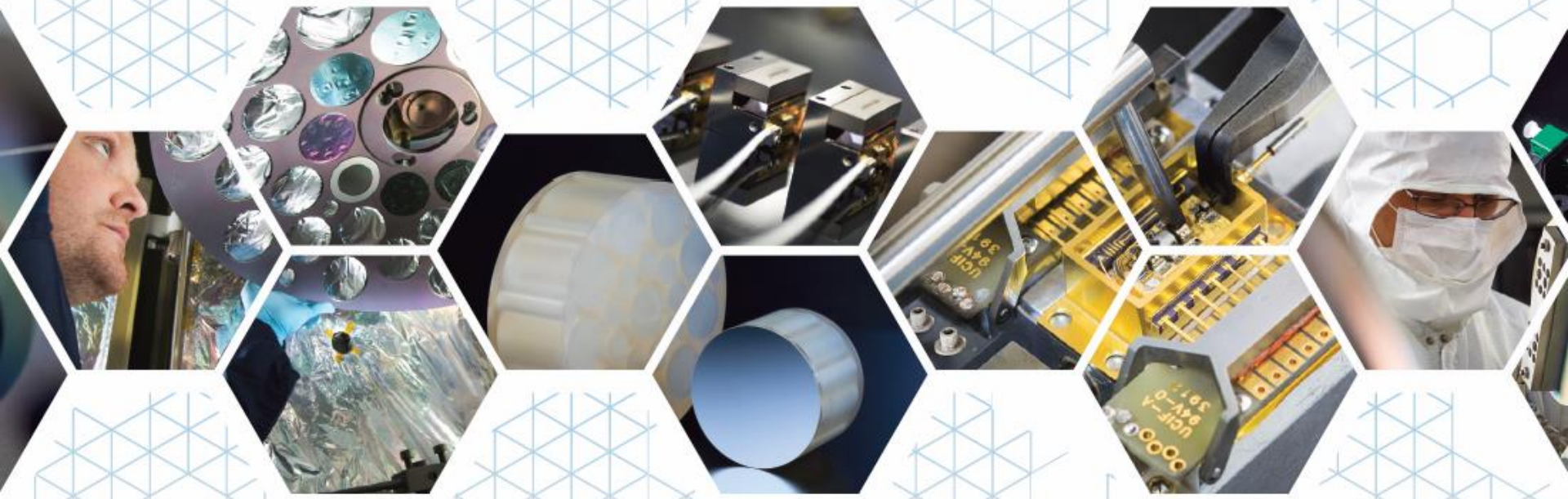


PRELIMINARY FULL YEAR RESULTS

YEAR ENDED 30 SEPTEMBER 2019

CEO: Mark Webster / **CFO:** Chris Jewell

Gooch & Housego
ENABLING PHOTONIC TECHNOLOGIES

Key highlights – strategic progress

- **Trading:** as previously disclosed, challenging macro-economic environment in our industrial laser sector, contrasted with record levels of demand for fibre optics, hi-reliability fibre couplers used in undersea cables and life science products
- **Industrial laser products**: we believe that technical innovation in end markets and new manufacturing techniques, combined with our market leading position will ultimately drive improved demand
- **Strategic investment**: we invested to deliver a multi-year growth phase of hi-reliability fibre couplers and new US A&D contracts. Further investment in R&D projects that represent the highest return for our photonics technologies
- **Life Science business**: more than doubled in size compared with last year driven by growth in our existing market areas, strongly supported by the addition of ITL which performed ahead of our expectations since its acquisition in August 2018
- **Strategic goals**: we made considerable progress on further diversification and moving up the value chain, in large part due to the continued growth in our A&D and Life Science businesses

"Despite challenging trading conditions in industrial laser markets we made considerable progress against our strategic goals of diversification and moving up the value chain, due in large part to the performance of A&D and Life Sciences."
Mark Webster, CEO

G&H
ENABLING PHOTONIC TECHNOLOGIES

Key highlights – strategic progress

Financial

- Revenue of £129.1 million, 3.4% ahead of previous year, flat excluding foreign exchange
- Adjusted profit before tax of £15.0 million, down 19.9%. This reflects both the lower market demand for relatively higher margin critical components for industrial lasers and the investment required to deliver multi-year growth in hi-reliability fibre couplers and new US A&D contracts
- Capital expenditure of £5.9m. Net debt of £14.3m (c.0.7x Adjusted EBITDA)
- Full year dividend increased to 11.5p, reflecting the Board's long term confidence in the business
- Order book of £94.4m, 1.8% lower than same time last year. This reflects strong demand for fibre optics, hi-reliability fibre couplers and our A&D and life science capabilities, whilst industrial laser demand is yet to recover to more "normalised" levels

"The Board is confident that G&H will continue to make progress in FY 2020 and beyond."

Mark Webster CEO

G&H
ENABLING PHOTONIC TECHNOLOGIES

Financial headlines

Summary Income Statement

Year Ended 30 September	2019 £'000	2018 £'000	% Change
Revenue	**129,133**	124,883	3.4%
Gross profit	**44,902**	50,072	(10.3)%
Adjusted operating profit	**16,254**	19,100	(14.9)%
Adjusted operating profit %	**12.6%**	15.3%	
Adjusted profit before tax	**15,016**	18,757	(19.9)%
Adjusted basic earnings per share	**46.8p**	57.2p	(18.2)%

"We have continued to invest in extra capacity for high growth areas. Elsewhere we 'right sized' in sites affected by current demand levels for industrial lasers, while retaining core skills".
Chris Jewell, CFO

- Revenue growth of 3.4% yoy, (0.2)% excluding foreign exchange, (8.0)% excluding foreign exchange and acquisitions/disposals.
- 46:54% H1/H2 revenue split, with strong last quarter
- Gross margins reduced to 34.8%, from 40.1% in the prior year, due to the decline in demand for the relatively higher margin industrial laser products, and additional costs on some A&D development contracts
- Invested £7.3 million in R&D representing 6.0% of revenue, on a 'like for like' basis at a similar level to FY 2018
- Adjusted effective tax rate was 22.2% (FY 2018: 24.9%)
- Adjusted basic earnings per share at 46.8p

G&H
ENABLING PHOTONIC TECHNOLOGIES

Financial headlines

Cash Flow

Year Ended 30 September	2019 £'000	2018 £'000
Net cash flow from operating activities	**11,646**	**9,170**
Cash flow from investing activities		
Acquisition of subsidiary	(3,940)	(24,029)
Purchase of property, plant and equipment & intangibles	(7,412)	(7,226)
Sale of property plant and equipment	1,480	384
Interest received	21	9
	(9,851)	**(30,862)**
Cash flow from financing activities		
Movement in borrowings	(74)	17,256
Interest paid	(1,116)	(304)
Dividends paid to ordinary shareholders	(2,849)	(2,647)
	(4,039)	**14,305**
Net decrease in cash	**(2,244)**	**(7,387)**
Exchange gains	323	395
Cash and cash equivalents	**17,512**	**19,433**

- £6.6 million build in working capital, primarily driven by inventory
- 50% of the inventory growth to support growth in FY 2020 from our Fibre Optic and Life Science businesses. The remainder is for the industrial laser market where recovery has been slower than expected
- Capex and Devex of £7.4m – manufacturing capabilities and business systems. Proceeds of £1.5m from the sale of the Orlando facility.
- Acquisitions – final payments in the year for the StingRay and Kent Periscopes acquisitions
- Net debt position of £14.3 million, 0.7x net debt/ Adjusted EBITDA
- Group banking facility of $40 million RCF and $20 million uncommitted accordion extends to August 2021

G&H
ENABLING PHOTONIC TECHNOLOGIES

Industrial

Financials (47% of FY19 revenue)

	FY19	FY18	Reported growth
Revenue	£60.9m	£72.9m	(16.5)%
Adjusted operating profit	£9.0m	£12.3m	(26.8)%
% margin	14.8%	16.9%	(210bp)

- Revenue decline driven by cyclical slowdown in industrial lasers, US/China tariff dispute and a very strong comparator year in FY 2018
- We believe that technological innovation in end market applications, such as 5G and the introduction of new laser based manufacturing techniques, will ultimately drive improved demand for our industrial laser products
- In contrast demand for fibre optic products and hi-reliability fibre couplers is at record levels. Hi-reliability fibre couplers are undergoing a multi-year growth phase driven by 'Silicon Valley' companies laying their own undersea cable networks and doubling of the number of fibre couplers used per repeater
- 'Harsh environment' sensing and scientific research also had strong demand
- Margins in this segment declined 210 bps reflecting the lower volume demand for the relatively higher margin industrial laser products and investment in capacity for hi-reliability fibre couplers

Industrial Lasers	Optical Comms	Metrology	Remote Sensing	Semi-conductor	Scientific Research

G&H
ENABLING PHOTONIC TECHNOLOGIES

Aerospace & Defence

Financials (34% of FY19 revenue)

	FY19	FY18	Reported growth
Revenue	£44.2m	£40.8m	8.4%
Adjusted operating profit	£3.5m	£5.7m	(38.6)%
% margin	7.9%	14.0%	610bp

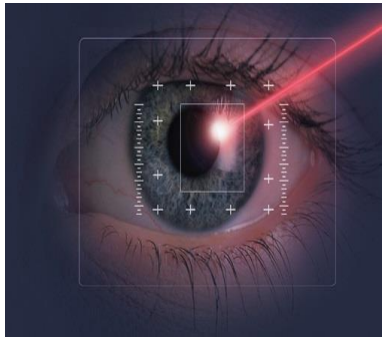
- Revenue growth of £3.4 million or 8.4%, on an organic basis 5.9%
- G&H is now able to bring a wide range of photonic capabilities that very much represent the ‘direction of travel’ in this sector. For example, design and engineering of complex optical arrays in the IR spectrum for targeting, surveillance and LIDAR capability in UAVs. Space satellite communication is undergoing a technological revolution and G&H is at the forefront of laser based long range secure communications. The acquisition of GFO now provides enhanced access for our fibre based business to tier one US A&D companies
- During FY 2019 we were able to win a number of high profile US A&D contracts and we have put in place an enhanced organisation in our Boston facility to deliver these multi year projects
- Profit margins were lower due to additional costs incurred as we completed complex development programmes that are now entering their production phase. We expect margins to improve in FY 2020
- The order book for our A&D business is strong as we enter the new financial year

Target Designation & Range Finding	Guidance & Navigation	Counter-measures	Space Photonics	Periscopes & Sighting Systems	Opto-mechanical sub systems

Life Sciences/Biophotonics

Financials (19% of FY19 revenue)

	FY19	FY18	Reported growth
Revenue	£24.1m	£11.2m	114.7%
Adjusted operating profit	£5.1m	£1.6m	212.8%
% margin	21.2%	14.6%	660bp



- Revenue growth of £12.9 million or 114.7%, on an organic basis by 22.4%
- Driven by growth across three main G&H subsectors of OCT, laser surgery and microscopy and full year effect of ITL, acquired in August 2018, whose performance has exceeded our expectations
- Our OCT technology is widely used in ophthalmology for 3D retina scanning and now use of the same technology has started to deliver growth in cardiovascular disease and cancer detection from US based medical diagnostic companies
- Profit margin grew significantly thanks to the benefits of greater volume in our existing subsectors and the improved financial profile of the system based ITL business
- We will continue to invest in R&D and look for further strategic acquisitions with the aim of bringing the revenue into line with the other sectors

Optical Coherence Tomography (OCT)	Laser Surgery	Microscopy	Systems

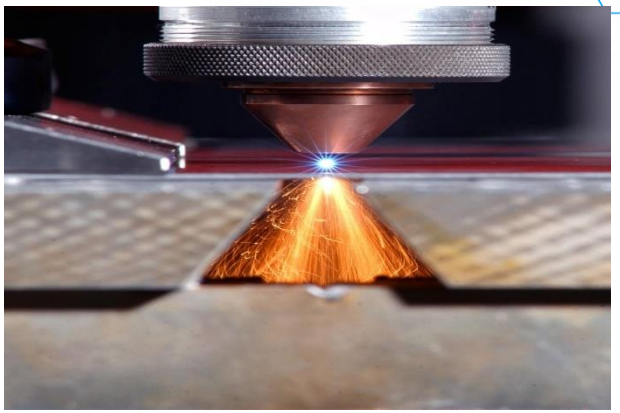
G&H
ENABLING PHOTONIC TECHNOLOGIES

Our Strategy

Remains diversification & moving up the value chain

Diversify

Aim to establish ‘critical mass’ in both the A&D and Life Science sectors and in an ‘ideal world’ there would be an equal split between the three market sectors across G&H. A&D represents 34% of FY 2019 revenue, Life Sciences more than doubled in size during FY 2019 and now represents 19% of revenue.



Exploit near/ medium term opportunities in:

- Precision and ultrafast lasers and laser systems
- Optical sensing in harsh environments
- Space satellite communications
- Opto-mechanical systems for UAVs
- Optical systems for armoured vehicles
- Laser surgery
- OCT medical diagnostics
- Laser Microscopy
- Medical diagnostic systems

Move up the value chain

- Generate growth by adding value for our customers through enhanced design, engineering, systems and service capability
- Leverage excellence in components to become a systems or solutions provider
- In FY 2019 35.7% of revenue in systems and subsystems compared with 25.6% in previous year

G&H
ENABLING PHOTONIC TECHNOLOGIES

Performance improvement programme

On track, delivering sustainable benefits

- The three manufacturing centres – Acousto Optics/Electro Optics, Fibre Optics and Precision Optics/Systems – now cover ten of our twelve manufacturing sites. Each manufacturing centre head's role is to ensure that best practice is shared, there is process harmonisation and optimal allocation of resource

- The three customer facing business units mirror our traditional market sectors of Industrial, A&D and Life Sciences/Biophotonics. Each unit is responsible for the sector's strategy and longer term planning. They report into our newly appointed Chief Commercial Officer, Adrian Meldrum

- Further investments were made in our business systems. Roll out of common operating system to all sites making good progress. Common operational metrics and financial costing methodologies now in place across the manufacturing centres

- We have been agile in responding to changes in market demand. In FY 2019 we increased capacity for hi- reliability fibre couplers and elsewhere 'right sized' the organisation to respond to the current demand in the industrial laser sector ,while retaining core skills

G&H
ENABLING PHOTONIC TECHNOLOGIES

Key messages & Outlook

- **Trading:** as previously disclosed, challenging macro-economic environment in our industrial lasers sector, contrasted with record levels of demand for our fibre optic products, hi-reliability fibre couplers used in undersea cables and life science products

- **Industrial lasers:** we believe that technical innovation in end market applications, such as 5G and new laser manufacturing techniques, combined with our leading position will ultimately drive improved demand for our industrial laser products

- **Strategic investments:** we invested in order to deliver on the multi-year growth phase of hi-reliability fibre couplers and put in place an enhanced organisational structure to deliver our new US A&D contracts.

- We will continue to seek to reduce the cost of producing critical components for industrial lasers. When necessary, we will continue to make considered and proportionate organisational changes in line with the requirements of our business

G&H
ENABLING PHOTONIC TECHNOLOGIES

Key messages & Outlook

- G&H is committed to making further investment in R&D target areas that represent the highest return for our photonic technologies. In FY 2019 we delivered 48* new products which contributed £13.5 million (FY 2018: £12.0 million) to group revenue

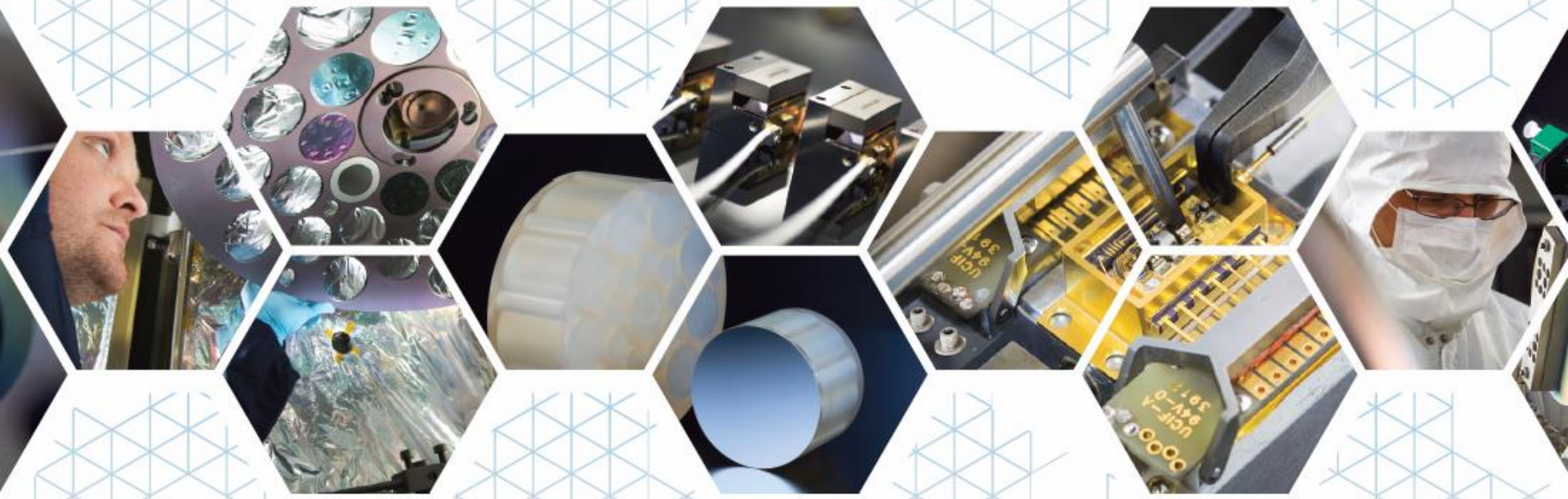
- We will continue to actively pursue our strategic goals of diversification and moving up the value chain. During FY 2019 our life science sector more than doubled its revenues. A&D now represents 34% of our revenue and life sciences 19%. In FY 2019 35.7% of revenue was in systems and subsystems compared with 25.6% in FY 2018

- The order book, as at 30 September 2019, reflects strong demand for fibre optics, hi-reliability fibre couplers and our A&D and life science capabilities, whilst industrial laser demand is yet to recover to ‘normalised’ levels. Our forecasts and plans are not dependent on a recovery in the industrial laser market

- The ‘direction of travel’ is very much towards greater use of photonic technologies. G&H has a strong technological platform and target sector market presence. The Board is confident that the Company is well positioned to deliver progress in FY 2020 and beyond

* - see page 16

G&H
ENABLING PHOTONIC TECHNOLOGIES



Appendices

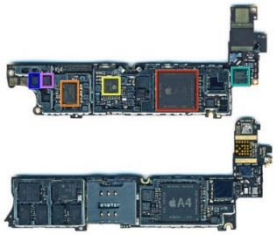
Gooch & Housego
ENABLING PHOTONIC TECHNOLOGIES

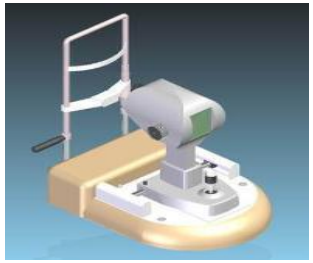
G&H photonics – part of our everyday lives

You probably use G&H photonics every time you use the internet or make a transatlantic phone call

Your smartphone or tablet was manufactured and tested using G&H photonic components: -

- Lasers containing G&H acousto- and electro-optics are used in virtually every step in the manufacturing process
- Lithography systems containing G&H precision optics and acousto-optics are used in semiconductor and PCB manufacture
- Wafers, masks and boards are inspected with laser scanners incorporating G&H acousto-optics
- Displays are measured using G&H instruments





When you travel on holiday or business the airliner you are flying in will be guided by a ring laser gyroscope that probably incorporates G&H optical components

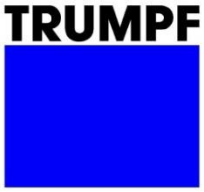
When you use a sat nav in your car you are relying on GPS satellites that incorporate G&H lasers and fibre-optic components

When you have your eyes tested you will be examined with instruments made possible by G&H fibre-optic modules and precision optical components

If you have laser surgery it is likely that G&H photonics are an integral part of the surgical system

G&H
ENABLING PHOTONIC TECHNOLOGIES

Key Customers



Targeted R&D

New products	Precision Optics & Systems	Acousto/ Electro-Optics	Fibre Optics
Aerospace & Defence	29		1
Industrial		6	3
Life Sciences	6		3

- 48* new products launched in FY 2019 compared with 29 in prior year

"R&D is the life blood of the business. We have released 48 new products to the market in 2019."
Mark Webster - CEO

* Now includes optical arrays, of which 20 were introduced in FY19

G&H
ENABLING PHOTONIC TECHNOLOGIES

Prior Year Restatement and Non Underlying Items

Prior Year Restatement

- In support of the establishment of the manufacturing centres the Group has standardized its approach as to which costs are included within its inventory values.
- Prior year comparatives have been restated to reflect the retrospective application of this approach to the 30 September 2017 and 30 September 2018 balance sheets.
- The effect of the change was to increase inventory by £1.5m, tax liabilities by £0.3m and retained earnings by £1.2m at both 30 September 2017 and 30 September 2018.

Non Underlying Items

- Total non underlying items of £9.1m
- M&A related - £8.1m
  - Amortisation of acquired intangibles - £3.7m
  - Goodwill impairment – Boston £2.6m and Baltimore (Gould Fibre Optic) £3.7m
  - Write back of Gould fibre Optic accrued contingent consideration - £(2.6)m and StingRay - £(0.5)m
  - Interest unwind of contingent consideration - £1.2m
- Restructuring - £1.4m – associated with the implementation of the manufacturing centres
- Site closure - £(0.4)m – gain on disposal of the Orlando facility of £0.8m offset by closure costs of the Madison facility of £0.4m

G&H
ENABLING PHOTONIC TECHNOLOGIES

IFRS 16

- New accounting standard for leases effective 1st October 2019
- Requires operating leases to be accounted for as finance leases on the balance sheet
- No restatement of comparatives
- No net cashflow or bank covenant impact – bank covenant continues to be calculated according to the prior standard
- Summary accounting impacts expected to be
    - c. £0.1m increase to operating profit, £0.3m increase to finance costs, £0.2m reduction in PBT
    - c. £8.25m - £9.25m increase to reported assets and net debt
    - c. £1.8m movement from cashflow from operating activities to cashflow from financing activities.

G&H
ENABLING PHOTONIC TECHNOLOGIES

Investor Timetable

- 19th February 2020 - AGM Trading Update
- 7th April 2020 – Half Year Trading Update
- June 2020 – Interim Announcement
- October 2020 – Full Year Trading Update
- December 2020 – Preliminary Announcement

G&H
ENABLING PHOTONIC TECHNOLOGIES