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NS Final Results

FINAL RESULTS

HAYDALE GRAPHENE INDUSTRIES PLC

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Haydale Graphene Industries PLC
26 October 2023

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Haydale Graphene Industries plc

('Haydale', the 'Company', or the 'Group')

Final Results

Haydale (AIM: HAYD), the global advanced materials group, is pleased to announce its full year results for the year ended 30 June 2023 ("FY23").

Operational Highlights:

US sales continued to progress with growth in the core aerospace and automotive markets.

- Established a regionalised manufacturer's representative network which is already showing signs of generating improved commercial traction within the North American steel mill, aerospace and automotive sectors for our finished tooling.
- As part of the commercial rollout, published full tooling parts catalogue and now building stock to support growth.
- We plan to drive further market penetration as additional distribution agreements are concluded.
- Added additional internal sales support with plans to reinforce technical support in Q2 FY24.

Consolidation in the UK of nanomaterial functionalisation technology offering leading to key partnership arrangements anticipated to form bedrock of continued commercial progress:

- continued to optimise and extend the functionality of the HDPlas[®] HT1400 plasma reactor installed in 2022:
 - can functionalise nanomaterials for third parties on an industrial scale; and
 - won an Engineering and Manufacturing Awards in September 2023 in the manufacturing technology innovation class.
- Signed commercial agreements with industry partners Saint Gobain, Cadent and Petronas:
 - all have a commercial requirement that may potentially be met through the application of our plasma functionalisation process to their materials or the use of our wider product range; and
 - can help take products to market through their market reach and capability.
- Working with several other nanomaterial producers and end customers where our HDPlas[®] process can bring additional value to their end customers.
- Secured financial support from the Welsh Government to continue the development of our key underfloor heating technology.

- Re-orientated our Thermal fluid technology to focus on Graphene by signing an agreement with an industry partner with expertise and market access.

Financial Highlights

- Revenue at £4.30 million (FY22: £2.90 million) up by 48.3% on prior year, driven predominantly by a continued recovery in the US business.
- Full year impact of the planned FY22 investment in sales, marketing, quality assurance and production capability saw adjusted administrative expenses increase by 12.5% to £6.26 million (FY22: £5.52 million).
- Adjusted operating loss increased slightly by £0.16 million to £3.49 million (FY22: £3.33 million).
- £5.1 million fundraising completed post period end.

Commenting on the results David Banks, Non-executive Chair of Haydale, said:

"We have made important progress in our next planned steps as a business by forging commercial partnerships and collaborations with leading organisations that the Board believe will ultimately help lead to commercial success. With the fundamental building blocks in place and continuing progress in our key markets, the Board remains confident that the Company will be able to take advantage of the traction it is now seeing."

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Notes to Editors

Haydale is a global technologies group and service provider that facilitates the integration of graphene and other nanomaterials into the next generation of industrial materials and commercial technologies. With expertise in graphene, other nanomaterials and Silicon Carbide, Haydale is able to deliver improvements in electrical, thermal and mechanical properties, Haydale has been granted patents for its technologies in Europe, USA, Australia, Japan and China and operates from five sites in the UK, USA and the Far East. For more information please visit: www.haydale.com or Twitter: @haydalegraphene

Caution regarding forward looking statements

Certain statements in this announcement, are, or may be deemed to be, forward looking statements. Forward looking statements are identified by their use of terms and phrases such as "believe", "could", "should", "envisage", "estimate", "intend", "may", "plan", "potentially", "will" or the negative of those, variations or comparable expressions, including references to assumptions. These forward-looking statements are not based on historical facts but rather on the Directors' current expectations and assumptions regarding the Company's future growth, results of operations, performance, future capital and other expenditures (including the amount, nature and sources of funding thereof), competitive advantages, business prospects and opportunities. Such forward looking statements reflect the Directors' current beliefs and assumptions and are based on information currently available to the Directors.

A number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements including risks associated with vulnerability to general economic and business conditions, competition, environmental and other regulatory changes, actions by governmental authorities, the availability of capital markets, reliance on key personnel, uninsured and underinsured losses and other factors, many of which are beyond the control of the Company. Although any forward looking statements contained in this announcement are based upon what the Directors believe to be reasonable assumptions, the Company cannot assure investors that actual results will be consistent with such forward looking statements. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Subject to any continuing obligations under applicable law or any relevant AIM Rule requirements, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.

CHAIR'S STATEMENT

Introduction

I am pleased to present Haydale Graphene Industries Plc's full year audited results to 30 June 2023 ("FY23").

The Group continued to make positive progress during the year on its journey to delivering sustainable commercial revenues. The US operation in particular saw a strong bounce back in FY23 and, with its continued progress into the manufacture of SiC cutting tools, is increasingly well positioned to deliver strong growth moving forwards. The UK operation has started to see the seeds planted in FY22 begin to come through in the second half of FY23 and post year end period as we entered into a number of agreements that we believe will form the bedrock of strong business partnerships going forwards to take our offerings to the wider market. We anticipate the momentum across both the nanomaterial and SiC markets will continue into the current financial year.

Summary financials

Commercial revenue for FY23 of £4.30 million (FY22: £2.90 million) was up by 48.3% on prior year. Gross profit margin was slightly down due to sales mix at 56% (FY22: 60%) resulting in a gross profit of £2.39 million (FY22: £1.75 million). Other operating income for the year of £0.38 million (FY22: £0.44 million) was in line with last year after adjusting for US Covid support received in FY22. Adjusted administrative expenses increased by £0.74 million (12.5%) to £6.26 million (FY22: £5.52 million) primarily related to the full year impact of FY22 planned investment in resource resulting in an adjusted operating loss of £3.49 million (FY22: £3.33 million). Total administrative expenses were £8.93 million (FY22: £7.24 million) as a result of the above plus a number of additional non-trading items, namely increase in share-based payments charges of £0.55 million and an increase in depreciation and impairment of £0.40 million. Loss for the year was £6.17 million (FY22: £4.81 million).

Operational Highlights

The Group made good progress towards its longer-term goals in the year as the Company consolidated its position bringing increased focus onto its core offerings and laying the foundations for continuing growth in FY24 and beyond. The priorities of delivery of commercial revenue, focused investment in our physical and human capacity and development of our technology remains central to our strategy.

During the year we continued to optimise and extend the functionality of the HDPlas[®] HT1400 plasma reactor acquired in 2022 which allows us to manufacture functionalised nanomaterials on an industrial scale. With that assurance, we have further developed our collaborations with industry partners who, due to their market reach or capability, are potentially able to help take our products to market. We have also concluded commercial project arrangements with several nanomaterial producers and end customers where our HDPlas[®] process can bring additional value to their end customers.

The SiC and ceramic cutting tools produced by our US facility saw growth in their core aerospace and automotive markets. We started to roll out a regionalised manufacturer's representative strategy towards the end of FY23 which is already showing signs of generating improved commercial traction within the North American steel mill, aerospace and automotive sectors for our finished tooling. We anticipate this will increase further during the current financial year as additional distribution agreements are concluded.

Staff

I would like to thank our staff for their continued support and flexibility, as their efforts are key to us achieving our aims. I would also like to thank the executive management team who continue to drive the transition towards a sustainable commercial operation.

Funding

On 3 October 2023, the Company completed an equity funding of £5.1 million (gross) and I would like to welcome our new shareholders and to thank our existing shareholders for their continued support.

Outlook

We have made important progress in our next planned steps as a business by forging commercial partnerships and collaborations with leading organisations that the Board believe will ultimately help lead to commercial success. With the fundamental building blocks in place and continuing progress in our key markets, the Board remains confident that the Company will be able to take advantage of the traction it is now seeing.

David Banks

Chair

25 October 2023

STRATEGIC REPORT

FY23 has seen the Group's US operations continue its progress as demand returns for SiC powders and tooling in the aerospace and automotive industries. This has driven the overall FY23 revenue growth of the Group and looks set to help support the Group moving forwards with the expansion into the manufacture and sale of SiC tooling through a network of regional manufacturer representatives recently engaged across the USA. The UK based nanomaterial business has made significant steps in commercialising its portfolio of technology, especially in terms of business collaborations with significant industry players in key markets, having previously installed sufficient capacity to be able to process commercial levels of plasma functionalised nanomaterials for those partners and other third parties. These collaborations are expected to form a solid base to the expected progress in the current financial year.

Nanomaterials

The UK operations made significant progress over the year in progressing commercialisation of its proprietary technology which resulted in a number of key agreements being signed with industry partners in the last quarter of FY23 and first quarter of FY24. We anticipate these may lead to significant volume sales as those products and relationships mature over the next

few years. Whilst progress on commercial arrangements has been strong, it is taking longer than expected for this to translate into revenue and, primarily due to one large functionalised product sale (goods) in FY22 not being repeated in FY23, total sales reduced by £0.20 million on prior year. Other consultancy revenues (services) grew by 11% on a like-for-like basis.

Patented Plasma Functionalisation Technology

At the core of all our product offerings and underpinning the Group's future nanomaterial prospects, is Haydale's patented HDPlas[®] plasma functionalisation process which improves the dispersibility of many nanomaterials by changing their surface chemistry using a highly tunable, repeatable process. Plasma functionalisation allows Haydale to tailor advanced materials to enhance the properties of its customers' products to achieve pre-agreed mechanical or conductive performance criteria. The process is cost effective and environmentally friendly and our capacity to produce industrial levels of functionalised nanomaterials underpins the business model. Specifically, we have the expertise to:

- functionalise nanomaterials that are blended with resins, composites and fluids to deliver enhanced electrical, mechanical (strength) and thermal performance;
- formulate proprietary nanomaterial-based inks and coatings for the print and sensor markets, including biomedical, RFID and piezo resistive inks and sensors; and
- compound functionalised nanomaterials into a range of elastomers to enable customers to use nanomaterials in elastomeric products.

The Group safeguards its nanomaterials business across its sites and the territories in which it operates through the use of patents and trade secret protocols which protect its intellectual property. It holds licences where that intellectual property is for operational reasons with a third party. Haydale currently has a portfolio of patents that are variously recognised in the following territories - US, UK, Europe, China, Japan and Australia. Haydale works closely with its patent advisors, Mewburn Ellis LLP, and maintains a rolling programme of patent applications.

Plasma Functionalised Powder Sales

We have secured a number of commercial contracts during the year with manufacturers of graphene to plasma functionalise their graphene powders to their requirements and are in discussions with many others who recognise the difference plasma functionalisation can make.

Of particular note, we have entered into contracts with a number of major industrial customers who manufacture their own nanomaterials. For Saint Gobain, who manufacture boron nitride, we are working with their end customers to hone the final surface chemistry to match their desired outcomes. Our ability to reliably adjust the surface chemistry has more recently led to our securing a major collaboration with Petronas to help them take their own graphene product, refined from a byproduct of their main petrochemical business, and functionalise it so it can potentially be recycled into other applications. We anticipate that all of these initiatives may lead to significant volumes needing to be plasma functionalised over the coming years, either directly by Haydale, or indirectly through the leasing of plasma reactors on a volume based royalty model.

Plasma Functionalised Products Sales:

Heating

Haydale has been working in the energy and heating sectors for a number of years. Geopolitical events and the UK Government's net zero strategy, have brought an increased urgency for solutions in this space.

Over the past few years, the Company has developed a number of off-the-shelf flexible heater graphene-based functional inks that can be printed onto a wide variety of surfaces. Based on those inks we are developing a range of low power heating products, potentially the most exciting of which is an energy efficient, cost-effective and easy to install underfloor heating system that could be used to supplement or replace domestic heating systems. The technology could be rolled out underneath the floor covering (e.g. carpet or tiles) and potentially run off a battery. With support from the Welsh Government, working prototypes have been created and are currently being tested in laboratory conditions to finalise the design before further optimisation and seeking a CE mark. We are now looking at various partnership options to take these to market.

We are also undertaking a number of paid projects for Cadent focused on helping energy suppliers meet their obligations to their vulnerable customers where they are under a legal requirement to be able to guarantee hot water and heating in situations where the power or gas go down. The initial project referred to last year involves a portable, battery powered water heater, a prototype of which is currently undergoing testing. We have also recently started work on a low power, portable over-the-radiator heating device which is also looking promising. Other potential applications of the same low power heating technology are currently in early-stage testing with partners.

In FY22 we announced we were working with a company that had acquired a patent for a boron nitride based thermal fluid. This has not progressed as we had hoped and is unlikely to lead to further revenues. We have however developed our own graphene based thermal fluid (patent pending) which early trials suggest performs with similarly positive thermal results and have now partnered with a specialist heating fluid engineering firm to finesse the formulation to work with the necessary additives so it meets applicable industry standards and can ultimately be deployed into their customer base.

Sensors

Following on from the work historically undertaken in the biomedical ink sector, we have a range of off-the-shelf functional inks appropriate for use in biomedical and other sensor applications that can potentially detect a wide range of medical

conditions. These inks have a high sensitivity and are therefore able to replace lower grade carbon inks and potentially metallic based inks in existing sensor products. Our work with a leader in the glucose monitoring and diabetes management sector is moving forwards following positive results against their existing inks and, having successfully passed an audit of the quality controls around production at our Ammanford site, we are now working with them on further tests. In the interim, we are separately working with a major European sensor manufacturer on an application to detect chlorine in water which we understand has a potentially lower barrier to entry, market wise.

Elastomers

Our collaboration with Vittoria Spa, a leading premium cycle tyre manufacturer, has progressed and, having proved the benefits that plasma functionalised graphene can bring to tyres (namely: grip, rolling resistance, puncture resistance and durability), we are shipping tonnage materials. We are also working with Vittoria on further enhancements for the next generation of tyres and anticipate the existing graphene enhancements to start trickling out to the wider market in due course.

Composites

In the second half of FY23, we released a graphene enhanced prepreg tooling material, following two years of trialling with Prodrive Composites Ltd, which is designed to deliver cost effective composite tooling with extended tooling life. This, and related products which were released during the year, are now seeing interest from the market which we hope will build through the current year.

Focused research and development

We continue to work on customer-paid and grant-funded projects to develop plasma functionalised nanomaterial solutions where there is a clear problem statement and we believe there to be a volume demand at the end of the process for any product created. We are selective and require a clear business case to proceed. By being able to deliver a number of selective projects that have resulted in a requirement for plasma functionalised material for third party applications or intellectual property that vests in Haydale, we have been able to build our underlying customer base. Key projects include the development of material that might be appropriate for type IV and V hydrogen storage tanks with Viritech for use in hydrogen powered vehicles and anti-counterfeiting technology using our PATit plasma functionalised graphene based conductive inks.

Asia Pacific

The performance of both the Thailand and Korea operations were at the lower end of expectation and, whilst we have been able to leverage our presence in these countries to secure several major clients for the Group as a whole including Petronas and Vittoria sourced by the Thailand office, it has been agreed that both entities are to be scaled back to a sales front office for the foreseeable future. This has been a progressive process which we will continue to monitor carefully. The Korea office concluded a beneficial commercial settlement with iCraft to terminate the agreement after they decided to focus on their core activities.

Silicon Carbide powders and tooling

Following prior year investment in the US and our move up the value chain into the manufacture of cutting tools, we have seen our silicon carbide and tooling business achieve significant growth in FY23. Although the raw SiC powder market is limited in scope (historically dependent on a small number of key customers) we continue to have additional sales in that area.

The SiC cutting tools is, by itself, a \$900m market. Having previously invested in the necessary plant to manufacture our own SiC tooling and signed finishing service supply agreements to ensure we can meet capacity demands, towards the end of FY23 we released our first cutting tools catalogue and appointed four additional regional manufacturer representatives who act to introduce our product directly to end users on a commission only basis and thereby cost effectively extend our sales reach. The initial feedback we are receiving is very positive and we understand our tooling is exceeding the largest competitor in terms of durability and performance in a number of applications. This is starting to lead to a potential sizeable demand for product being reported by the manufacturer representatives which we anticipate will feed through into orders in the US hence we are taking steps to ensure inventory is available to support. We have recently secured an agreement with a distributor for the UK and Eire and are in discussions for similar arrangements in Asia. In addition, we have started acting as a seller of complementary non-SiC tooling in a number of areas and are also looking to develop further partnerships in this space through FY24.

Other products

There has been limited progress on CeramycGuard™, a one stop solution to significantly extend the surface life of concrete assets, for which Haydale holds the distribution rights for the UK market. Whilst accreditation with the Drinking Water Inspectorate ("DWI") has not been progressed due to the DWI not having the necessary capability at this time, we still believe that there remains a key market in the wider, non-drinking water market.

Production Capacity

Haydale invested in production capacity for its plasma functionalisation process and ink production in FY22 and now has sufficient capacity to meet its forecasts for the next few years. Should additional capacity be required, Haydale has a scaling plan to affordably and materially increase its own internal capacity on relatively short timescales or, depending on client volumes, arrange for a machine to be leased to a client and charge a volume-based royalty.

Likewise, there is also more than sufficient capacity for the manufacture of SiC powder and tooling in the US to meet the business plan for the next few years.

Overheads

The Directors continued to invest in the human capital across the wider business in FY23, strengthening the teams across UK and US operations and across the spectrum of sales, marketing, human resources, quality control and production. Whilst there will be further strategic hires required at the right time to manage the anticipated growth, there is not expected to be a need for any step change to deliver the business plan.

At the same time, the Group has also taken selective measures to reduce costs around the organisation. The scope of these is being extended as more focus is brought into the areas likely to lead to profit on a short-term basis.

FUTURE STRATEGIC DIRECTION

As noted above, the US operations have potential for strong growth in the short term through the manufacture and sale of specialised SiC tooling and complementary products. Having historically made the necessary capital investments, the focus is now on building the manufacturing representative network across the US and elsewhere to get the tooling into key end user sites.

Whilst Haydale has world leading technology for the functionalisation of nanomaterials, the focus for the UK is on building the business partnerships that will get its plasma functionalised nanomaterial solutions into the market and the organic growth that this will bring through repeat revenues at scale. This is concurrent to developing our own strategic products based on our existing solutions, such as underfloor heating, and we anticipate these, together with third party plasma functionalisation services, will form the basis of our future growth over the coming years in the UK.

The Directors remain mindful of the scaling challenges in both the US and UK that need to be managed for the Company to deliver the growth it expects to deliver as its early-stage industry partner relationships develop.

FINANCIAL REVIEW

In the year under review, the Group's principal areas of income were sales of specialty inks, fluids and graphene enhanced composites and associated consultancy services from the UK and APAC operations and sale of SiC fibres, whiskers, particulate, blanks and tooling from the US operation. The Group's revenue for the year ended 30 June 2023 of £4.30 million (FY22: £2.90 million) represents a 48% increase compared with the previous year. Revenue derived from product sales increased by £1.33 million during the year, driven by the US business performance (See Note 3 - Segmentation Analysis).

The Group's Gross Profit, which excludes Other Operating Income, was £2.39 million (FY22: £1.75 million) delivering a Gross Profit margin of 56% (FY22: 60%) which is slightly down due to sales mix.

Other operating income, which is principally grant funded projects, was £0.38 million (FY22: £0.44 million) consistent with prior year after taking account of £0.06 million received in FY22 from US Covid Government Support packages.

Adjusted administrative expenses increased by £0.69 million (12.5%) to £6.26 million (FY22: £5.52 million) reflecting the full year impact of investment decisions taken in FY22 partially offset by cost savings resulting in an adjusted operating loss of £3.49 million (FY22: £3.33 million). Total administrative expenses for the year were £8.93 million (FY22: £7.24 million) which, in addition to the above, reflects additional non-cash related share-based payment expenses of £0.55 million. Also, the Group took the decision to impair the fixed assets held in the US and accordingly a non-cash charge of £0.53 million is included in total administrative expenses.

The Loss from Operations was £6.16 million (FY22: £5.06 million). Finance costs, which include interest payable on the Group's debt, for the year were £0.41 million (FY22: £0.19 million).

The Group continued to direct resources to research and development with the focus for that investment on products and processes that could develop into sustainable and profitable revenue streams. R&D spend for the year was £1.52 million (FY22: £1.45 million^[1]), of which £0.42 million was capitalized (FY22: £0.34 million). During the year the Group claimed R&D tax credits of £0.40 million (FY22: £0.43 million) and it is expected that this claim will be received during the current financial year.

Total comprehensive loss for the year, including £1.12 million (FY22: £0.41 million) of one off charges relating to impairment of tangible assets and share-based payment costs, was £5.80 million (FY22: £4.54 million).

The loss per share for the year was £0.01 loss (FY22: £0.01 loss).

Statement of Financial Position and Cashflows

As at 30 June 2023, net assets amounted to £6.97 million (2022: £7.05 million), including cash balances of £1.38 million (2022: £1.19 million). Other current assets marginally decreased to £3.15 million at the year-end (2022: £3.26 million) with

modest reductions across most areas offset by an increase in inventory of £0.22 million at the US facility during the year. Current liabilities reduced slightly to £2.01 million (2022: £2.28 million) principally due to a reduction in trade and other payables.

The Right of Use Asset in respect of its leased premises decreased to £2.20 million (FY22: £2.70 million) due to winding down of the leases agreements. The Lease Liability which is split between Current and Non-Current Liabilities similarly decreased to £2.44 million (FY22: £2.92 million). These movements were non-cash items and did not impact the cash outflow in the year. The Company will amortise these balances over the remaining life of the leases which varies across the sites.

The Group's US Pension Obligations of £0.58 million (FY22: £1.36 million) has reduced in the year due to a combination of positive movements on investments, exchange and discount rate movements and contributions made.

Net cash outflow from operating activities before working capital movements for the year increased to £3.67 million (FY22: £3.42 million), the principal contributing factors being the Loss after Taxation of £6.17 million (FY22: £4.81 million). Cash used in Operations increased by £0.92 million in the year to £4.09 million (FY22: £3.17 million). The Group received an R&D tax credit inflow of £0.43 million in the year (FY22: £0.37 million). Net cash used in operating activities increased to £3.66 million (FY22 £2.80 million).

Capital expenditure in the year, excluding the IFRS 16 adjustments, was £0.20 million (FY22: £1.00 million).

Capital Structure and Funding

On 13 September 2022, the Company raised £5.51 million (gross) through the placing, open offer and subscription of 275,516,784 new Ordinary Shares at 2.00 pence per share. Consequently, at 30 June 2023 the Company had 785,852,475 ordinary shares in issue (2022: 510,335,691). No options were exercised into ordinary shares during the year (FY22: none).

The Group's total borrowings at the year-end were £1.37 million (2022: £1.35 million), of which £1.21 million was in the UK and the balance in the Group's US subsidiaries. The UKRI Innovation loan has a quarterly liquidity covenant until April 2024 with which the Group has been in full compliance through the reporting period. There are no financial covenants extant in respect of the UK bounceback loan of £0.03 million (FY22: £0.04 million) or the Group's US borrowings.

Post Balance Sheet Event

On 3 October 2023, the Company raised £5.1 million (gross) through a placing, retail offer and subscription of 1,012,609,000 new Ordinary Shares at 0.5 pence per share. The funds raised will be principally used to fund the general working capital needs of the business. As part of this process, the Company's share capital was restructured to in effect reduce the nominal value of each ordinary share from 2.0 pence to 0.1 pence.

Save for 576 shares issued following an exercise of warrants, all other warrants issued following the fundraise on 13 September 2022 of 138,758,392 lapsed on 14 September 2023 and are no longer exercisable.

Key Performance Indicators

The Group has historically reported financial metrics of revenues, gross profit margin, adjusted operating loss, cash position and other metrics as its key performance indicators and these are set out below.

	FY23 (£m)	FY22 (£m)
Revenue	4.30	2.90
Gross profit margin	56%	60%
Adjusted operating loss	(3.49)	(3.33)
Cash position	1.38	1.19
Borrowings	1.37	1.35

During the year under review, management also used a sales tracker, a non-financial performance metric to monitor the revenue pipeline of the business. The sales tracker monitors the number of accredited leads and assigns a probability of revenue realisation to those leads.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended 30 June 2023

	Note	Year ended 30 June 2023 £'000	Year ended 30 June 2022 £'000
REVENUE	3	4,301	2,901
Cost of sales		(1,911)	(1,156)
Gross profit		2,390	1,745
Other operating income		377	442
Adjusted administrative expenses		(6,260)	(5,520)
Adjusted operating loss		(3,493)	(3,333)

Adjusting administrative items:			
Share based payment expense		(589)	(39)
Depreciation and amortisation		(1,552)	(1,308)
Impairment		(531)	(375)
		<u>(2,672)</u>	<u>(1,722)</u>
Total administrative expenses		<u>(8,932)</u>	<u>(7,242)</u>
LOSS FROM OPERATIONS		<u>(6,165)</u>	<u>(5,055)</u>
Finance costs		(407)	(187)
LOSS BEFORE TAXATION	4	<u>(6,572)</u>	<u>(5,242)</u>
Taxation		407	433
LOSS FOR THE YEAR FROM CONTINUING OPERATIONS		<u>(6,165)</u>	<u>(4,809)</u>
Other comprehensive income:			
<i>Items that may be reclassified to profit or loss:</i>			
Exchange differences on translation of foreign operations		(341)	374
<i>Items that will not be reclassified to profit or loss:</i>			
Remeasurements of defined benefit pension schemes		702	(109)
TOTAL COMPREHENSIVE LOSS FOR THE YEAR FROM CONTINUING OPERATIONS		<u>(5,804)</u>	<u>(4,544)</u>
Loss for the year attributable to:			
Owners of the parent		<u>(6,165)</u>	<u>(4,809)</u>
Total comprehensive loss attributable to:			
Owners of the parent		<u>(5,804)</u>	<u>(4,544)</u>
Loss per share attributable to owners of the Parent			
Basic (£)	5	(0.01)	(0.01)
Diluted (£)	5	(0.01)	(0.01)
		<u> </u>	<u> </u>

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 30 June 2023

Company Registration No. 07228939	Note	30 June 2023 £'000	30 June 2022 £'000
ASSETS			
Non-current assets			
Goodwill		1,059	1,131
Intangible assets		1,386	1,312
Property, plant and equipment		5,915	7,579
		<u>8,360</u>	<u>10,022</u>
Current assets			
Inventories		1,733	1,515
Trade receivables		564	667
Other receivables		446	646
Corporation tax		406	427
Cash and bank balances		1,378	1,186
		<u>4,527</u>	<u>4,441</u>
TOTAL ASSETS		<u>12,887</u>	<u>14,463</u>
LIABILITIES			
Non-current liabilities			
Bank loans	6	(1,363)	(1,341)
Pension Obligation		(577)	(1,356)
Other payables		(1,962)	(2,440)
		<u>(3,902)</u>	<u>(5,137)</u>
Current liabilities			
Bank loans	6	(11)	(11)
Trade and other payables		(1,899)	(2,199)
Deferred income		(103)	(68)
		<u> </u>	<u> </u>

	(2,013)	(2,278)
TOTAL LIABILITIES	(5,915)	(7,415)
TOTAL NET ASSETS	6,972	7,048
EQUITY		
Capital and reserves attributable to equity holders of the parent		
Share capital	15,717	10,207
Share premium account	31,912	31,912
Share-based payment reserve	833	244
Foreign exchange reserve	(353)	(12)
Retained losses	(41,137)	(35,303)
TOTAL EQUITY	6,972	7,048

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 30 June 2023

	Share capital £'000	Share premium £'000	Share- based payment reserve £'000	Foreign Exchange Reserve £'000	Retained losses £'000	Total Equity £'000
At 30 June 2021	8,505	28,820	250	(386)	(30,430)	6,759
Comprehensive loss for the year						
Loss for the year	-	-	-	-	(4,809)	(4,809)
Other comprehensive income/(loss)	-	-	-	374	(109)	265
	8,505	28,820	250	(12)	(35,348)	2,215
Contributions by and distributions to owners						
Recognition of share- based payments	-	-	39	-	-	39
Share based payment charges - lapsed options	-	-	(45)	-	45	-
Issue of ordinary share capital	1,702	3,401	-	-	-	5,103
Transaction costs in respect of share issues	-	(309)	-	-	-	(309)
At 30 June 2022	10,207	31,912	244	(12)	(35,303)	7,048
Comprehensive loss for the year						
Loss for the year	-	-	-	-	(6,165)	(6,165)
Other comprehensive income/(loss)	-	-	-	(341)	702	361
	10,207	31,912	244	(353)	(40,766)	1,244
Recognition of share- based payments	-	-	589	-	-	589
Issue of ordinary share capital	5,510	-	-	-	-	5,510
Share issue cost	-	-	-	-	(371)	(371)

At 30 June 2023	15,717	31,912	833	(353)	(41,137)	6,972
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CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 30 June 2023

	Year ended 30 June 2023 £'000	Year ended 30 June 2022 £'000
Cash flow from operating activities		
Loss after taxation	(6,165)	(4,809)
<i>Adjustments for:-</i>		
Amortisation and impairment of intangible assets	335	607
Depreciation and impairment of property, plant and equipment	1,747	1,076
Profit on disposal of plant and equipment and F&F	-	8
Share-based payment charge	589	39
Finance costs	407	188
Pension: employer contribution	(180)	(92)
Taxation	(407)	(433)
Operating cash flow before working capital changes	(3,674)	(3,416)
Increase in inventories	(218)	(187)
Decrease/(increase) in trade and other receivables	304	(4)
(Decrease)/increase in payables and deferred income	(503)	435
Cash used in operations	(4,091)	(3,172)
Income tax received	427	371
Net cash used in operating activities	(3,664)	(2,801)
Cash flow used in investing activities		
Purchase of plant and equipment	(203)	(996)
Purchase of intangible assets	(421)	(340)
Net cash used in investing activities	(624)	(1,336)
Cash flow from financing activities		
Finance costs	(209)	(63)
Finance costs - right of use asset	(116)	(125)
Payment of lease liability	(261)	(548)
Proceeds from issue of share capital	5,510	5,103
Share capital issues costs	(371)	(309)
New bank loans raised	-	454
Repayments of borrowings	(53)	(842)
Net cash flow from financing activities	4,500	3,670
Effects of exchange rates changes	(20)	9
Net increase/(decrease) in cash and cash equivalents	192	(458)
Cash and cash equivalents at beginning of the financial year	1,186	1,644
Cash and cash equivalents at end of the financial year	1,378	1,186

Abbreviated notes to the final results statement

1. General information

Haydale Graphene Industries plc is a public limited company incorporated and domiciled in England and Wales and quoted on the AIM Market, hence there is no ultimate controlling party.

2. Significant accounting policies

Basis of preparation

The Group consolidated financial statements have been prepared in accordance with International Financial Reporting Standards, International Accounting Standards and Interpretations as adopted by the UK (collectively "IFRSs") and with the requirements of the Companies Act 2006.

The Group's financial statements have been prepared under the historical cost convention.

The consolidated financial statements are presented in sterling amounts.

Amounts are rounded to the nearest thousands, unless otherwise stated.

The financial information contained in this announcement does not constitute the Group's statutory accounts for the year ended 30 June 2023 but is derived from those accounts which have been audited and which will be filed with the Registrar of Companies in due course.

The auditors' report on the Annual Report and Financial Statements for the year ended 30 June 2023 was unqualified, did not draw attention to any matters by way of emphasis and did not contain a statement under s498(2) or s498(3) of the Companies Act 2006.

Going concern

The Directors have prepared and reviewed detailed financial forecasts of the Group and, in particular, considered the cash flow requirements for the period from the date of approval of the 2023 financial statements to the end of June 2025. These forecasts sit within the Group's latest estimate and within the longer-term financial plan, both of which have been updated on a regular basis. The directors are also mindful of the impact that the other risks and uncertainties set out in the Annual Report may have on these estimates and in particular the speed of adoption of new technology.

As part of this review the directors have considered several scenarios based on various revenue, cost and funding sensitivities.

Revenue

Various sensitivities have been applied to forecasted revenue including a stress test scenario which reduces forecasted revenue by circa 14 per cent in FY24 and 9% in FY25, to the point where the Group would breach its available cash resources in November 2024. With respect to this 'stress test' the Group has circa 28 per cent of that sensitised revenue within forward orders, contractual or some other form of customer assurance which have a high degree of certainty.

Cost Mitigation

The directors have included some limited assumptions regarding cost savings that might be achievable if the forecast fails to meet the forecasted or sensitised estimates, and these have been phased in gradually over the 12-month period to October 2024.

Customer Solvency

As part of this review the directors have assessed the solvency of key customers and their ability to deliver on their contractual or other commitments on the basis of both publicly available information and taken account of these assessments in their forecasts. Future revenue related to certain contractual commitments have been heavily discounted given the lack of available data and trading history with the Group.

Summary

Therefore, after due consideration of the forecasts prepared, the sensitivities applied and the Group's current cash resources after the equity fund raise in October 2023 and the terms of its debt facilities, the directors consider that the Company and the Group have adequate financial resources to continue in operational existence for the foreseeable future (being a period of at least 12 months from the date of this report), and for this reason the financial statements have been prepared on the going concern basis.

Whilst the directors believe that the going concern basis is appropriate at the date of this report, the Board is mindful that the net proceeds of the fund raise will be insufficient to fund the cash requirements of the Group through to a position where it is able to fund itself from its own cashflow. The Board continues to pursue the possibility of

securing additional debt facilities to provide additional liquidity. In the event that such debt facilities are not available or are unavailable in sufficient quantum it is very likely that the Group would need to raise additional equity funding in the future and, whilst the directors believe that future equity funding would be available, there can be no guarantee that sufficient funds could be raised at a later date. Any additional equity financing may be dilutive to Shareholders.

3. Segment analysis

IFRS 8 requires operating segments to be identified on the basis of internal reports about components of the Group that are regularly reviewed by the chief operating decision maker (which is the Chief Executive Officer and Chief Financial Officer) as defined in IFRS 8, in order to allocate resources to the segment and to assess its performance.

For management purposes, the Group is organised into the following reportable regions:

- UK & Europe (focusing on functionalisation of nano materials, high performance ink & master batches, elastomers and the composites market in Europe);
- North America (focusing on SiC & blank products for tooling); and
- Asia Pacific (focusing on sales to the Asian markets)

				Adjustments,	
	UK & Europe	North America	Asia Pacific	Central & Eliminations	Consolidated
	£'000	£'000	£'000	£'000	£'000
REVENUE	786	3,190	325	-	4,301
Cost of sales	(467)	(1,231)	(213)	-	(1,911)
Gross profit	319	1,959	112	-	2,390
Other operating income	377	-	-	-	377
Adjusted administrative expenses	(2,270)	(1,836)	(538)	(1,616)	(6,260)
Adjusted operating loss	(1,574)	123	(426)	(1,616)	(3,493)
Administrative expenses					
Share based payment expense	(34)	(43)	(1)	(511)	(589)
Depreciation & amortisation	(681)	(693)	(48)	(130)	(1,552)
Impairment	-	(531)	-	-	(531)
	(715)	(1,267)	(49)	(641)	(2,672)
Total administrative expenses	(2,985)	(3,103)	(587)	(2,257)	(8,932)
OPERATING LOSS	(2,289)	(1,144)	(475)	(2,257)	(6,165)
Finance costs					(407)
LOSS BEFORE TAXATION					(6,572)
Taxation					407
LOSS AFTER TAXATION					(6,165)
Additions to non-current assets	658	-	80	-	738
Segment assets	3,607	6,447	312	2,521	12,887
Segment liabilities	(2,391)	(3,138)	(99)	(287)	(5,915)

				Adjustments,	
	UK & Europe	North America	Asia Pacific	Central & Eliminations	Consolidated
	£'000	£'000	£'000	£'000	£'000
REVENUE	984	1,673	244	-	2,901
Cost of sales	(356)	(670)	(130)	-	(1,156)
Gross profit	628	1,003	114	-	1,745
Other operating income	373	69	-	-	442

Adjusted administrative expenses	(1,977)	(1,648)	(525)	(1,370)	(5,520)
Adjusted operating loss	(976)	(576)	(411)	(1,370)	(3,333)
Administrative expenses					
Share based payment expense	(20)	(4)	23	(38)	(39)
Depreciation & amortisation	(474)	(629)	(74)	(131)	(1,308)
Impairment	-	-	(23)	(352)	(375)
	(494)	(633)	(74)	(521)	(1,722)
Total administrative expenses	(2,471)	(2,281)	(599)	(1,891)	(7,242)
OPERATING LOSS	(1,470)	(1,209)	(485)	(1,891)	(5,055)
Finance costs					(187)
LOSS BEFORE TAXATION					(5,242)
Taxation					433
LOSS AFTER TAXATION					(4,809)
Additions to non-current assets	1,533	72	36	-	1,641
Segment assets	4,159	7,225	341	2,738	14,463
Segment liabilities	(2,386)	(4,486)	(114)	(429)	(7,415)

Geographical information

All revenues of the Group are derived from its principal activities. The Group's revenue from external customers by geographical location are detailed below.

	2023	2022
	£'000	£'000
By destination		
United Kingdom	563	769
Europe	813	685
United States of America	1,822	1,051
China	180	127
Thailand	61	158
South Korea	145	86
Japan	678	-
Rest of the World	39	25
	4,301	2,901

During 2023, £0.95 million (22%) (2022: £0.73 million (25%)) of the Group's revenue depended on a single customer. During 2023 £0.68 million (16%) (2022: £0.58 million (20%)) of the Group's revenue depended on a second single customer.

All amounts shown as other operating income within the Statement of Comprehensive Income are generated within and from the United Kingdom, EU and the US. These amounts include income earned as part of a number of grant funded projects in the United Kingdom and EU and a government grant in the US.

Dis-aggregation of revenues

The split of revenue by type:	2023	2022
	£'000	£'000
Services	387	306
Reactor rental	124	134
Goods	3,790	2,461
	4,301	2,901

	UK & Europe	North America	Asia Pacific	Total
2023	£'000	£'000	£'000	£'000

Services	303	-	84	387
Reactor rental	124	-	-	124
Goods	359	3,190	241	3,790
	<u>786</u>	<u>3,190</u>	<u>325</u>	<u>4,301</u>
	<u><u>786</u></u>	<u><u>3,190</u></u>	<u><u>325</u></u>	<u><u>4,301</u></u>

2022

	North			
	UK & Europe	America	Asia Pacific	Total
	£'000	£'000	£'000	£'000
Services	275	-	31	306
Reactor rental	134	-	-	134
Goods	575	1,673	213	2,461
	<u>984</u>	<u>1,673</u>	<u>244</u>	<u>2,901</u>
	<u><u>984</u></u>	<u><u>1,673</u></u>	<u><u>244</u></u>	<u><u>2,901</u></u>

Services and reactor rental revenues are recognised over time, whereas goods and reactor sales are recognised at a point in time.

The Group acquired non-current assets during the year, split by geographical location as detailed below:

Non-current asset additions

	2023	2022
	£'000	£'000
By destination		
United Kingdom	658	1,533
United States of America	-	72
Thailand	80	36
	<u>738</u>	<u>1,641</u>
	<u><u>738</u></u>	<u><u>1,641</u></u>

The carrying value of the Group's non-current assets split by geographical location is detailed below:

	2023	2022
	£'000	£'000
By destination		
United Kingdom	2,500	2,732
United States of America	5,781	7,240
Thailand	76	49
South Korea	3	1
	<u>8,360</u>	<u>10,022</u>
	<u><u>8,360</u></u>	<u><u>10,022</u></u>

4. Loss before taxation

Loss before taxation is arrived at after charging:

	2023	2022
	£'000	£'000
Amortisation of intangibles	335	232
Impairment of intangibles	-	375
Depreciation of property, plant and equipment	1,216	1,076
Impairment of tangibles	531	-
Foreign Exchange	105	58
Operating lease rental: plant and machinery	1	1
	<u>2,188</u>	<u>2,742</u>
	<u><u>2,188</u></u>	<u><u>2,742</u></u>

The service fees of the Group's auditor, Crowe U.K. LLP are analysed below:

Fees payable to the Company's auditor for the audit of the Group's financial statements	62	56
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There are no other fees payable to the Company's auditors and its associates for other services (2022: £Nil).

5. Loss per share

The calculations of loss per share are based on the following losses and number of shares:

2023	2022
£'000	£'000

Loss after tax attributable to owners of		
Haydale Graphene Industries Plc	(6,165)	(4,809)
	<hr/>	<hr/>
Weighted average number of shares:		
- Basic and Diluted	729,239,439	483,770,289
	<hr/>	<hr/>
Loss per share:		
Basic (£) and Diluted (£)	(0.01)	(0.01)
	<hr/>	<hr/>

The loss attributable to ordinary shareholders and weighted average number of ordinary shares for the purpose of calculating the diluted earnings per ordinary share are identical to those used for basic earnings per share. This is because the exercise of share options would have the effect of reducing the loss per ordinary share and is therefore not dilutive under the terms of IAS 33. At 30 June 2023, there were 242,033,392 (2022: 48,685,000) options and warrants outstanding. All of the options are potentially dilutive.

6. Bank loans

	2023	2022
	£'000	£'000
Bank loans	1,374	1,352
	<hr/>	<hr/>
The borrowings are repayable as follows:-		
- within one year	11	11
- in the second year	605	15
- in the third year and above	758	1,326
	<hr/>	<hr/>
	1,374	1,352
	<hr/>	<hr/>

The Group's borrowings are denominated in US dollars and Pounds Sterling. The directors consider that there is no material difference between the fair value and carrying value of the Group's borrowings.

	2023	2022
Average interest rates paid	6.85%	6.3%

In October 2016, a five year bank loan of \$1,720,000 (equivalent to approximately £1.4 million at the time) was drawn by HTI, the Company's US holding company, secured on the fixed assets of HTI and its newly acquired operating subsidiary, HCT. This loan carried an interest rate of 4% and was repayable in equal instalments. HTI also had a working capital facility of up to \$900,000 which was secured on a combination of the fixed assets, inventory and trade receivables of the US business. The rate of interest of this was fixed at 5.25%. Both the above loans were repaid during the comparative year.

In June 2020, as part of the Government Bounce Back Loan scheme, HCS entered into a six year loan agreement with NatWest for £50,000. The loan had a repayment holiday and did not accrue interest during the first 12 months. Following the initial 12 months, interest has been charged at 2.5% p.a. and the loan and interest are repayable in equal instalments over the remaining period.

In March 2021, HCS secured a five year loan of £1,100,000 from Innovate Loans UK Limited. At the year end the Company had fully drawn down this facility. The loan has a repayment holiday until March 2024 and is fully repayable by March 2026. Interest will be charged at 7.4% p.a. for the period of the loan. For the initial 36 months interest will be paid at 3.7% p.a. and for the final 24 months interest will be paid at 10.7% p.a. There are no penalties for early repayment.

During the prior year, the US operation secured a loan through the COVID-19 Economic Injury Disaster Loan scheme of \$200,000. The loan is for a period of 30 year with a fixed interest rate of 3.75% and deferred repayments for the first two years. At the year end the balance on the loan was £164,000.

¹ Based on calculations submitted to HMRC for the R&D tax credit.

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