The information contained within this announcement is deemed by the Group to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 ('MAR'). Upon the publication of this announcement via a Regulatory Information Service ('RIS'), this inside information is now considered to be in the public domain.

For immediate release 27<sup>th</sup> February 2020

### **Haydale Graphene Industries plc**

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

#### **Interim Results**

Haydale (AIM: HAYD), the global advanced materials group, announces its unaudited interim results for the six months ended 31 December 2019 (the 'Period' or 'H1 2020').

### **Financial Highlights**

- Group Revenues of £1.35 million for the Period, 17% down on H1 2019;
- Adjusted administrative expenses fell by 17% with a saving of £0.68 million on the prior year half year;
- Adjusted operating loss for the Period reduced by 22% (H1 2020 £2.1 million vs H1 2019 £2.7 million);
- Cash at Period end of £2.70 million (30 June 2019: £4.69 million); and
- New share subscription of £0.45 million at approximately a 29% premium to closing mid-market price.

### **Operational Highlights**

- US blanks production now at commercial levels after some earlier teething issues;
- Decision taken to close loss-making Taiwan manufacturing facility and transfer production to both our UK and Thailand operations, expected to result in a reduction in turnover but improved EBITDA for H2 2020;
- Rightsizing of the Group's cost base has continued, with a reduction of £0.68 million adjusted administrative expenses in the Period.

## Commenting on the interim results, Keith Broadbent, Chief Executive Officer of Haydale, said:

Whilst both internal and external factors have adversely impacted our short-term revenues, the Directors remain committed to delivering on the commercial potential of our stable of world leading technologies. We are making significant progress, in collaboration with a number of international partners, towards converting state of art science into everyday applications that will positively impact our customers' businesses. Our proprietary technology and our exceptional ability to functionalise nano materials continues to give us confidence in the longer-term prospects of the Group.

### For further information:

**Haydale Graphene Industries plc** 

Keith Broadbent, CEO Tel: +44 (0) 1269 842 946

Gemma Smith, Head of Marketing www.haydale.com

Arden Partners plc (Nominated Adviser & Broker)

Ruari McGirr / Paul Shackleton / Ben Cryer Tel: +44 (0) 20 7614 5900

#### **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, silicon carbide and other nanomaterials, Haydale is able to deliver improvements in electrical, thermal and mechanical properties, as well as toughness. 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: <a href="https://www.haydale.com">www.haydale.com</a> 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.

### **Chief Executive's Report**

#### Overview

The Group experienced a softer start to the financial year than anticipated and, in particular, sales of silicon carbide ("SiC") whiskers and blends in H1 2020 were disappointing and reflected wider issues experienced within the US aerospace and petrochemical sectors. Sales within the Group's other regions were below expectations but showed improvement year on year which we expect to continue, albeit at a more gradual pace than originally forecast.

As previously announced the Board has decided to close the Group's loss-making manufacturing facility in Taiwan and move capacity to its APAC Knowledge Centre in Bangkok and its manufacturing facility in Ammanford. This shift will be completed in H2 2020.

Notwithstanding that revenues for the Period were down on the prior year period (H1 2020 £1.35 million vs H1 2019 £1.64 million) the Group's adjusted operating loss showed a 24% reduction (H1 2020 £2.1 million vs H1 2019 £2.7 million). The anticipated costs savings of £0.68 million have been realised in the H1 2020 results and, although further cost reduction measures are being implemented, the Directors do not envisage that these will have a similar impact as those achieved to date.

The strategic focus on SiC and the related cutting tools ("blanks"), functionalised inks and graphene composites remains at the heart of the operational purpose and, within this plan, the Directors will continue to exercise cost control as a necessity and cost reduction where it does not adversely impact operational priorities.

The Board welcomed Mark Chapman as the Group's Chief Financial Officer on 22 November 2019.

### Operations

The Board took the decision to close the loss-making Taiwan manufacturing facility and move production to the Ammanford site and the Thailand Knowledge centre. Notwithstanding the previous investment in the Taiwan operation, the Directors could see no realistic prospect of that business unit moving into profitability in the medium term. As noted in the Group's 2019 Annual Report and Accounts, the unit was 'receiving regular repeat orders, albeit still in relatively small quantities.' During H1 2020 we saw no expansion of these orders and, after a reassessment of the prognosis for this operation, the decision was taken to close the facility. The Directors expect the closure and reallocation of resources to be completed by the end of June 2020.

Our Asia Pacific ("APAC") hub in Thailand continued to make good progress in the Period towards commercialising Haydale's proprietary technology in conjunction with a number of key national business champions. The APAC hub has also acted as a springboard into other APAC countries including China and the Group is currently considering a number of opportunities within that region that will allow for wider exploitation of its PATit (non-visualised graphene security code) ink technology. The knowledge centre in Thailand is supported in realising these prospects by our sales engineer in Seoul. Although revenue growth there has been more modest than anticipated, the Directors expect the position to improve in H2 2020. Notwithstanding this, the Group continues to monitor its prospects in the APAC region as part of its on-going strategic review.

Revenue at our US SiC manufacturing facility has lagged our initial forecasts as the business was subject to the issues that have been widely reported in the US aerospace and petrochemical sectors. Sales of the Group's SiC whisker and blends showed a like-for-like fall in H1 2020 of 43% which, given the historic predictability of this revenue stream, has been frustrating. Whilst we anticipate that inventory levels will not fully rebound in H2 2020, we do foresee a stronger sales pattern emerging as customers have adjusted their stock holdings and are now resuming a steadier purchasing pattern. The Group has sought to counteract this subdued activity by looking for alternative uses for its SiC and has recently completed the successful trial of a new barrier coating with a major utility business.

To compound this wider industry slowdown, the US facility also encountered teething problems with its blanks line as it scaled up to commercial production levels. We are pleased to report that these issues have now been resolved and the unit is now shipping to those customers that pre-approved the blanks in 2019. Subsequent to the year-end, strong traction with new customers in the US and APAC region has given the Directors the confidence to move the US facility to a double shift pattern from early February 2020. The growth in the blanks business should allow the Group to make a solid return on its investment and, despite the short delays, the forecast payback period is expected to be less than our initial projection. We anticipate that the blanks production will contribute to a higher utilisation

of the wider manufacturing capacity at the US facility and, as we move up the value chain, will lead to higher value sales than the historic SiC operation.

The UK division has made meaningful progress towards commercialising its proprietary technology and to delivering on some of the previously announced collaborations. It is rewarding to see the BAC Mono car moving to the commercial production stages with the use of graphene enhanced composites for a number of the body panels. In line with the refocus towards revenue generation, the Group has formalised the technical specifications of six new products which it is confident can deliver the promoted material enhancement and can be manufactured to an industrial scale. This important step forward has attracted interest from some significant global businesses in the aerospace and automotive sectors who can now readily understand the level of electrical, thermal and mechanical enhancements achievable and the potential benefit that our functionalised nano materials could offer them.

Excluding grant income, the UK division has shown an increase in like-for-like sales but, due to the longer than anticipated lead times, it has fallen short of its original forecast for H1 2020. We expect the business to improve in H2 2020 but, unless some of the significant pipeline opportunities crystallise ahead of schedule, we do not expect the business to recoup the shortfall seen to date by the end of the current financial year.

Grant income remains on target, although we continue to take a more critical approach to accepting new proposals and expect this revenue stream to decline marginally as commercial projects increasingly take priority. However, to the extent that grant funded research aligns with our commitment to the continuous improvement in the capabilities of our plasma reactors and related processes, then these projects remain an important element of our business.

As previously announced, our global sales team was further strengthened in H1 2020 with the addition of UK sales expertise both in the inks and composites sectors. The enlarged team is already delivering positive results with a strong pipeline of potentially profitable opportunities being actively pursued. It has been rewarding to see that closer collaboration fostered between the regional teams has, amongst other accomplishments, led to the successful phase one trial of a US coatings solution in the EMEA region. As we further capitalise on our world leading nanomaterial expertise and technological know-how, we foresee the need to further invest in our global sales team.

### **Unaudited Financial Results**

The Group's recognised commercial income in the Period of £1.35 million (H1 2019 £1.64 million). Of this, £0.94 million (H1 2019: £1.28 million) derived from the US with the sales of SiC nanomaterials and blanks with the balance being sales of functionalised nanomaterials for speciality inks and composites from the UK and APAC region. The Company did not sell any plasma reactors in the Period.

During the past year, management has concentrated on reducing costs across all areas of the Group. This focus has borne fruit with total administrative expenses being reduced by £0.9 million, equivalent to 19% (H1 2020 £3.8 million vs H1 2019 £4.7 million) and adjusted administrative expenses (excluding share based payments, restructuring costs and depreciation/amortisation) by £0.7 million or 17% (H1 2020 £3.8 million vs H1 2019 £4.7 million). This has been achieved notwithstanding the investment in further sales resources as Haydale transitions from an R&D focused operation to one delivering a commercially viable product range.

The Group's adjusted operating loss for H1 2020 reduced by 22% (H1 2020 £2.1 million vs H1 2019 £2.7 million) and the Loss before taxation was £2.7 million compared to £3.5 million in H1 2019. Following completion of the capital investment in the US blanks production in FY 2019, capital expenditure in H1 2020 shrunk to £0.2 million (H1 2019: £1.0 million) and capex is forecast to remain similarly restrained through H2 2020.

The Group's net assets at 31 December 2019 were £9.06 million (31 December 2018: £9.26 million). The Group's borrowings reduced by £0.54 million during the Period to £0.70 million at the Period end (30 June 2019: £1.25 million). Cash at the Period end was £2.7 million (30 June 2019: £4.7 million), including the £0.45 million of new equity funds received in November 2019. The reduction in cash balances during the Period of £2.0 million (H1 2019: £4.1 million) showed a significant reduction in cash burn compared with the prior period notwithstanding the reduced levels of capital investment. The reduction was broadly made up of £2.1 million of operational losses, £0.4 million of investment in working capital, £0.2 million of capital expenditure and the balance being repayments of borrowings offset with cash inflows of £0.44 million from R&D tax credits and £0.45 million from the equity subscriptions. We are expecting operating losses to reduce and the investment in inventory, principally in the US, to unwind in H2 2020 thus reducing the rate of cash burn.

The Company raised £0.45 million via the issue of 22,500,000 new ordinary shares in November 2019 at a price of £0.02 each (the "Subscription"), representing a premium of approximately 29% to the closing mid-market price of the Company's shares immediately before the Subscription. As at 31 December 2019, and at the date of this announcement, the Company had 340,223,850 ordinary shares in issue.

## **Board changes**

In November 2019, Mark Chapman was appointed to the role of the Group's CFO, replacing Laura Redman-Thomas who left the Company. On behalf of the Board I would like to thank Laura for her service to the Company.

### Outlook

The Directors remain committed to delivering the strategic plan that was set out in early 2019. The commercial sales of functionalised inks and graphene enhanced composites remain a priority alongside capturing the economic upside of our investment in the more mature US SiC and blanks operation. We look ahead to H2 2020 showing a more robust turnaround in sales and a reduced operating loss compared to H2 2019 and on a full year-on-year basis. Cost control remains a focus, but the Directors recognise that investment in further resource will be required to drive sales of the new product lines. Therefore, the level of overall cost reduction will reduce within the wider rebalancing towards a structure geared to achieving commercial success.

Keith Broadbent Chief Executive Officer 26<sup>th</sup> February 2020

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (UNAUDITED)

## For the six months ended 31 December 2019

	Note	Unaudited Six months ended 31 Dec 2019 £'000	Unaudited Six months ended 31 Dec 2018 £'000	Audited Year ended 30 Jun 2019 £'000
REVENUE Cost of sales		1,347 (509)	1,635 (758)	3,467 (1,567)
Gross Profit Other operating income		838 320	877 377	1,900 785
Adjusted Administrative expenses		(3,268)	(3,951)	(6,865)
Adjusted operating loss Adjusting administrative items:		(2,110)	(2,697)	(4,180)
Share based payments income/(expenses)		142	(147)	(200)
Restructuring costs Depreciation and amortisation		(123) (539)	(591)	(350) (1,118)
Depreciation and amortisation		(520)	(738)	(1,668)
Total trading administrative expenses		(3,788)	(4,689)	(8,533)
LOSS FROM TRADING Impairment		(2,630)	(3,435)	(5,848) (1,784)
Total administrative expenses		(3,788)	(4,689)	(10,317)
LOSS FROM OPERATIONS Finance costs		(2,630) (94)	(3,435) (36)	(7,632) (123)
LOSS BEFORE TAXATION		(2,724)	(3,471)	(7,755)
Taxation		159	143	570
LOSS FOR THE YEAR FROM CONTINUING OPERATIONS		(2,565)	(3,328)	(7,185)
Other comprehensive income:  Items that may be reclassified to profit or loss:  Exchange differences on translation of foreign operations Remeasurements of defined benefit pension scheme		(99) 174	5 (109)	60 2
TOTAL COMPREHENSIVE LOSS FOR THE YEAR FROM CONTINUING OPERATIONS		(2,490)	(3,432)	(7,123)
Loss per share attributable to owners of the Parent				
Basic $(\mathfrak{E})$ and Diluted $(\mathfrak{E})$	2	(0.01)	(0.13)	(0.06)

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION (UNAUDITED)

## As at 31 December 2019

	Unaudited 31 Dec 2019 £'000	Unaudited 31 Dec 2018 £'000	Audited 30 Jun 2019 £'000
ASSETS			
Non-current assets			
Goodwill	1,454	2,088	1,453
Intangible assets	1,078	1,950	1,024
Property, plant and equipment	4,815	5,751	5,556
Deferred tax asset		680	
	7,347	10,469	8,033
Current assets			
Inventories	1,618	1,255	1,182
Trade receivables	512	861	637
Other receivables	352	314	472
Corporation tax	149	547	836
Cash and bank balances	2,700	961	4,688
	5,331	3,938	7,815
TOTAL ASSETS	12,678	14,407	15,848
LIABILITIES			
Non-current liabilities			
Bank loans	234	526	388
Deferred tax	-	820	-
Pension obligation	894	1,173	1,085
	1,128	2,519	1,473
Current liabilities			
Bank loans	470	270	859
Trade and other payables	1,852	2,197	2,056
Deferred income	173	165	209
	2,495	2,632	3,124
TOTAL LIABILITIES	3,623	5,151	4,597
TOTAL NET ASSETS	9,055	9,256	11,251
EQUITY			
Capital and reserves attributable to equity holders of the parent			
Share capital	6,804	547	6,354
Share premium account	27,764	27,539	27,764
Share-based payment reserve	686	1,445	828
Retained (deficits)	(26,000)	(20,120)	(23,595)
Foreign exchange reserve	(199)	(155)	(100)
TOTAL EQUITY	9,055	9,256	11,251
	<del></del>		

## ${\bf CONSOLIDATED\ STATEMENT\ OF\ CASH\ FLOWS\ (UNAUDITED)}$

For the six months ended 31 December 2019

	Unaudited Six months ended 31 Dec 2019 £'000	Unaudited Six months ended 31 Dec 2018 £'000	Audited Year ended 30 Jun 2019 £'000
Cash flow from operating activities			
Loss before taxation	(2,724)	(3,471)	(7,755)
Adjustments for:- Amortisation of intangible assets	68	180	2,007
Depreciation of property, plant and equipment	471	411	895
Share-based payment (income)/charge	(142)	147	200
Loss/(Profit) on disposal of property, plant and equipment	123	-	16
Pension plan contributions	-	(120)	(118)
Finance costs	94	36	123
Pension - net interest expense	22	19	42
Operating cash flow before working capital changes	(2,088)	(2,798)	(4,590)
(Increase) in inventories	(435)	(233)	(401)
Decrease / (increase) in trade and other receivables	245	(108)	200
(Decrease)/increase in payables and deferred income	(240)	112	13
Cash used in operations	(2,518)	(3,027)	(4,778)
Income tax received	846	76	76
Net cash used in operating activities	(1,672)	(2,951)	(4,702)
Cash flow used in investing activities			
Purchase of property, plant and equipment	(28)	(964)	(1,205)
Capitalisation of intangible assets	(121)	-	(267)
Net cash used in investing activities	(149)	(964)	(1,472)
Cash flow used in financing activities			
Finance costs	(94)	(36)	(123)
Proceeds from issue of share capital (net of share issue	436	-	5,634
costs) New bank loans raised	_	_	750
Repayments of borrowings	(545)	(149)	(500)
Net cash flow from financing activities	(203)	(185)	5,761
Effects of exchange rate changes	36	(31)	9
Net (decrease) in cash and cash equivalents	(1,988)	(4,131)	(404)
Cash and cash equivalents at beginning of the financial period	4,688	5,092	5,092
Cash and cash equivalents at end of the financial period	2,700	961	4,688

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (UNAUDITED)

	Share Capital	Share premium	Share- based payment reserve	Foreign exchange reserve	Retained profits	Total
	£,000	£'000	£'000	£'000	£'000	£'000
At 1 July 2018	547	27,539	1,298	(160)	(16,683)	12,541
Total comprehensive loss for the period	-	-	-	5	(3,437)	(3,432)
Recognition of share-based payments	-	-	147	-	-	147
At 31 December 2018	547	27,539	1,445	(155)	(20,120)	9,256
Total comprehensive loss for the period	-	-	-	55	(3,746)	(3,691)
Recognition of share-based payments	-	-	53	-	-	53
Share based payment charges – lapsed options	-	-	(670)	-	670	-
Issue of ordinary share capital	5,807	225	-	-	-	6,032
Transaction costs in respect of share issues	-	-	-	-	(399)	(399)
At 30 June 2019	6,354	27,764	828	(100)	(23,595)	11,251
Total comprehensive loss for the period	-	-	-	(99)	(2,391)	(2,490)
Recognition of share-based payments	-	-	(142)	-	-	(142)
Issue of ordinary share capital	450	-	-	-	-	450
Transaction costs in respect of share issues	-	-	-	-	(14)	(14)
At 31 December 2019	6,804	27,764	686	(199)	(26,000)	9,055

## Equity share capital and share premium

The balance classified as share capital and share premium includes the total net proceeds on issue of the Company's equity share capital, comprising  $\pm 0.02$  ordinary shares. The share premium account can only be used for bonus issues, to provide for the premium payable on redemption of debentures or to write off preliminary expenses, or expenses of, or commissions paid on, or discounts allowed on, any issues of shares or debentures of the company.

### Share premium account

The share premium account represents the amount received on the issue of ordinary shares in excess of their nominal value and is non-distributable.

## Share-based payment reserve

The share-based payment reserve comprises the cumulative expense representing the extent to which the vesting period of share options has expired and management's best estimate of the achievement or otherwise of non-market conditions and the number of equity instruments that will ultimately vest.

## **Retained profits**

The retained profits reserve comprises the cumulative effect of all other net gains, losses and transactions with owners (e.g. dividends) not recognised elsewhere.

### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### For the six months ended 31 December 2019

### 1. Accounting policies

#### **Basis of preparation**

The interim financial statements, which are unaudited, have been prepared on the basis of the accounting policies expected to apply for the financial year to 30 June 2020 and in accordance with recognition and measurement principles of International Financial Reporting Standards (IFRSs) as endorsed by the European Union. The accounting policies applied in the preparation of these interim financial statements are consistent with those used in the financial statements for the year ended 30 June 2019.

The interim financial statements do not include all of the information required for full annual financial statements and do not comply with all of the disclosures in IAS34 'Interim Financial Reporting'. Accordingly, while the interim financial statements have been prepared in accordance with IFRS they cannot be construed as being in full compliance with IFRS.

The financial information for the year ended 30 June 2019 does not constitute the full statutory accounts for that period. The Annual Report and Accounts for 30 June 2019 have been filed with the Registrar of Companies. The Independent Auditors' Report on the Annual Report and Accounts for 2019 was unqualified and did not include references to any matters which the auditors drew attention to by way of emphasis without qualifying their report and did not contain statements under Section 498(2) or 498(3) of the Companies Act 2006.

### Going concern

The Group meets its day-to-day working capital requirements through existing cash resources which, at 31 December 2019 amounted to £2.7 million and included cash drawn from the working capital facility held by the Group's US subsidiary, which, as at 31 December 2019, stood at £0.68 million. The working capital facility is secured against the US inventory and debtor book, and is included in trade and other payables on the Statement of Financial Position at the Period end. The Directors have prepared cash flow projections for the period ending no less than 12 months from the date of their approval of these financial statements. On the basis of those projections, the Directors believe that the Group will be able to continue to trade for the foreseeable future.

## 2. Loss per share

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

	Unaudited Six months ended 31 Dec 2019 £'000	Unaudited Six months ended 31 Dec 2018 £'000	Audited Year ended 30 Jun 2019 £'000
Loss after tax attributable to owners of the Haydale Graphene Industries Group	(2,565)	(3,328)	(7,185)
Weighted average number of shares: - Basic and Diluted	322,615,153	27,328,773	115,060,850
Loss per share: - Basic $(\mathfrak{L})$ and Diluted $(\mathfrak{L})$	(0.01)	(0.13)	(0.06)

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.

### 3. Approval

The 31 December 2019 interim financial statements were approved by a duly appointed and authorised committee of the Board of Directors on 26<sup>th</sup> February 2020