

# Final Results

Twelve months ended 30 June 2022

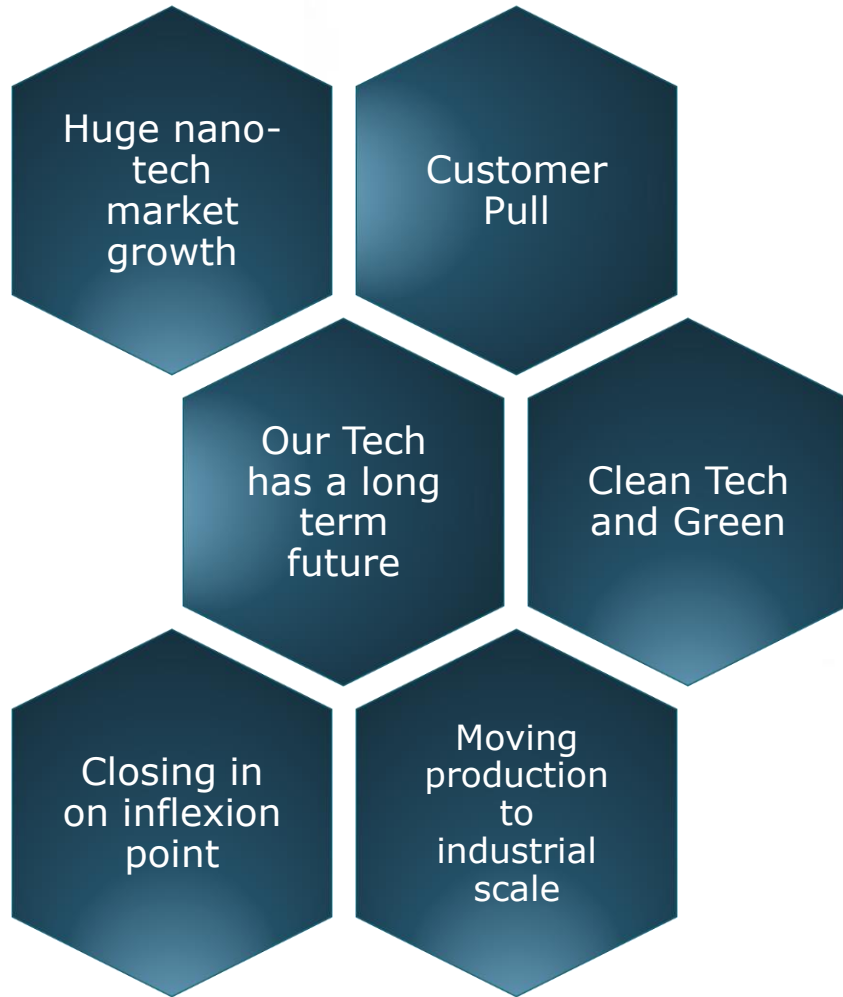
Keith Broadbent – CEO

Mark Chapman – CFO

October 2022



# Overview



## Our priorities

- Delivering commercial revenue
- Investment in our capacity
- Development of our technology

# Period Highlights

- **Positive progress in the energy, heating and power storage sectors**
  - Exclusive supply agreement with High Tech Systems Limited - *ahead of contractual volumes at the financial year-end*
  - Working with Cadent to develop graphene ink-based heaters for a low power water heater prototype
  - Developing underfloor heating solutions - energy efficient, cost effective and easy to install. Discussions with major energy providers.
  - MoU with Viritech for the delivery of advanced hydrogen storage solutions
- **Good progress scaling up operations to take advantage of commercial opportunities**
  - Successfully commissioned the larger HT1400 plasma reactor – now optimising for specific materials
  - Contract with Vittoria Spa, the leading cycle tyre manufacturer, for an initial supply of one tonne of functionalised graphene nanomaterial
- **Continue to enhance core product base**
  - Developing an advanced ink for the glucose monitoring and diabetes management sector
  - Liquid doping technology for conductive inks – patent applied
- **Successful fundraising - £5.51 million gross proceeds in turbulent market**

# Key Product Update

	Key Benefit	Status	Target Customer	Update
Biomedical Inks	Cost effective, non invasive monitoring of chronic conditions and detecting other diseases	Refining an ink that can be used in the testing of diabetes. Developing a new ink with enhanced testing capability	Glucose monitoring companies - Intl	Currently on plan, challenges being overcome
Conductive/ Security Inks	Cost effective and environmentally friendlier solution to reduce metallic content of security tags	Project with leading supplier of RFID solutions	Project Sponsor	On plan
Elastomers Shoes/ Tyres	Improved rubber compounds - increased tear strength, improved slip resistance and weight reduction	One tonne order from Vittoria Trials with a number of footwear companies	Vittoria Other tyre companies Footwear companies	On plan
Nano Material Customers	Functionalising customers nanomaterials to improve performance	Several large suppliers looking to enhance the performance of their raw material offering	Graphene suppliers Boron Nitride suppliers	Developing revenue stream

Revenue from these product lines included in FY23 market guidance and FY24 ramp up



# Key Product Update

	Key Benefit	Status	Target Customer	Update
Hi-Therm	Energy efficient alternative to water in heating systems	Product in final stages of development - Exclusive supplier to High Tech Systems Ltd	Energy utilities, Residential builders	On plan
Underfloor Heating	Energy efficient, cost effective alternative for current UFH and a replacement for other heating systems	Working with a leading supplier to the major utilities	Energy utilities, Residential builders Mobile heating applications	Ahead of plan - strong interest
Ceramyc Guard	Repair rather than replace reduces maintenance costs and new concrete requirement	Working towards DWI 31. Site trials (inc dirty water) completed Diversifying into civil engineering	Water Utilities Civil Engineering Contractors	Slight slippage on DWI but on plan in other areas
Cutting Tools (US)	Finished ceramic cutting tools to the aerospace and automotive sectors	> 60 geometries ready New customer acquisition going well	Aerospace sector Automotive - brake sector	Slight slippage but revenue build in progress



£'000	2022			
	UK & Europe	North America	Asia Pacific	TOTAL
Services	275	-	31	306
Reactor rental	134	-	-	134
Goods	575	1,673	213	2,461
	<b>984</b>	<b>1,673</b>	<b>244</b>	<b>2,901</b>

£'000	2021			
	UK & Europe	North America	Asia Pacific	TOTAL
Services	231	-	107	338
Reactor sales	403	-	-	403
Reactor rental	134	-	-	134
Goods	155	1,679	194	2,028
	<b>923</b>	<b>1,679</b>	<b>301</b>	<b>2,903</b>

➤ **Robust revenue performance in FY22 on a LFL basis**

- US silicon carbide customer in East Asia pulled forward revenue to FY21
- Settlement with US cutting tool customer

➤ **Segmental analysis**

- Strong growth in UK Goods Revenue – 270% increase YoY
- Excluding reactor sale in 2021 UK showing 89% LfL growth
- Momentum should carry forward to current year

➤ **Asia Pacific**

- Progress slower than anticipated
- Potential upsides with Vittoria – still discussing further collaboration



# Financial Review

Profit & Loss	Jun-22 Audited £'000	Jun-21 Audited £'000	% Mov
<i>Like for Like Revenue</i>	2,450	1,279	
<i>US Customer (East Asia)</i>	-	1,222	
<i>US Settlement</i>	451	-	
<i>Reactor Sale</i>	-	402	
Revenue	2,901	2,903	-0%
<b>Gross Profit</b>	<b>1,745</b>	<b>1,979</b>	<b>-12%</b>
<i>Gross Profit Margin</i>	60%	68%	
Other Operating Income	442	575	-23%
Adjusted Admin Expenses	5,520	4,724	-17%
<b>Adjusted Operating Loss</b>	<b>3,333</b>	<b>2,170</b>	<b>-54%</b>
Adjusting Administrative Items			
Share Based Payment Exp	39	119	
Impairment - Thailand	375	-	
Dep & Amort	1,308	1,271	
Total Trading Admin Expenses	7,242	6,114	18%
<b>Loss from Operations</b>	<b>5,055</b>	<b>3,560</b>	<b>-42%</b>
Finance Costs	187	211	11%
<b>Loss Before Taxation</b>	<b>5,242</b>	<b>3,771</b>	<b>-39%</b>
Taxation	433	363	19%
<b>Loss for Year from Cont. Ops</b>	<b>4,809</b>	<b>3,408</b>	<b>-41%</b>

- Robust revenue performance
- Other operating income – US federal support not repeated in FY22
- Investment to strengthen teams across all facilities locations led to increase in Adjusted Admin Expenses
- Adjusted operating loss increased by £1.16 m due to investment in human capital
- Investment in Thai subsidiary impaired due to higher level of uncertainty
- Increased capitalisation of R&D costs reflecting increase in technology investment.

# Financial Review

Cashflow Statement	Jun-22 Audited £'000	Jun-21 Audited £'000	% Mov
<b>Operating cash flow before working capital changes</b>	<b>3,416</b>	<b>2,044</b>	<b>-67%</b>
Working Capital Movement	244	468	48%
R&D Tax Credit Received	371	383	-3%
<b>Net Cash used in Operations</b>	<b>2,801</b>	<b>1,193</b>	<b>-135%</b>
Purchase of Tangible Assets	996	220	-353%
Purchase of Intangible Assets	340	260	-31%
<b>Net Cash used in investing activities</b>	<b>1,336</b>	<b>480</b>	<b>-178%</b>
<b>Cash Flow used in Financing Act</b>			
Finance Costs	63	95	34%
Finance Costs - Right of Use Asset	124	116	-7%
Payment of Lease Liability	548	591	7%
Net proceeds from Share Issue	4,794	2,757	-74%
Net Loan Drawdown/(Repayment)	389	581	167%
	3,670	2,536	
Effect of XR Changes	9	42	-122%
<b>Net Change in Cash</b>	<b>458</b>	<b>821</b>	<b>156%</b>
<b>Balance at End of Year</b>	<b>1,186</b>	<b>1,644</b>	<b>28%</b>

- **Cash outflow before working capital increased by £1.4 m**
  - Investment to strengthen team
  - Positive but limited working capital movement
- **£1.0 m investment in physical assets**
  - HT1400 reactor and new unit fit out at Ammanford
- **Debt at year end of £1.3 m (FY21: £1.8 m).**
  - Repayments scheduled for FY23 are less than 1% of debt.
  - New bank loans from Innovate UK offset by net repayment of US facilities
- **Successful fund raise in September 2022**
  - £5.15 m net proceeds
  - Potential warrant conversion of up to £2.75 m by Sept 23





# Summary Outlook

## ➤ **Focusing on clear priorities**

- Key segments/products identified and being pursued - the markets for these remain vast
- Looking to carry momentum for H2 FY22 through to current year
- Conversion of technology to sales is the challenge we are focused on – product portfolio should shield from significant external progress disruption

## ➤ **Investment in FY22 allows us to solve the 'graphene challenge'**

- We can deliver consistent product on an industrial scale
- Physical capacity now sufficient to deliver revenue expectations through FY24
- Ability to cost effectively scale physical capacity

## ➤ **Our products can make a real difference to the carbon reduction challenge**

- We cost effectively remove weight, reduce use of metallic elements and make sustainable products that last longer

## ➤ **Haydale is in the right place at the right time**



# THANK YOU

Keith Broadbent CEO  
Mark Chapman CFO

October 2022



# Board of Directors



## **Keith Broadbent, CEO**

Prior to joining Haydale, Keith held a number of senior operational and commercial positions which covered aerospace, defence, automotive, marine and medical sectors. His experience includes significant multi-site responsibilities in both the UK and internationally and he has worked for Princess Yachts International, Sunseeker, TT Electronics and most recently Ultra Electronics. Keith has demonstrated a strong track record in the delivery of budgets, high level customer service and enhancing shareholder value. Keith joined Haydale in July 2017 and was appointed the Group's Chief Executive Officer in March 2019.

Keith holds an MBA from Derby University and this, coupled with his customer contact and manufacturing experience across a number of different sectors encompassing design, supply chain, manufacture, commercial and financial elements of business, are a key skill requirement in the ongoing journey moving Haydale into a market led commercial scale manufacturing organisation putting people at the centre of the enterprise strategy,

## **Mark Chapman, CFO**

Mark has held a number of CFO and COO roles within international companies operating in the med-tech, beverages and consumer sectors, where he has helped deliver strong improvements in business sustainability and EBITDA growth. Prior to moving into industry, Mark spent 8 years in professional services firms, including 5 years as a corporate financier with Deloitte. Before embarking on his career in finance, Mark was a commissioned officer in the British Army. Mark qualified as a chartered accountant in 1995 and holds a degree in Economics from the University of Birmingham. Mark joined Haydale as CFO in November 2019.

Mark brings experience of working in Board positions in international multi-currency businesses undergoing periods of sustained change. He has a strong foundation in accountancy supplemented by experience in mergers and acquisition, corporate restructuring and raising equity and debt finance.



# Board of Directors



## **David Banks, Non-Executive Chairman**

David Banks started in stockbroking in Birmingham in 1979 with Harris, Allday, Lea and Brooks before moving to London and becoming an Institutional Salesman at Panmure Gordon where he was acclaimed in the Automotive, Engineering, Aerospace and Motor Distributors sectors. He subsequently became a Corporate Broker advising many companies on their Corporate Structure, Strategy, Messaging and Presentations. He also raised the Capital for many of these Companies both at IPO and in Secondary fund raises. David joined Haydale as Non-executive Chair in July 2017 and was appointed as Interim-executive Chair on 5 September 2018 and, following the general meeting on the 12 March 2019, reverted to Non-executive Chair.

David has significant city experience and has advised companies in the Automotive, Aerospace and Motor Distribution sectors on their corporate structure, strategy in messaging and presentation. He has experience of raising capital for growing companies and is responsible for liaison with our major shareholders.



## **Graham Eves MA, Non-Executive Director**

Graham Eves joined GKN plc in 1967 where he spent 13 years operating across multiple overseas jurisdictions including, for the last 5 years, setting up and running a special operation for GKN plc's head office in Switzerland. He returned to the UK in 1980 to work in venture capital and establish his own international business consultancy. His main activities covered advising a range of German, North American and Japanese automotive component/technology suppliers and he co-founded and was chair of an automotive technology company, Mechadyne (now part of Rheinmetall Automotiv AG). Graham was a non-executive director of AB Dynamics plc from flotation until September 2020. He was on the AIM advisory committee of the London Stock Exchange ("LSE") for 6 years and has a Master of Arts degree in Modern and Medieval Languages from the University of Cambridge.

Graham is a Non-Executive Director of Viritech Limited and iVapps (UK) Limited, Chair of Zero E Technologies, Inc. and a director of Zeus Motors, Inc. He has an extensive range of international business contacts and years of experience of negotiating technology licence deals. He is particularly interested in the challenges of growing and structuring small high technology companies so that they can find their places on the world stage.



## **Theresa Wallis, Non-Executive Director & Chair of Audit Committee**

Theresa Wallis worked most of her executive career in financial services, moving into technology commercialisation in 2001. She was with the LSE for 13 years, where from 1995 to 2001 she was COO of AIM, having managed the market's development and launch. From 2001 to end 2006 she was a principal executive of ANGLE plc, a venture management and consulting business focusing on the commercialisation of technology. Since 2001 she has held a number of non-executive directorships, including LiDCO Group plc where she was non-executive chair, Veriton Pharma Ltd and the Quoted Companies Alliance. Prior to joining the LSE, she worked for Hambros Bank and then Canadian Imperial Bank of Commerce in London. Theresa has a degree in Zoology from the University of Oxford and a Diploma in Company Direction from the Institute of Directors.

Theresa has a background in business development and technology commercialisation alongside her experience of working with AIM and other companies at a similar stage of development. She brings a range of corporate governance, business development, financial and commercial experience to the Company.

Theresa joined the Board of Haydale in June 2020.

