



**Investor Presentation
Annual Results
October 2018**



Adrian Potts – Chief Executive Officer

- 28+ years' experience in advanced composites, commercial and manufacturing leadership
- Global business development Director within Cytec Industrial Materials
- President of Cytec's process materials business
- PhD in thermoplastics composite materials, BSc in materials technology



Gareth Jones – Chief Financial Officer

- Chartered Accountant with 28 years' experience in finance
- Divisional Finance Director at Gardner Denver
- Finance Director of Vireol plc
- BEng in Mining Engineering

Other Directors

Bryan Dobson – Chairman

- Over 33 years' experience in the chemical industry with ICI plc and Croda International plc

Karl Coleman – Chief Scientific Officer

- Invented AGM's proprietary production process and established the Company in 2010. Head of Chemistry at Durham University

Sean Christie – NED

- Formally Group Finance Director of Croda International plc

Mike Townend – NED

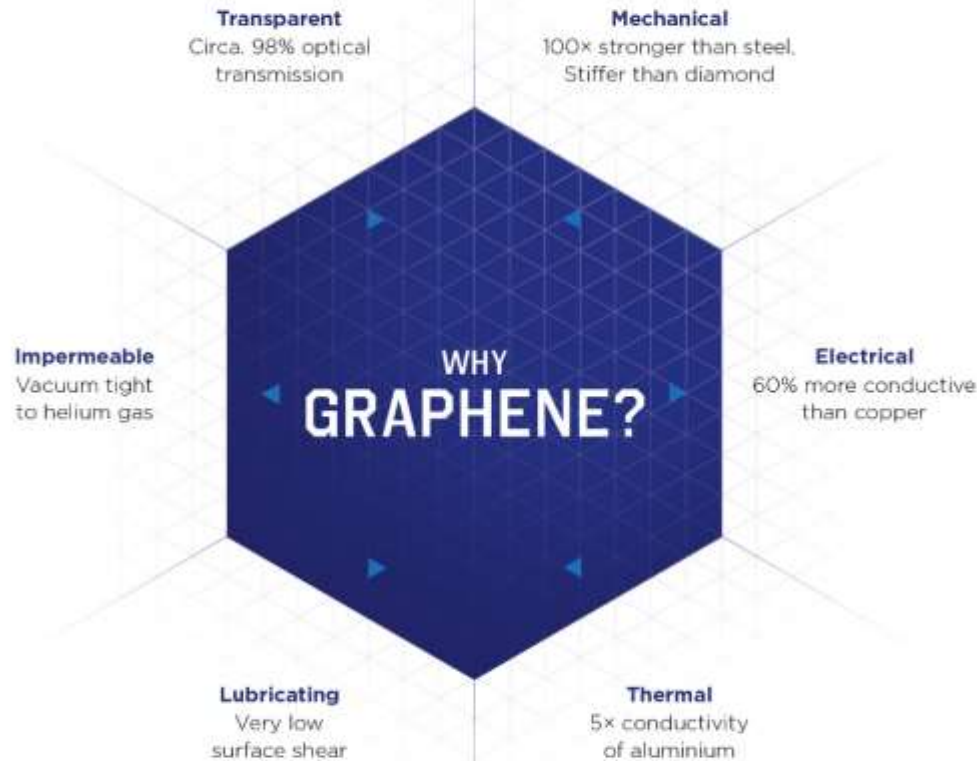
- Currently Chief Investment Officer of IP Group

Highly experienced team with track record of value creation in specialty materials



WHY GRAPHENE?

“GRAPHENE HAS THE POTENTIAL TO BE THE MOST DISRUPTIVE MATERIAL OF THE 21ST CENTURY”



However there are significant challenges to produce, disperse and format for customers



Significant progress on multiple fronts in recent months

- James Briggs launching a graphene enhanced product range
- Several significant coatings opportunities are progressing towards commercial maturity
- National vehicle manufacturer, Brit Tipp tendering for several commercial contracts for graphene enhanced coatings for vehicles
- Airbus continuing to work towards product incorporation in 2018
- Magna Exteriors looking to incorporate graphene in a variety of their products
- Puraglobe launched Graphenics® range of oil based products for customer testing- excellent results being reported in testing
- Customer successfully tested *Genable*® 4400 and targeting a launch of product within the electronics sector
- *Structural Ink*® programme making significant progress with additional investment and testing ongoing
- *Genable*® product range launched, focused on the coatings industry
- Patent application for manufacturing process approved in USA



Market requirements

- Excellent barrier properties
- UV absorption
- Electrical conductivity
- Resistance to scratch and abrasion
- Adhesion to substrate
- Thermal conductivity
- Foul release

£8.1bn

Anti-corrosion coatings opportunity
(2013)

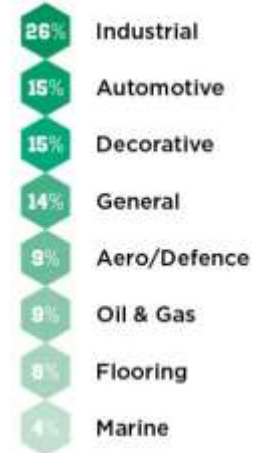
Routes to market

- Coatings market formulators
- Additives manufacturers



COMMERCIAL HIGHLIGHTS

- James Briggs launching a graphene enhanced product range
- HMG Paints developing a graphene product range with AGM
 - Brit Tipp completed live field trials and adopted graphene into their offering
 - Following positive feedback Brit Tipp is now bidding on several larger contracts
 - HMG/AGM working to bring an enhanced product to market in 2019
- *Genable*[®] product range launched specifically for the coatings sector



COATINGS SECTOR- CASE STUDY

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James Briggs Limited

Background

- Leading independent chemicals business based in North West
- Can distribute up to 150 million aerosols and 30 million litres of product per annum
- A commitment to innovation led them to explore the potential benefits graphene had to offer

Latest developments

- JBL and AGM technical teams worked in close co-operation
- Extensive testing programme including salt spray testing, ladder testing, stability testing, along with a number of product variants
- Initial product launch scheduled for Q4 2018
- Ramp up and demand requirements being developed

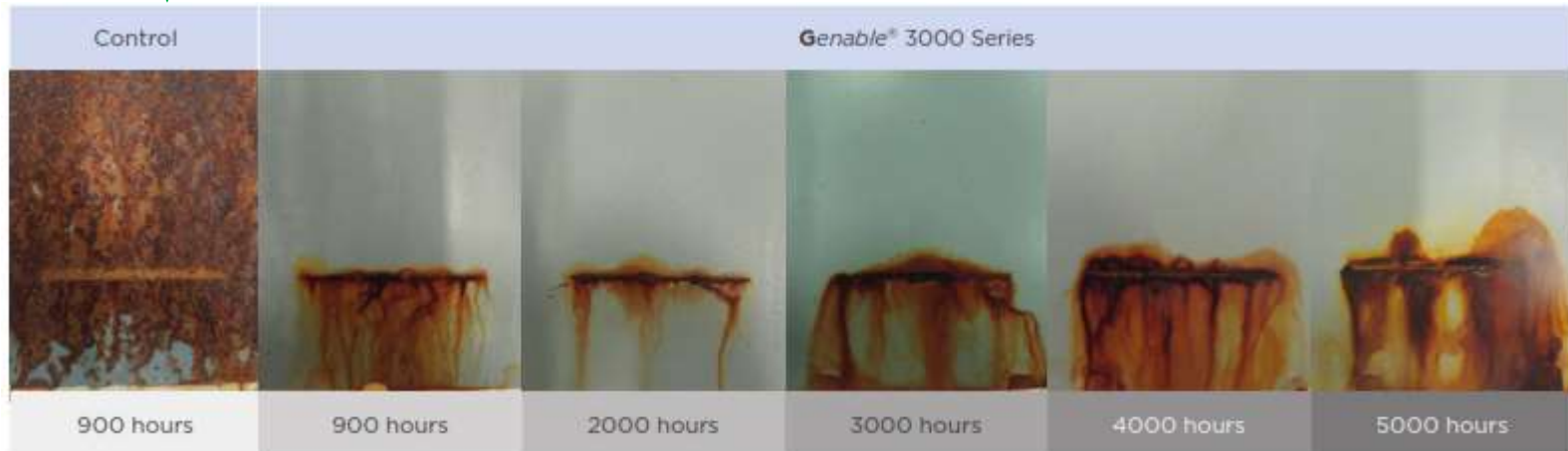


COATINGS SECTOR- *Genable*® 3000 range

Standard primer
without graphene



Control totally fails after around 900 hours in salt spray tests
Graphene plates show very little deterioration even after 5,000 hours

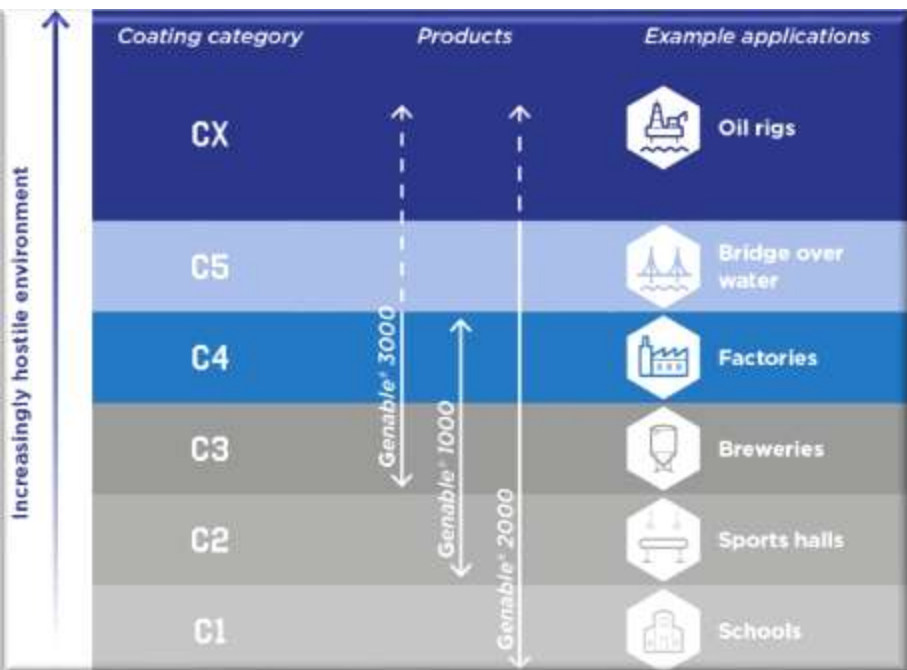


- Tool-box additive for formulators to enhance coating performance in a range of environments
 - Metal free systems
 - Extended durability, anticipated to find applicability in harsh C4, and C5, type environments
 - Commercial benefits, significant reductions in application, maintenance and repair costs

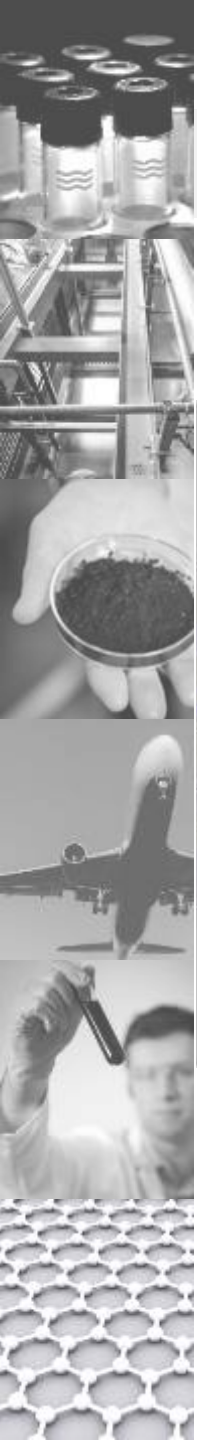


Genable® PRODUCT RANGE

A standardised range of data backed products



	Interior	Exterior
CX	Marine areas with high condensation/pollution	Coastal areas with high salinity
C5	Industrial areas with high condensation/pollution	Industrial areas with high humidity & aggressive environment
C4	Chemical plants/swimming pools, coastal shipyards	Industrial and coastal areas moderate salinity
C3	High humidity/some air pollution – breweries/dairies	Urban/industrial atmosphere. Moderate SO2, low salinity
C2	Buildings with condensation – sports halls	Rural areas
C1	Buildings with clean atmosphere – schools/hotels	Areas of low pollution



Market requirements

- Improved toughness
- Low density
- Thermal conductivity
- Electrical conductivity
- Enhanced fatigue performance
- Improved flame resistance, smoke, toxicity and heat release
- Increased moisture and barrier properties
- Low shrinkage

€37bn

Materials opportunity

Routes to market

- Formatted materials-pre-impregnated composites
- Infusion systems- bulk resin suppliers
- Adhesive producers
- End users



COMMERCIAL HIGHLIGHTS

- **Magna Exteriors- engagement with tier 1 automotive supplier**
 - Included graphene on Fenyr supercar
 - Various work programmes underway to assess graphene potential
- **Airbus continue to work towards product incorporation in 2018**
- **Continued high levels of interest in Structural Ink®**
 - Testing underway in sports and aviation industries
 - Additional investment in larger printing unit



COMPOSITES SECTOR- CASE STUDY

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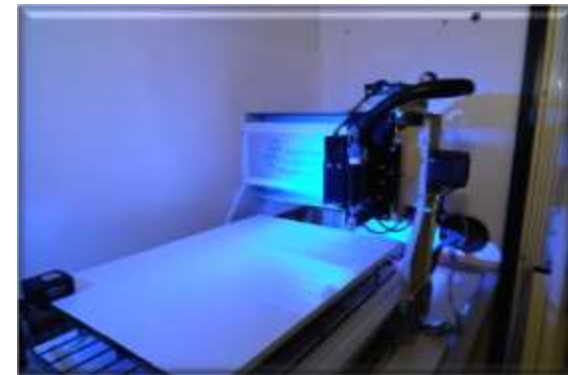
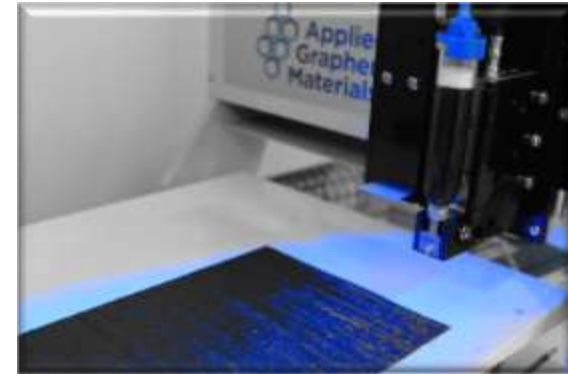
STRUCTURAL INK®

What is it?

- Highly targeted delivery of graphene onto composites
- Combination of two technologies: printing and dispersing graphene
- Accurately applied - greater precision and performance where its properties are required

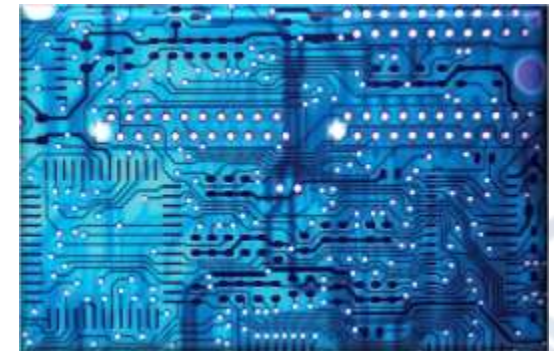
Latest developments

- Additional £74k invested to increase capability
- Patent application filed
- Assessment of product underway with a number of partners
- Successfully demonstrated at JEC - high levels of interest

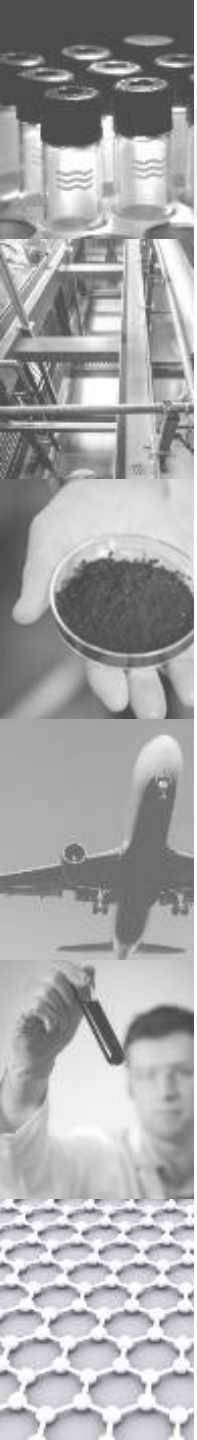
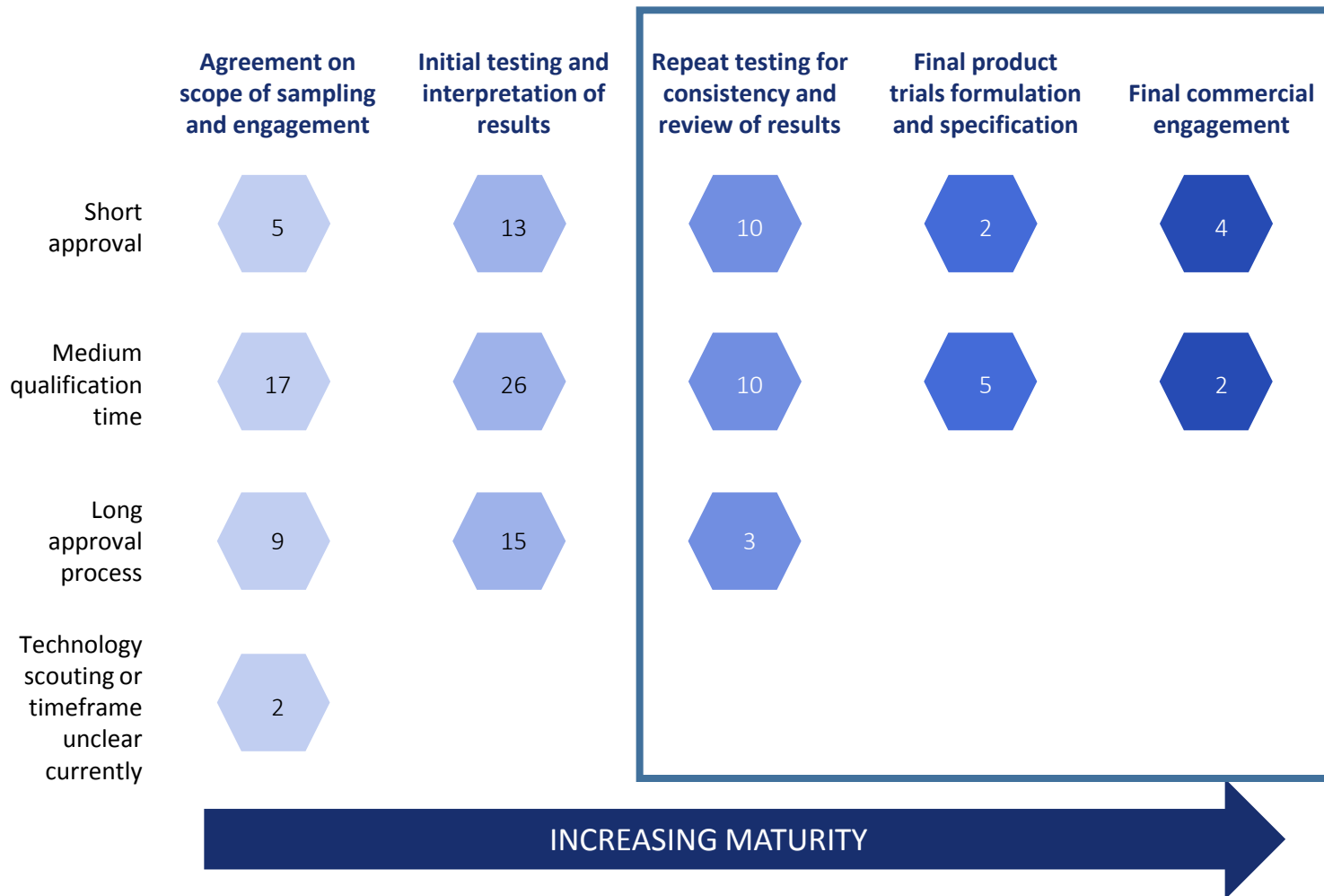


COMMERCIAL HIGHLIGHTS

- Puraglobe at point of commercialisation:
 - Completed extensive testing and performance evaluation
 - Launched Graphenics® range for target customers
 - “Excellent progress” being reported back from testing by Puraglobe customers
- Customer completed testing of *Genable*® 4400 and is now looking to launch a product targeted at the electronics sector



OPPORTUNITY PIPELINE MATURITY



OUR BUSINESS MODEL

Our key relationships



Partnerships



Our people



R&D



IP



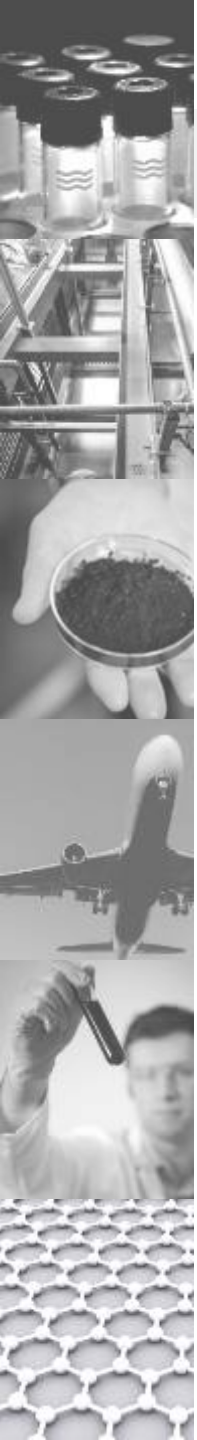
An integrated business



Creating value



Creating value for shareholders, employees, customers and suppliers



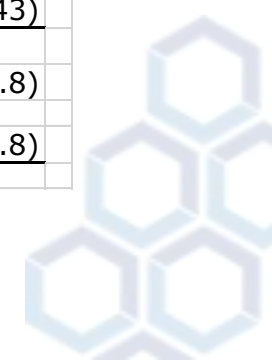
The background of the slide is a grayscale photograph of an industrial facility. It features a complex network of pipes, valves, and structural beams. In the foreground, a large horizontal pipe runs across the frame. To the right, there are large cylindrical tanks or vessels with flanges. The overall scene is brightly lit, creating a clean, technical atmosphere.

FINANCIALS

INCOME STATEMENT SUMMARY

- Revenues for year in line with prior year, with notable orders from Airbus
- Other income relates to grants received primarily for the development of graphene applications.
- Operating expenses in line with prior year when exceptionals and additional depreciation are excluded
- Exceptional costs relate primarily to fund raising and disposal of patent and licence costs
- Depreciation up year on year as production capacity comes on stream.

	2018	2017
	£'000	£'000
Revenue	77	97
Other income	126	168
	203	265
Cost of sales	(250)	(385)
Gross loss	(47)	(120)
Operating expenses	(4,555)	(4,190)
EBITDA	(3,984)	(4,059)
Exceptional costs	(307)	-
Depreciation	(311)	(251)
Operating loss	(4,602)	(4,310)
Net finance income	57	33
Loss before tax	(4,545)	(4,277)
Tax on loss	1,046	1,234
Loss for the period	(3,499)	(3,043)
Diluted EPS (pence)	(8.2)	(13.8)
Adjusted diluted EPS (pence)	(8.2)	(13.8)



CASH FLOW SUMMARY

- Net cash of £10.4m on deposit with maturity of less than one year. Slightly ahead of expectations
- Capital expenditure down year on year following completion of new A-GNP 35 facility
- Gross proceeds from placing and open offer £9.7m
- Tax credits relate to R&D tax credits
- Cash used in operations of £4m consistent with prior year

	2018	2017
	£'000	£'000
Operating loss	(4,602)	(4,310)
Depreciation and amortisation	432	251
IFRS 2 Share based payments	177	192
Net working capital movement	(12)	(95)
Cash used in operations	(4,005)	(3,962)
Interest received	53	52
Tax received	631	1,234
Capital expenditure	(319)	(725)
Free cash flow	(3,640)	(3,401)
Proceeds from issue of shares	9,375	407
Opening cash at bank	4,708	7,702
Cash at bank	10,443	4,708

SUMMARY

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- **Notable commercial progress in the coatings sector with a number of exciting opportunities very close to production order stage**
 - **JBL looking to launch product**
 - **Brit Tipp tendering for several commercial contracts**
- **Increased momentum in the composite sector in a multitude of applications and industries, with numerous work-streams ongoing with Magna**
- **A number of milestones within the technical and operational teams, including:**
 - **Breakthrough in barrier protection;**
 - **Launch of *Genable*® range;**
 - **Receipt of manufacturing patent for USA; and**
 - **Filing application patents.**
- **Focus remains on targeting additional and larger production orders during 2018 and into 2019.**
- **AGM remains confident that its adopted strategy will enable it to become the UK's leading producer of graphene and commercial momentum is building.**



APPENDIX

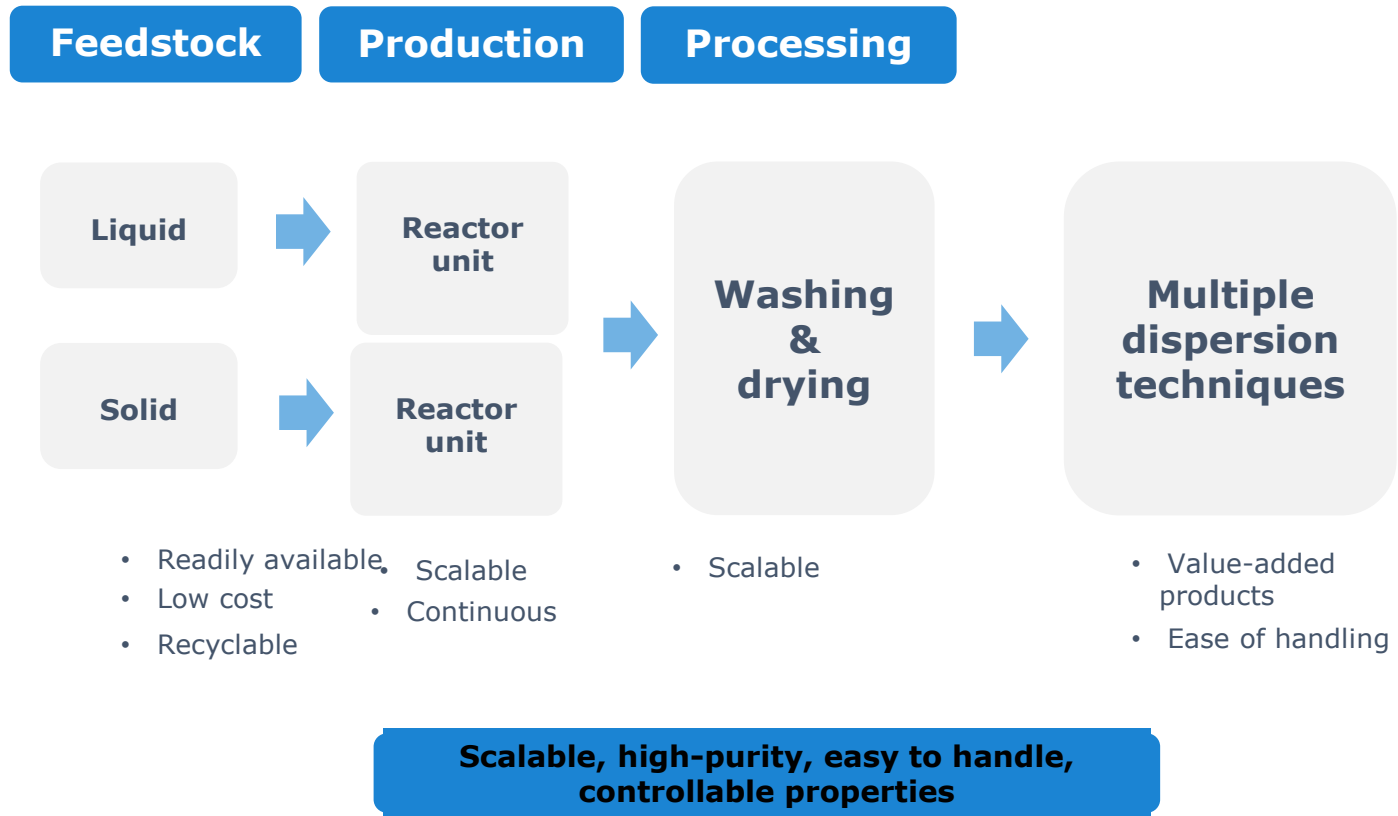


SHAREHOLDER STRUCTURE

Significant shareholders at 31.7.18	%	%
49,429,380 ordinary shares of 2 pence each		
Directors		4.1%
IP Group	19.1	
Insight	10.3	
Herald Investment	9.7	
Hargreaves Lansdown	8.3	
Ruffer	7.7	
Eden Tree	7.6	
Baillie Gifford	4.8	
Interactive Investor	3.0	
University of Durham	2.5	
		73.0%
Other		22.9%

AGM PRODUCTION PROCESSES

Unique, proprietary bottom-up processes



Top-down

DESCRIPTION

ADVANTAGES

DISADVANTAGES

Reduced graphene oxide

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> • Oxidation of graphite • Sonication / heat to separate layers • Reduction to graphene nanoplatelets | <ul style="list-style-type: none"> • Established process | <ul style="list-style-type: none"> • Graphite supply chain – concentrated in China • Batch process • Residual graphite • Incomplete reduction |
|--|---|---|

Liquid phase exfoliation

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> • Graphite in solvent • Sonication to separate layers • Graphene nanoplatelets | <ul style="list-style-type: none"> • Can be low temperature | <ul style="list-style-type: none"> • Graphite supply chain – concentrated in China • Batch process • Residual graphite • Toxic solvents |
|--|--|---|

Chemical vapour deposition

Bottom-up

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> • Deposition of graphene films onto metal substrates • Film removed from metal substrate • Produces films rather than nanoplatelets • Different end markets to AGM | <ul style="list-style-type: none"> • Able to produce large films with roll-to-roll approach • High purity with good electrical properties | <ul style="list-style-type: none"> • Expensive due to need to recover/remove metal substrate • High operating temperature • Low volume of material |
|---|---|---|



THANK YOU

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