25 August 2016

Haydale Graphene Industries plc

("Haydale" or the "Group")

Haydale acquires low cost expertise in Thailand

Issue of equity

Haydale Graphene Industries plc (AIM: HAYD), the Group focused on enabling technology for the commercialisation of graphene and other nanomaterials, is pleased to announce that it has exchanged contracts to acquire the entire issued share capital of Innophene Co., Ltd ("Innophene"), a business focussed on the production of graphene enhanced conductive ink and composites, based on the Thailand Science Park, Bangkok ("Acquisition"). Completion of the Acquisition ("Completion") is conditional on, *inter alia*, a meeting of Innophene's shareholders to effect the share transfer (expected to occur on 9 September 2016 ("Innophene Shareholder Meeting")) and the subsequent issue of 176,952 new ordinary shares of 2p each in Haydale as consideration for the Acquisition as further described under the heading "Terms of the Acquisition" below.

Innophene, founded in 2011, is a small scale innovation based business that has developed, in conjunction with the Thailand National Science & Technology Development Agency, a one-stage exfoliation/dispersion process to create a range of graphene-enhanced transparent conductive inks for inkjet and other printing platforms. They have also now developed a graphene enhanced PLA (Poly-Lactic Acid) resin (commonly used in medical devices and 3D printing) that shows improved mechanical and barrier performance without sacrificing transparency, thereby allowing the material to be coloured through the addition of pigments, whereas a graphene loaded PLA will be black. Innophene has commenced targeted marketing of their Thai-patented transparent conductive ink.

A key benefit of the Acquisition to Haydale is Innophene's ability to harness local expertise to design and develop high value applications for the carbon based Organic and Printed Electronic market. Their graphene inks are suitable for screen, roll to roll and inkjet printing and can be printed on a range of materials.

Innophene's highly qualified staff have also started to focus on graphene enhance composite applications in their local market and, following completion of the Acquisition, will be using know how developed in the work done on composites by the Group's UK operations.

Reason for the Acquisition

Haydale has been trialling Innophene's graphene enhanced inks internally and with a number of potential customers in the Far East region for several months. The Innophene portfolio of ink products and its PLA "non-black" resin will extend the Group's products available for sale.

Innophene's access to The Thailand Science Park in Bangkok, with its extensive analytical and processing capabilities, provides a platform for it to become the Group's Far East Centre of Excellence. Crucially, the Acquisition will also provide Haydale with research and development capability for current and potential Far East customers. This will require the delivery, initially, of a HT60 plasma reactor to Innophene's site on the Thailand Science Park to provide low cost processing and treatment services. A second reactor is likely to follow in 2017 to meet anticipated demand in the region.

The creation of HTT is a crucial step in the Group's Far East expansion plan where, post-Acquisition, the Group will:

- aim to provide a rapid customer response where nanomaterials can be processed in Thailand;
- provide a more "local" support service to the sales efforts in the Korean, Japanese and Taiwanese markets and in particular, assisting the sales activities of Haydale Technologies Korea and the Group's Taiwanese agent, Euflex;
- have a low-cost technical team that supports specific customer applications;
- have a low cost facility to support some of Haydale's UK R&D needs;
- create a sales point into SE and East Asia by keeping product stock locally for rapid delivery to customers; and
- have expanded its ink and PLA product offerings in Europe and the USA.

Terms of the Acquisition

Haydale has agreed to acquire Innophene for a total consideration of approximately £311,665, to be satisfied through the issue of 176,952 new ordinary shares of 2p each in Haydale ("Ordinary Shares") to the vendors, 74,768 of which will be subject to a 12 month lock in followed by a further 12 month orderly market agreement and the balance of 102,184 Ordinary Shares is subject to a six month orderly market agreement ("Consideration Shares"). Haydale's share price used in the calculation of the consideration is 176.13p per Ordinary Share, being the average of the closing mid-market price per Ordinary Share over the previous 30 days. As noted above, Completion of the Acquisition and issue of the Consideration Shares is conditional on approval of the Acquisition by the shareholders of Innophene at the Innophene Shareholder Meeting which is expected to occur on 9 September 2016.

The vendors of Innophene have given customary warranties and indemnities in respect of the Acquisition.

Application for the admission of the Consideration Shares to trading on AIM will be made shortly and trading in the Consideration Shares is expected to commence on 12 September 2016, assuming satisfactory outcome of the Innophene Shareholder Meeting. The Consideration Shares will rank pari passu with the existing Ordinary Shares and will represent approximately 1.1% of Haydale's enlarged issued share capital following the issue of the Consideration Shares, which will be 15,413,898 Ordinary Shares. Following Completion, this number may be used by shareholders in Haydale as the denominator for the calculations by which they will determine if they are required to notify their interest in, or a change in their interest in, the share capital of Haydale under the FCA's Disclosure and Transparency Rules.

On completion, Ray Gibbs and Matt Wood will join the board of Innophene, which upon completion will be renamed as Haydale Technologies (Thailand) Company Limited ("HTT"), with Ray Gibbs becoming chairman of HTT. Patrick Frantz, Haydale's Asia Pacific representative will also join as a director, and will assist Mr Komkrit Sajjaanantakul, HTT's Managing Director, in delivering the plan. Mr Frantz lives in Bangkok.

A further announcement will be made in the event of Completion occurring following the Innophene Shareholder Meeting.

Ray Gibbs, CEO at Haydale Limited, said:

"*We have been working with the Innophene team for over 9 months, where they have carried out a number of projects for us. The analytical and application development facilities that they have access*

to on the Thailand Science Park is substantial and we have been impressed with the quality and speed of their response. Innophene's managing director, Mr. Komkrit Sajjaanantakul, has 10 years' experience in medical devices, bio plastics and sensors and has started to develop local sales opportunities.

There is a need for investment by Haydale in the form of our plasma reactor(s) and a processing laboratory. However, this strategic move is set to ensure a rapid response and application engineering support to the fast moving Far East market."

Mr. Komkrit Sajjaanantakul, Managing Director of Innophene, added:

"*We are excited to be a part of Haydale as we see great opportunities by working together. The technology and know-how developed at Haydale, especially in composites, will create new materials. As we know, the Asia markets are maturing and fast moving especially where new technologies are concerned. We believe that it is the right time for Haydale to establish an Asia R&D hub here, and are confident that our customers will be excited about our full services and applications solutions from Haydale Technologies in Thailand*."

Trading Update

The Board is pleased to provide the following trading update for the financial year ended 30 June 2016. The Group's overall trading performance remains encouraging and is in line with market expectations. More specifically, we are delighted to be launching our first commercial thermoplastic product next month, a graphene loaded filament for 3D printing. This product will be launched on 28/29 September at the TCT exhibition in Birmingham, following extensive customer trials. We have received very positive feedback and we expect significant interest in this product. We have a supply chain set up, have commenced building for stock and we have established a sales and distribution network. Further details regarding the launch are available on our web site at http://www.haydale.com/media/1247/3d-printing-rns-reach-final.pdf

This announcement contains inside information for the purposes of Article 7 of EU Regulation 596/2014.

- Ends -

For further information, please contact:

Haydale Graphene Industries plc +44 (0) 1269 842 946
John Knowles, Chairman
Ray Gibbs, Chief Executive Officer

Cairn Financial Advisers LLP (Nomad) +44 (0) 20 7148 7900
Tony Rawlinson
Emma Earl

Cantor Fitzgerald Europe (Broker) +44 (0) 20 7894 7000
David Foreman (Corporate Finance)
Will Goode (Corporate Finance)
David Banks (Sales)

Hermes Financial PR
Trevor Phillips +44 (0) 7889 153 628
Chris Steele +44 (0) 7979 604 687

About Haydale

Haydale has developed a patented scalable plasma process to functionalise graphene and other nanomaterials. This enabling technology can provide Haydale with a rapid and highly cost-efficient method of supplying tailored solutions to enhance applications for both raw material suppliers and product manufacturers.

Functionalisation is carried out through a patented low-pressure plasma process that treats both mined, organic fine powder and other synthetically produced nanomaterial powders, producing high-quality few layered graphenes and graphene nanoplatelets. The process can functionalise with a range of chemical groups, with the level of functionalisation tailored to the customer's needs. Good dispersion improves the properties and performance of the host material and ensures the final product performs as specified.

The Haydale plasma process does not use wet chemistry, nor does it damage the material being processed; rather, it can clean up any impurities inherent in the raw material. The technology is a low energy user and most importantly environmentally friendly. The Haydale process is a patented enabling technology, allowing the Group to work with a raw material producer who seeks to add value to the base product and tailor the outputs to meet the target applications of the end user.

Haydale, based in South Wales and housed in a purpose-built facility for processing and handling nanomaterials, is facilitating the application of graphenes and other nanomaterials in fields such as inks, sensors, energy storage, composites, paints and coatings.

www.haydale.com Twitter: @haydalegraphene

About Innophene

Founded in 2011, Innophene Company Limited is one of the leading "Innovation-Houses" for Graphene Composite and Printed Electronic business in ASEAN. The company has focused on applied-research and development as well as commencing the manufacturing high value products of graphene composite polymers, conductive inks and the related applications.

Its products, under the '**PHENE**' series branding, are focused on 4 groups. (1) PHENE-Plus series is a premium grade "Transparent Conductive ink". (2) PHENE series is a Functional Conductive Ink (3) PHENE-X series is special high value Graphene polymers or chemical, such as Graphene-PLA additive for Enhancing Bio-plastic performance, (4) PHENE-Power series is Graphene for the energy harvesting application such as Ultra capacitors.

Its facilities are located in the Thailand Science Park, north area of Bangkok. Innophene works closely with the researchers and technical teams in National Science and Technology Development Agent (NSTDA), and their networks to create an appropriated technology for its client's purpose. The Research Centre is an innovative, affordable, and reliable research service for the companies who are looking for creating new products and applications.

http://www.innophene.com