

Stock Data

Share Price: 3,75p
Market Cap.: £77.7m*
Shares in issue: 2,072m*
**Pre-Acquisition numbers*

Company Profile

Sector: Alternative Energy
Ticker: PHE
Exchange: AIM

Activities

PowerHouse Energy Group plc ('the Company', 'PowerHouse' or 'PHE') has developed a proprietary process technology - DMG® - which can utilise waste plastic, end-of-life-tyres, and other waste streams to efficiently and economically convert them into syngas from which valuable products, such as chemical precursors, hydrogen, electricity and other industrial products may be derived. Its technology is one of the world's first proven, modular, hydrogen from waste (HfW) processes.

1 year share price performance



Source: LSE

Past performance is not an indication of future performance.

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PowerHouse Energy Group plc

PowerHouse's Board has confirmed it has entered into a conditional agreement for the acquisition (the 'Acquisition') of Waste2Tricity Limited ('W2T'). This will be effected through issue of 1,437,440,277 new Powerhouse ordinary shares (representing a 41% of the Company's enlarged capital), which remains subject to a general meeting scheduled for **14 July 2020**. A full description is contained in a [Circular](#) that covers the complete corporate action along with its connected proposal for shareholders to [waive Rule 9 of the Takeover Code](#). Completion of the Acquisition is expected to be transformational for Powerhouse, in that it secures UK exclusivity for DMG® Technology together with direct control of its UK sales, marketing and assignment which, given the size of the [addressable market](#), TPI considers could enable it to start generating returns for shareholders within the next two years, during which it will also commence an international licensing roll-out to selected, well-financed partners based on similarly negotiated exclusivity terms it already has in place for the UK.

Securing exclusivity for DMG® Technology in the UK.

Prior to the Acquisition, PowerHouse, W2T and Peel L&P Environmental Limited ('Peel') have been collaborating to develop the Protos Project as a 'first-of-a-kind' application of the DMG Technology at the Protos Site, together with 10 additional potential projects. On **9 March 2020**, Peel entered into the UK Exclusivity Option Agreement which is conditional upon and requires the completion of the proposed and recommended acquisition of W2T by PowerHouse.

Within this, a key aspect has been the Cheshire West and Chester planning committee [approval of the planning application](#) submitted by Peel and W2T for the DMG Technology to be utilised on the Protos Site. This arose from the successful partnership of the three companies and the fact that all principal team members from W2T will be incorporated into the PowerHouse team upon completion of the Acquisition. Their focus will then be on delivery of the Protos Project or related services together with international development, for which monthly operational costs are expected to be reduced significantly. Moreover, a key outcome from completion of the Acquisition would be for all project licence fees and project technology incomes to revert to the Company, together with the rights to assign development for projects twelve and beyond based on its assumption of exclusivity of DMG Technology across the UK.

Hydrogen – The clean energy of choice

Hydrogen is set to play an important role in UK and international clean growth strategies. PowerHouse's proprietary process technology, DMG®, not only offers a more sustainable way to treat plastic waste, but also creates a local source of low carbon transport fuel which will help tackle national air quality issues. Having cemented its relationship with Peel, the Company now expects to see the commercialisation of its pioneering plastic to hydrogen technology at the Protos development before it is rolled-out at other sites across the UK and, ultimately, internationally. Adoption of its low cost, licence-fee based business model also leads TPI to believe that PHE could potentially achieve cashflow breakeven or better, based simply on the commissioning of just two Protos-sized projects (each targeting production of, say, 3.8MWe on site and exporting 3.4MWe electricity and up to 2 tonnes of hydrogen/day). Considering the lengthy existing pipeline already negotiated by Peel, together with fees from expected feedstock testing and site-specific engineering design work, TPI considers successful completion of the W2T acquisition could result in PowerHouse being able to start generating returns for shareholders within the next 2 years.

Near-term cash inflows seen bolstering PowerHouse's balance sheet

PowerHouse has confirmed it continues to manage its outgoings and operating costs within budget. To date during 2020, project engineering operating costs have been covered by revenues received for engineering services. Current cash balances are c.£280,000 and with committed incoming fees, these resources are expected to meet outstanding costs associated with the proposed acquisition of W2T and the Company's current net cash burn of administrative costs until perhaps the fourth quarter of 2020.

Collaborative Agreements with W2T and Peel

The terms of collaboration with W2T and Peel have, as it has developed over time, been recorded in a number of agreements culminating in the Peel Collaboration Agreement, the Peel Supplemental Agreement and, most recently, the Peel UK Exclusivity Option Agreement (the 'Peel Agreements'), with the Acquisition being a condition to full implementation of the Peel Agreements pursuant to which Peel has, on exercise of its option (exercisable from Completion), agreed to pay the sum of £500,000 to PowerHouse for the exclusive right to use the DMG Technology in the United Kingdom (Exclusivity Sum) and, as a consequence, will further lead the development and the further funding strategy for all developments contemplated within the Peel Agreements.

As such, PowerHouse had originally granted W2T and Peel exclusive development rights to the DMG Technology in the UK in respect of the 11 'waste plastic-to-hydrogen' facilities and separately afforded W2T the right to exclusive development of the DMG Technology in Japan and Korea, subject to identifying suitable target projects and securing initial contracts.

Strategy following completion

PowerHouse's Board considers significant long-term global potential for the application of its DMG Technology will drive the strategy to exploit its opportunities as quickly and effectively as possible. Upon completion of the Acquisition, the Board's immediate focus will be on delivering the first commercial application of DMG Technology on the contracted Protos Site. To support the Protos Project development and other future projects, PowerHouse intends to seek to expand its operational teams in a phased manner, aligned to project progress, with teams set up to maintain and develop the delivery and supply chain relationships designed to enable it to deliver and provide licensing support to multiple projects simultaneously.

In recognition of the potential size of its global addressable market, the Enlarged Group will be able to negotiate exclusivity arrangements similar to the arrangements already in place for the UK, with carefully selected experienced and well-financed development partners on a country-by-country basis to enable rollout of its DMG Technology in each region. This strategy is expected to enable international delivery of DMG Technology projects in a speedy yet manageable manner, whilst also mitigating operational and financial risk to PowerHouse and thus creating an operational and management system capable of optimising profit and delivering sustainable growth.

In order to achieve this, Powerhouse's existing pipeline of two dozen screened DMG Technology plant opportunities in the UK will be handed over to Peel under the Peel Collaboration Agreement and a future UK exclusivity agreement, this freeing company operational resource and removing all associated UK business development costs. The international business development activities of W2T will then be integrated into those of PowerHouse and will focus on developing territory-by-territory partnership agreements with regional partners, contractors and operators to affect the roll-out. The Company will also continue such international business development activities by seeking industrial partner relationships, including the current W2T-led Japanese and Asian customer liaison which will be taken in-house and become technically directed.

PowerHouse intends also to continue with the DMG Technology development. Having become the IP owner and licensor, it will provide technical services in order to facilitate its partners' undertaking their own project development, funding and ownership.

As such, the Board considers that the global outlook for the expanded Company could be very positive, with sales and marketing effort brought in-house, together with a more focused delivery of its international ambitions based on the roll-out of the application of the DMG Technology worldwide.

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