

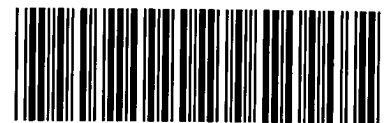


# POWERHOUSE ENERGY GROUP PLC

COMPANY NUMBER 03934451

## ANNUAL REPORT AND FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

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## COMPANY INFORMATION

Directors	William Cameron Davies (Chairman) Robert Keith Allaun (Chief Executive Officer) Nigel Brent Fitzpatrick (Director) James John Pryn Greenstreet (Director) David Ryan (Director)
Company secretary	Nigel Brent Fitzpatrick
Company number	03934451
Registered office	10b Russell Court Woolgate Cottingley Business Park Bingley BD16 1PE United Kingdom
Website	<a href="http://www.powerhouseenergy.net">www.powerhouseenergy.net</a>
Bankers	HSBC 79 Piccadilly London W1J 8EU United Kingdom
Nominated Adviser and Broker	WH Ireland 24 Martin Lane London EC4R 0DR United Kingdom
Registrar	Neville Registrars Limited Neville House, 18 Laurel Lane Halesowen B63 3DA United Kingdom
Auditor	Jeffreys Henry LLP Finsgate 5-7 Cranwood Street London EC1V 9EE United Kingdom

### Forward-looking statements

This report includes forward-looking statements. Whilst these forward-looking statements are made in good faith, they are based upon the information available to PowerHouse Energy Group PLC at the date of this report and upon current expectations, projections, market conditions and assumptions about future events. These forward-looking statements are subject to risks, uncertainties and assumptions about the Company and should be treated with an appropriate degree of caution.

## CHAIRMAN'S REPORT

I am pleased to report to shareholders in respect of the year ended 31 December 2017.

During the year under review PowerHouse Energy Group PLC ("PowerHouse" or the 'Company') saw a transformation in its technical capabilities and an increase in activity in terms of partnership establishment, organisational development and financial restructuring. For the two years prior to January 2017, the Company had been exclusively focused on the development and initial testing of the G3-UHt Unit, our process demonstrator, from first principles in conjunction with OrePro engineering in Australia. The end of 2016 saw the recommitment to the building of the Company's commercial operations headquartered in the UK.

The delivery of the Company's process demonstrator to the UK in early 2017 and its re-siting and re-commissioning at the Thornton Science Park Energy Centre successfully concluded the initial testing phase of our proprietary technology.

The confirmation of the demonstrator's ability to operate within target temperature envelopes and its re-commissioning were completed in accordance with stringent UK Health, Safety, and Environmental regulations and standards. A regular programme of demonstration, testing, enhancement, and consistent operation has been underway at the Thornton Science Park Energy Centre. Recent developments including the expansion of testing of mixed plastics as a feedstock, the independent verification of our gas by third-party laboratories, and positive validation by external hydrogen purification equipment vendors that our gas can be purified to a 99.9995% (road-fuel quality) hydrogen stream.

Of greatest importance for the year was the capture and utilisation of the data from our on-going testing programme to support the initiation of the commercial design, completion of the Pre-FEED (front-end design and engineering,) the identification of our first commercial site, the start of the planning and permitting process for that site, and the establishment of a robust technical and management team for the intended delivery of our first DMG® (Distributed Modular Gasification) System by the end of 2018.

The Board maintains its belief that the DMG® System and the hydrogen-from-waste process that we have created is well on its way to becoming a significant part of the hydrogen economy and the distributed electrical grid.

I would like to take this opportunity to thank our talented team who work tirelessly to drive forward our exciting technology as well as the shareholders whose ongoing support is greatly appreciated.

We are confident in our ability to continue to increase both our capabilities and shareholder value.



**Dr Cameron Davies**  
**Non-Executive Chairman**  
**28 June 2018**

# CHIEF EXECUTIVE OFFICER'S STATEMENT

A number of the items that follow were initially discussed in our interim Accounts on 27 September 2017. What the team has accomplished this year is worthy of note. However, the retrospective is far more understandable in the context of the key drivers for the Company's future success:

- The global requirement for energy is growing every day and together with having to address the monumental environmental issues created by traditional forms of energy production, delivering such a quantum of clean energy is both challenging and disruptive. The result is that a number of new and pioneering modalities for energy generation and distribution will be embraced and established. PHE's DMG® technology is one such platform which is suited to both enable, and deliver, such solutions.
- Waste elimination – particularly for unrecyclable plastics and end of life tyres (two of the biggest challenges faced by the waste management sector) - is also a major global challenge that PHE's technology platform is ideally positioned to address. The DMG® technology platform efficiently converts such waste into an environmentally friendly and commercially viable source of clean energy thus making it a highly attractive energy feedstock. Consequently, waste then becomes our friend rather than an enemy.
- Our objective is to harness the true power of waste by having our enabling technology platform embedded within the future energy infrastructure - one in which high efficiency, clean energy, environmental credentials and economically viable operation will be at a social, political and commercial premium. Putting it simply, we believe that PHE meets all four of these demanding criteria and we have now embarked on the commercialisation path to ensure our technology becomes a reality.
- Our core DMG® technology is in its final stages of engineering validation in advance of scheduled independent third party verification and testing by a leading global player in the field. This work is due to be completed by the end of the third quarter.
- We are now shifting the balance of our efforts onto the commercialisation phase, in which we are already actively engaged, and through which we are making positive progress by taking a customer-led approach, involving a combination of strategic alliances, commercial partnering and working directly with potential customers. Our flexibility combined with the modular design of our DMG® system allows us to tailor our technology to meet the most specific of partner and customer requirements.

It is within the above context that I am delighted to report on an exciting year that has seen the Company delivering against its strategic objectives. Developing its technology, securing funding, eliminating the Hillgrove Investments Pty. Ltd ("Hillgrove") note and debenture and identifying early-stage, commercially viable, opportunities for the sale of our DMG® System.

## **Our technology**

The focus for PowerHouse in recent years has concentrated on the efficient generation of energy from waste, but increasingly we see exciting prospects for the ability to convert waste, particularly waste plastics and end-of-life tyres, into hydrogen. Our small footprint, our thermal conversion process, and our ability to generate a concentrated volume of hydrogen on a distributed basis sets us apart from others. This process, DMG®, has led to one of the world's first distributed hydrogen from waste (HfW) system designs.

## CHIEF EXECUTIVE OFFICER'S STATEMENT (CONTINUED)

DMG® enables the molecular conversion of waste into an energy-rich syngas. The syngas can be used immediately to generate low emission electrical energy that can be used locally, thereby leveraging private line or micro-grid connections on-site. If appropriate, it can be sold directly into the National Grid. There is growing awareness of, and demand for, a "distributed grid" which ensures reduced transmission losses and enhanced availability where and when electricity is needed. Additionally, DMG® has been designed to produce road-fuel quality hydrogen as and when necessary.

Our process is not dependent upon the sun shining, or the wind blowing, but rather on the engagement of wastes that are poorly managed, over-produced, and ubiquitous in our society. End-of-life plastics and tyres represent extremely valuable energy sources, if managed properly. The unfortunate combustion and incineration of these extremely valuable resources is the least effective mechanism for deriving energy from them. DMG® represents a more environmentally responsible and profitable vehicle for the extraction of energy from these, and other, materials. Our hydrogen-from-waste process allows us to extract well over double the energy from these materials compared to conventional processes. We do this with a dramatically reduced greenhouse gas footprint, and when the hydrogen we produce displaces fossil fuels, we help eliminate over 21,000 kg of CO<sub>2</sub> per tonne of hydrogen used.

We believe that DMG® is a quantum shift in technology that can fundamentally enhance the waste-to-energy market. DMG® is a mechanism for the appropriate destruction of waste streams, the generation of distributed electricity, and, most importantly, the production of distributed hydrogen - which we believe will help unleash the hydrogen economy by providing hydrogen as a road-fuel as the demand for Fuel Cell Vehicles (FCVs) ramps up – particularly in industrial and public transportation.

The adoption of hydrogen powered FCV technology in industrial transport is accelerating with the announcement of major fleets adopting the fuel cell as its motive power of choice. Marine ferries, the Alstom hydrogen train, and major initiatives by the EU for the decarbonisation of public transport – leading to the adoption of hydrogen powered buses, are clear evidence that hydrogen in transport, particularly industrial transport, is beginning to gain momentum. Our DMG® process can allow for the efficient processing of non-recyclable waste plastics, the conversion of end-of-life tyres, and the diversion of these and other materials from land-fill; all while producing distributed hydrogen at a cost at, or below, that of petrol and diesel.

2017 was the year that Sir David Attenborough launched Blue Planet 2 on BBC TV. Perhaps more than any event of the past decade, this series highlighted the blight of plastics, the degradation of marine ecosystems, and the pollution of our oceans and beaches that our planet is facing. Subsequent to the airing of the series, most major newspapers in the UK have followed up with on-going coverage of the crisis of plastic in our Oceans. Additionally, Sky TV produced a multi-part documentary regarding the state of plastic recycling, and the significant failings therein. The UK, Australia, the EU and the United States have all been negatively impacted by the recent ban of waste and recycling imports by China.

More virgin plastics will be produced next year than the combined weight of every man, woman, and child on our planet. Plastics have revolutionised our lives in many ways. In healthcare, in food safety, in automobile manufacturing, and mobile devices to name a few. We needn't declare war on plastics. We need to declare war on the mis-management of end-of-life, non-recyclable, or waste plastics. What was once our enemy can now become our friend. Plastics are a tremendous store of clean energy potential.

## CHIEF EXECUTIVE OFFICER'S STATEMENT (CONTINUED)

PowerHouse has the ability to figuratively squeeze every hydrogen molecule from the stream of plastics while reducing waste plastic from our planet. Less than 50 per cent of recyclable plastic is actually able to be recycled economically, or in an environmentally sound manner. Our DMG® System, can, however, recover the energy value contained within the plastics and convert it into an ultra clean road fuel - hydrogen. Emissions from an FCV contain zero CO<sub>2</sub> (Carbon Dioxide), zero NO<sub>x</sub> (Nitrogen Oxides), and zero Sox (Sulfur Oxides). The only emission from a fuel cell vehicle is water vapour.

### Operations

The arrival of our process demonstrator, the G3-UHt Unit in the UK in March 2017 saw the start of a programme of engineering activity to ensure that the unit would safely and securely operate in accordance with UK Health, Safety, and Environmental guidelines. The work followed a comprehensive knowledge transfer from the Ore-Pro team (our prior external engineering partners) to our UK based engineering staff and included extensive upgrading of components, the installation of advanced automation, and the integration of appropriate safety controls for the system. The unit was completely deconstructed, examined, tested, and reconstructed to ensure its optimal operational condition.

During this period the system was moved from its initial commissioning site in Runcorn to its current location at Unit 99 of the Energy Centre at the Thornton Science Park, operated by the University of Chester. Unit 99 had been purpose-built as an emissions test facility for Shell Research and is an ideal location for the continuous operation, demonstration, and improvement of the DMG® System design. The Company has established an active engineering programme at the Centre and has taken a two year lease on its facilities there.

In April 2017 the Company announced that the first phase of the re-commissioning of the G3-UHt process demonstrator had been completed, with the successful production of syngas from the system. The PHE unit has consistently operated at temperatures of over 1000 degrees Celsius, demonstrating its capacity to successfully gasify many historically difficult waste materials and generate an extremely useful synthesis gas.

The second phase of re-commissioning saw additional improvements and modifications made to the system, ahead of the scaling up design necessary for commercial deployment. These included the enhancement of the gas-handling systems, refurbishment of the feed and oxidant systems and the complete redesign and introduction of programmable safety and control systems. During testing, the Company has regularly recorded a maximum peak flow rate of over 50 cubic metres per hour of syngas.

Following a robust programme of testing and technical data collection, the Company announced the completion of its first extended technical trial of the DMG® gasification process at the Energy Centre at Thornton Science Park on 31 July 2017.

Operating on a feedstock of tyre crumb, PowerHouse engineers were able to demonstrate control of the process within defined temperature envelopes that generated a syngas that, according to onsite, in-line, analytical instrumentation, was greater than 50 per cent hydrogen by volume. The remaining, measurable, constituent elements of the syngas were CO (carbon monoxide) and CH<sub>4</sub> (methane.) Importantly, the in-line gas analysis equipment detected absolutely no CO<sub>2</sub> in the gas stream generated by the demonstration unit.

Subsequently, a substantially more rigorous analysis of syngas samples produced in the process demonstrator has been conducted by off-site, third-party, independent laboratories. These tests have validated our initial findings, including minimal CO<sub>2</sub>, and continue to reinforce our ability to create target syngas constituent ratios for both electricity production and hydrogen extraction.

# CHIEF EXECUTIVE OFFICER'S STATEMENT (CONTINUED)

## **Strategic alliances and Relationships**

The accomplishments achieved in 2017 were underpinned by a number of strategic alliances with influential partners.

In January 2017 PowerHouse entered into a 24 month project development relationship with Waste2tricity Ltd ("Waste2tricity"). The initial results of that relationship have led to a substantive expansion of our UK capabilities, relationships with other industrial partners, and a pipeline of commercial opportunities, in the UK and elsewhere, under consideration.

Among the introductions made by Waste2tricity on behalf of PowerHouse was to Peel Environmental Limited ("Peel"). Our relationship with Peel continues to grow and develop and has led to the siting of our G3-UHT demonstration unit at the Energy Centre at the Thornton Science Park. This base is the hub of our continuing R&D activities in co-operation with the University of Chester, including the sponsorship of a PhD program to further the science behind the PowerHouse process and the expansion of DMG®. Additionally, Peel has identified the site of our first intended commercial operation in the North West near Ellesmere Port.

Of tremendous importance, the appointment of EngSolve Ltd ("EngSolve") as our principal engineering partner, announced in March 2017, to assist in the re-commissioning of the process demonstrator, has proven to be extremely productive and valuable. Their experience with novel waste to energy technologies has helped us accelerate our Commercial Design for which they are ideally suited. We look forward to a long-standing and successful relationship with their multi-talented engineering team.

The test data acquired through our robust programme at Thornton Science Park has been key to the effective engagement of the EngSolve team for the commercial design efforts. That testing program continues to inform design and procurement decisions we are making today.

In June 2017, the Company announced a collaboration agreement with a significant UK partner involved in the development of energy and waste projects. The partner has committed two tranches of funding of up to £500,000 in aggregate to meet the cost of preparing and funding applications for planning permission and environmental permits of the first five PowerHouse DMG® systems.

The agreement will require PowerHouse to supply five systems at locations of the partners' choosing on a prioritised basis. £100,000 of this commitment was released in July 2017 to fund the planning development of the Company's first commercial sites.

## **Risk Reduction and Funding**

### ***Hillgrove Convertible Loan Note***

The Board made the strategic decision to negotiate the retirement of the Hillgrove Convertible Loan note (Note) with a combination of cash and shares. The retirement of the Note was a significant milestone, and a major accomplishment, for the Company as there is no longer a financial impediment to its growth and operation.

The Note was accruing interest at a rate of 15 per cent per annum and had reached a value of £3.4M. The coupon on the Note would have added approximately a half-million pounds of fully secured debt to the Company each year.

## **CHIEF EXECUTIVE OFFICER'S STATEMENT (CONTINUED)**

In February 2017 the decision was taken to raise £2.5 million in a private placement and to repay the Note with £2 million in cash, and issue £1.4 million worth of shares at the conversion price of 0.5p per share. Hillgrove agreed to release its debenture over the Company's assets and IP upon the final settlement of the share issuance. This settlement has now occurred and the debenture has been released and all IP assigned to the Company per our agreement with Hillgrove.

### ***Other funding***

In January 2017, Yady Worldwide SA made an investment of £250,000 into the Company, showing an early commitment to the Company and the continued development and roll-out of DMG®. Yady further contributed £500,000 as the cornerstone investor to the £2.5 million placing in February 2017.

In August 2017 the Company raised a further £1.6 million through a placing of new ordinary shares at 1.0p to fund the acceleration of our on-going commercial engineering design and Company operations.

### **The PowerHouse Team**

The Company has made a number of significant appointments to strengthen the board and management team.

David Ryan was appointed as a Non-Executive Director in late February 2017, and on 20 March 2017, began acting in the role of Executive Director of Programme Development, overseeing the technical operations of the Company. Introduced to PowerHouse by Waste2tricity, David was the former CEO and Managing Director of Thyssenkrupp Industrial Solutions' Oil & Gas Business Unit for the UK.

With over 35 years of complex engineering, business development, and project management experience in the energy sector, David is an expert in sophisticated design engineering and brings a breadth of project delivery, international business management, and general engineering acumen to the management team. David was instrumental in the successful siting and re-commissioning of the G3-UHt process demonstrator at Thornton Science Park and continues to lead the engineering work on the design and development of the Company's commercial platform, DMG®. Additionally, David has plays a key role in the defining of the Company's Commercial and Operational Strategies.

The Company was delighted to announce the appointment of Dr. Cameron Davies as Non-Executive Chairman of the Board of Directors. Dr. Davies' many accomplishments, his extensive experience, and his steady hand have been serving the Company well since his Chairmanship took effect on 3 October of 2017.

Keith Allaun relinquished his role as Executive Chairman at the time of Dr Davies' appointment and has assumed the role of Chief Executive Officer for PowerHouse. In early 2018, Keith and his wife relocated to the UK for the foreseeable future.

Clive Carver stepped down from his role as Non-Executive Director of the Company in May 2017.

Chris Vanezis joined the PowerHouse management team as Chief Financial Officer, bringing an extensive background in financial accounting and waste-to-energy finance management.

In 2017, the first site personnel in the UK were hired, based at Thornton Science Park. Additionally, the Company has embarked upon the sponsorship of a Ph.D. program in advanced thermal conversion technology in conjunction with the University of Chester. That program has led to the seconding of two graduate students to PowerHouse.

## CHIEF EXECUTIVE OFFICER'S STATEMENT (CONTINUED)

2017 also saw the creation of an experienced, knowledgeable, and well-connected Advisory Panel consisting of Peter Jones OBE, Keith Riley, Myles Kitcher, Roudi Baroudi and Howard White. The Advisory Panel has been very influential in terms of our commercial planning and development activities.

### **Post period events**

#### ***Elimination of Hillgrove loan note***

Since the year end the Company has successfully placed shares issued to settle the Hillgrove outstanding loan balance (280,430,920 shares) in two tranches, the second being in conjunction with an additional private placement which also raised approximately £580,000 for Company operations.

The Hillgrove Debenture has been fully released and removed.

#### ***Commercial developments***

The Company announced a partnership Memorandum of Understanding ("MOU") with Wrightbus Ltd ("Wrightbus"), a leading bus manufacturer whose products include innovative hydrogen powered buses, in February 2018. This MOU, negotiated in collaboration with Waste2tricity, is non binding and although there can be no certainty a binding agreement will be entered into, the Board of PowerHouse expects this to lead to a definitive agreement which is currently under review by both Companies. This agreement will allow Wrightbus to supply hydrogen fuel powered buses while PowerHouse provide its DMG® system for the low cost and environmentally responsible production of hydrogen- in a turn-key solution to the Decarbonisation of Public Transport; a major EU Directive.

It is expected that this first-of-its-kind turnkey solution will be marketed to local authorities and public transport providers in the UK and internationally with a particular focus on city centres, where the lack of emissions generated by hydrogen fuel cell buses bring important environmental and quality-of-life benefits. PowerHouse's DMG® system has the capacity to process a nominal 25 tonnes of plastic per day, and has the potential to provide hydrogen to fuel buses while also providing electricity for sale to either the national grid or private clients.

In April 2018, PowerHouse announced its first international distribution agreement for its proprietary DMG® hydrogen from waste process targeting the supply into hydrogen bus projects in Bulgaria and Romania with Tresoil Biofuels SRL ("Tresoil") and Waste2tricity, PowerHouse's projects development partner. The three-way agreement between PowerHouse, Tresoil and PowerHouse's partner, Wrightbus, provides a cost-effective turnkey solution to bus operators in Romania and Bulgaria who are actively seeking to replace aging fleets of highly polluting public transport buses, with the region encouraged by the EU to deploy low carbon alternatives. Tresoil is a well established company in Bucharest and has been actively, and successfully, involved in seeking grants for alternative energy.

#### ***PowerHouse team***

The PowerHouse management team was strengthened by the addition of Bruce Nicholson as Commercial Operations Manager in April 2018. Bruce has a proven track record of delivering complex energy projects built over 30 years of project management, asset management and business development. Bruce's role is to drive and accelerate progress of the Company's commercial operations, business development, and partner identification.

## **CHIEF EXECUTIVE OFFICER'S STATEMENT (CONTINUED)**

### **Current trading and Outlook**

The year under review saw the Company make encouraging progress to its longer-term objective of being a leading provider of distributed electricity and distributed hydrogen produced from waste.

2017 was focused on acquiring the empirical data necessary to effect the commercial design of the DMG® System. It was clear that the G3-UHt unit was an excellent process demonstrator, in that it performed as designed, as planned, and as needed. It was, however, only a process demonstrator and has required significant, and sophisticated, engineering enhancement to execute the design for the Commercial PowerHouse DMG® System.

We have created what we believe to be a distinct and evolutionary philosophy with DMG®: distributed waste destruction; distributed electrical generation; distributed hydrogen production. We have taken a contrarian approach to the megaliths of the past and believe in bringing the solution to where the problem lies.

We are positioned to do something powerful for communities across the UK and throughout the world. We believe that DMG® today is but a ripple in the pond but that in time it will help redefine how our environment is managed and play a key role in the evolution of transport - as the ripple turns into a wave of opportunity for positive change in our world.

The Company is gaining traction in developing commercial interest in the DMG® System with inquiries arriving on a weekly basis. We believe, and have substantial evidence to this effect, that the completion of our first commercial system will lead to significant demand for our systems.

PowerHouse Energy Group plc no longer sees itself solely in the Waste to Energy category of companies, but now as a player in the hydrogen from waste (HfW) sector. We are convinced that DMG® will help fuel our future, cleanly and profitably.

We look forward to an even more exciting 2018. The year when the power of DMG® is finally unleashed.

As always, we appreciate your continued support.



**Keith Allaun**  
**Chief Executive Officer**  
**28 June 2018**

# DIRECTORS' RESPONSIBILITIES STATEMENT

The directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors are required to prepare group financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU) and have also chosen to prepare the Company financial statements under IFRSs as adopted by the EU. Under company law the directors must not approve the accounts unless they are satisfied that they give a true and fair view of the state of affairs of the company and of the profit or loss of the company for that period. In preparing these financial statements, International Accounting Standard 1 requires that directors:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- prepare the Financial Statements on the going concern basis unless it is inappropriate to presume that the company will continue in business;
- state whether applicable IFRSs as adopted by the European Union have been followed, subject to any material departures disclosed and explained in the financial statements.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.


The directors are responsible for the maintenance and integrity of the corporate and financial information included on the company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

## Responsibility statement

We confirm that to the best of our knowledge:

- the financial statements, prepared in accordance with International Financial Reporting Standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company;
- the strategic report includes a fair review of the development and performance of the business and the position of the Company together with a description of the principal risks and uncertainties that it faces; and
- the annual report and financial statements, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the Company's performance, business model and strategy.

BY ORDER OF THE BOARD



Keith Allaun  
Director  
28 June 2018

## DIRECTORS' REPORT

The Directors present their annual report along with the Company's financial statements for the year ended 31 December 2017. The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and will be laid before the shareholders of the Company at the Annual General Meeting.

The Company's only UK subsidiary is non-trading and not material. There are also long-term restrictions on the operations of the Company's subsidiaries in the US and Switzerland. As such the Company has claimed exemptions applicable to it under Companies Act section 405 (2) and 405 (3b) to not present any Consolidated financial statements for the year ended 31 December 2017.

### Principal activities

PowerHouse Energy Group PLC is a company incorporated in England and Wales. The Company is a public limited company which trades on the AIM market of the London Stock Exchange. The address of the registered office is 10b Russell Court, Woolgate, Cottingley Business Park, Bingley BD16 1PE.

The principal activity of the Company is to continue the commercial exploitation of the newly developed PHE Waste-to-Energy System, DMG®, in order to achieve its full commercial roll-out. The system's thermal conversion chamber converts waste materials such as non-recyclable plastic, biomass, and other waste streams into a high-quality, clean, synthesis gas composed primarily of hydrogen and carbon monoxide. The newly engineered, designed, and constructed, PHE G3-UHt demonstration system is completed and operational in Thornton.

### Future Development

Demand for our technology is increasing, with Europe, the UK, and Japan considered ideal markets given the focus on reducing waste to landfill and the growing interest in hydrogen as a source of motive power. Additionally, Australia has a growing need for solutions dealing with plastic waste and demand which exceeds supply for electricity.

The Company's project development relationship with Waste2tricity has led to the signing of non-binding MOU with Wrightbus in February 2018, for the collective progression of hydrogen bus projects. This has in turn led to a collaboration with Tresoil Biofuels SRL for potential projects in Romania and Bulgaria. Other international market opportunities are also being explored.

A more thorough review of the development of the business together with an indication of future proposed developments is included in the Chairman's Report and Chief Executive Officer's Statement.

### Management of Capital

The Company manages its capital with the aim of ensuring it can continue as a going concern. Capital sources include debt and equity balances. Board members review cash balances available for ongoing spend on a weekly basis in assessing needs forward and timing for future equity raises.

### Results and dividends for the year

The Company financial statements for the year ended 31 December 2017 are set out on pages 25 to 40. The Company loss for the year after taxation amounted to £1,874,692 (2016: Loss of £1,334,009). The net liabilities of the Company are £801,688 (2016: £3,226,564) with the movement in the year set out in the Statement of Changes in Equity.

The Directors do not recommend the payment of a dividend (2016: £nil).

### Research and development

Research and development related costs incurred during the year, relating to the newly developed PHE G3-UHt Waste-to-Energy System, amounted to £528,000 (2016: £nil).

### Post balance sheet events

There have been no significant events since the balance sheet date other than those discussed in this Directors' Report, the Strategic Report and note 21 to the Company financial statements.

## DIRECTORS' REPORT (CONTINUED)

### Directors' interests

Please refer to Notes 18 and 21.

### Substantial shareholdings

The Company is aware of shareholders holding 3 per cent or more of the issued share capital of the Company as at 6 June 2018 as follows:

	Number of ordinary shares of 0.5p each	Percentage of voting rights
Hargreaves Landsdown (Nominees) Limited (A/C VRA)	124,219,298	8.0
Paul Warwick	118,107,893	7.6
JIM Nominees (A/C Jarvis)	116,534,553	7.5
Hargreaves Landsdown (Nominees) Limited (A/C 15942)	105,562,123	6.8
Yady Worldwide S.A.	98,814,285	6.4
RenewMe Limited	90,932,961	5.9
Hargreaves Landsdown (Nominees) Limited (A/C HLNOM)	90,856,287	5.9
Hargreaves Landsdown (Nominees) Limited (A/C VRADDOWN)	71,303,847	4.6
Interactive Investor Services Nominees Limited (A/C SMKTISAS)	70,798,394	4.6
Barclays Direct Investing Nominees Limited (A/C Client1)	59,031,142	3.8
Interactive Investor Services Nominees Limited (A/C SMKTNOMS)	47,647,212	3.1

### Directors

The Directors, who served during the year, and subsequently, were as follows:

William Cameron Davies	Chairman (appointed 3 October 2017)
Robert Keith Allaun	Executive Director
Nigel Brent Fitzpatrick	Non-Executive Director
James John Pryn Greenstreet	Non-Executive Director
Clive Nathan Carver	Non-Executive Director (resigned 22 May 2017)
David Ryan	Executive Director (appointed 21 February 2017)

### Corporate governance

The Company complies with the AIM Rules for Companies, including AIM Rule 26, concerning the disclosure of information. More details are provided in the Corporate Governance Report and on the Company website.

### Payment to suppliers

The Company does not have a standard or code which deals specifically with the payment of suppliers. Total creditor days for the Company for the year ended 31 December 2017 were 29 days (2016: 19 days).

### Risk management and principal risks

The principal risks to the Company and how they are managed is explained in detail in the Strategic Report on page 16 and in note 17 to the financial statements.

### Going concern basis

The Directors have considered all available information about the future events when considering going concern including their review of cash flow forecasts for 12 months following the date of these financial statements.

The 2017 financial statements have been prepared on the going concern basis, notwithstanding the Company making a loss. The Directors believe the going concern basis to be appropriate for the following reasons:

## **DIRECTORS' REPORT (CONTINUED)**

The Company has been provided with a letter of support from one of its shareholders, who has indicated to the Directors that he intends, for at least 12 months from the date of the approval of these financial statements, to make available a maximum sum of £650,000. In addition, the Directors are also of the opinion that they can raise further funds as and when required having been assured of such by a number of external parties. Furthermore, the Directors have agreed to waive any future salaries or fees for themselves, if necessary, to allow the Company to repay its debts as and when they fall due.

The Directors consider that these should enable the Company to continue in operational existence for the foreseeable future by meeting its liabilities as they fall due for payment.

If the support of shareholders ceased or the Company was unable to raise further funds it would need to seek alternative finance in order to be able to remain as a going concern. The financial statements do not include the adjustments that would result if the Company is unable to continue as a going concern.

### **Political and charitable donations**

The Company has not made any political or charitable donations during the year.

### **Auditor**

Jeffreys Henry LLP were appointed as Auditors during the year following a tender process. A resolution proposing that they will be reappointed will be put to the AGM.

Each of the persons being a Director at the date of approval of this report confirms that:

- So far as the Director is aware there is no relevant audit information of which the Company's auditor is unaware; and
- The Director has taken all the steps that he ought to have taken as a Director in order to make himself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

This confirmation is given, and should be interpreted, in accordance with the provisions of s.418 of the Companies Act 2006.

Approved by the Board of Directors and signed on behalf of the Board on 28 June 2018.



Keith Allaun  
Director

# STRATEGIC REPORT

The Directors present their strategic report on the Company for the year ended 31 December 2017.

This strategic report comprises: the Company's objectives; the Company's strategy; the Company's business model; and a review of the Company's business using key performance indicators.

The Chairman's Report and the Chief Executive Officer's Statement, which also form the main part of the strategic review, contain a review of the development and performance of the Company's business during the financial year, and the position of the Company's business at the end of that year.

Additionally, a summary of the principal risks and uncertainties facing the business is set out in note 17 to the Company's financial statements.

## Objectives

The Company's primary objective is to create shareholder value from the development, construction, and sale of its proprietary thermal conversion technology and processes in projects that will convert waste to energy (Syngas, Hydrogen and Electricity.) Income will be derived from the sale, royalties, and the licence of our technology to third parties.

The Company has a number of secondary objectives, including promoting the highest level of health and safety standards, developing our staff to their highest potential and being a good corporate citizen in our chosen countries of operations.

## Strategy

The Company's long-term strategy is to contribute to building an attractive portfolio of profitable waste eradication, energy recovery, and distributed electrical and hydrogen production operations utilising the Company's proprietary thermal conversion technology in conjunction with a variety of industry partners, including Material Recovery Facilities, landfill operators, additional technology providers, and other project development partners.

Additionally, the Company will seek to exploit associated opportunities where the board believes it can add significant value and contribute towards the success of the Company as a whole.

At present the Company's principal assets are its G3-UHt process demonstrator, currently located at the University of Chester Thornton Science Park, the test data derived, and the Commercial Design materials developed during the on-going Engineering process.

## Business Model

The Company intends to further develop the Company's DMG® process into a fully operational commercial unit capable of processing a nominal 25 tonnes per day of waste. It is expected that activities will commence in the UK in partnership with Waste2tricity, Ltd, an experienced Waste-to-Energy project development organization. The Company has entered into an MOU with Peel Environmental to negotiate for the siting of its first commercial facility at Ellesmere Port near Chester and the Thornton Science Park. The Company is currently evaluating a number of other potential sites for the roll-out of future DMG® Systems.

Over the longer term the Company will look to exploit its proprietary know-how, technology developments and other processes to develop economical, environmentally sound, and efficient solutions to capture even more energy from the growing waste-steam generated by humanity. Operations will be rolled-out beyond the UK as opportunities present themselves.

# STRATEGIC REPORT (CONTINUED)

## Key performance indicators

Review of the Company's business using key performance indicators

The Directors consider the following to be the key performance indicators:

- Operational
  - Full commissioning of the G3-UHt demonstration unit at the Thornton Science Park with the ability to operate the unit on an on-going basis.
  - Pre-Feasibility study developed regarding the roll-out and construction of the DMG® Systems with a minimum nominal capacity of 25 tonnes per day throughput, coupled with the generation of electricity through any mechanism: steam boiler/turbine, reciprocal gas engines, gas turbine, or fuel cell.
  - Completion of Basic Engineering of a generic DMG® System.
  - Achievement of planning and permitting permissions for the operation of DMG®
  - Initiation of procurement of key elements of the DMG® System for commercial operation.
  - Demonstration of the ability to sequester adequately pure hydrogen for use in either road fuel or other fuel cell applications.
- Financial
  - Acquisition of adequate working capital for the Company's foreseeable needs.
  - Achievement of cash-flow to meet Company operational needs
  - Profitability when successfully and fully commercialized
  - Growing return on capital
  - Growing market capitalisation

## The principal and other risks and uncertainties facing the business

The Company is subject to various risks relating to political, economic, legal, social, industry, business and financial conditions. Risk assessment and evaluation is an essential part of the Company's planning and an important aspect of the Company's internal control system. The following risk factors, which are not exhaustive, are particularly relevant to the Company's business activities:

### Financing and financial instruments risks

The Company continually monitors its financial position to ensure the continuation of the operational activities and expects to fund the costs of its planned development programme over the next 12 months from existing funds in addition to, when appropriate, the introduction of new equity capital or the assumption of alternative debt or other sources of financing. The Company follows a financial management policy in the use of such financial instruments that aims to limit undue counterparty exposure and expense.

### Environmental and other regulatory risks

While there is always the possibility of a changing regulatory landscape, the Company is confident that it will achieve both regulatory and environmental certification for the operation of the DMG® System in power generation and hydrogen modes. To date, the Company has received permission for the operation of the process demonstrator in the Thornton Science Park, and there have been no adverse environmental incidents, or any adverse regulatory action taken against the Company.

### Operational risks

The thermal conversion technology employed by PowerHouse utilises high temperature processes and hazardous gas generation. The G3 process demonstrator has been subjected to robust HSE assessment including Hazard and Operability study, Hazard Identification study, Safety integrity review and a hazard classification, all of which have been included in the development of the Company's Health & Safety protocols. To date, there have been no adverse Health or Safety incidents involving the G3 platform.

### Political risk

The regulatory landscape may be subject to change with a new government and in differing geographies. PowerHouse actively monitors and keeps up to date with the regulatory schemes of all geographies in which it anticipates developing projects to be in a position to adapt to any, and all, emerging regulations as required.

## STRATEGIC REPORT (CONTINUED)

### Competitive risk

There are a number of thermal conversion and waste management technology operators world-wide. Another company may launch a less costly or more efficient analogue to PowerHouse's technology. At present the Company is not aware of any such technology currently under development, however, the Company is protected by years of specialised know-how, processes, and intellectual property developed during the years of research and development. Additionally, the Company's intended business model of the sale of DMG® into multiple development projects in multiple locations, each generating revenue, will provide a greater level of protection than if the Company was relying on the sale of individual units into a single market.

### Take-Over Risk

The Company may become the target of a take-over bid by any number of larger entities in the waste management, energy recovery, or energy production industries. It is expected that any take-over bid or attempted acquisition would be to the benefit of shareholders and the Board would work diligently to ensure that would be the case. The Board believes that this risk will be mitigated by successfully growing our commercial operations and increasing the market capitalisation.

### Other Risks

The Company may be subject to other risks of which it is not currently aware. The Board and Management operate to ensure that the Company is able to react to any unforeseen risks rapidly and appropriately. Through regular communication with industry bodies, peers, attending conferences and other industry events, the Board and Management work to maintain awareness of any potential threats or risks the Company might encounter and take appropriate action in a timely manner.

Approved by the Board of Directors and signed on behalf of the Board on 28 June 2018.



Keith Allaun  
Director

# CORPORATE GOVERNANCE REPORT

The Board is committed to the maintenance of high standards of corporate governance and seeks to implement best practice as appropriate for smaller listed companies by reference to the provisions of the Quoted Companies Alliance's Corporate Governance Code for Small and Mid-Size Quoted Companies.

## The Board of Directors and Committees

The Board is responsible for setting the overall strategy of the business, reviewing management performance and ensuring the Company has sufficient financial and human resources to meet its objectives. It directs the Company's activities in an effective manner through general Board meetings and monitors performance through timely and relevant reporting procedures. Where it deems necessary, the Board requests reports on specific areas outside the normal reporting regime.

The Chairman is responsible for the leadership of the Board and ensuring its effectiveness.

The Board at present comprises two Executives (the CEO and an Executive Director) and three Non-Executive Directors. The size of the Board is considered to be appropriate to the current size and character of the Company. Cameron Davies, James Greenstreet and Brent Fitzpatrick are independent of management and any business or other relationships which would interfere with the exercise of their independent judgment.

### Board meeting attendance during 2017

	Meetings attended
Meetings held in 2017	12
Dr Cameron Davies*	3/12
Keith Allaun	12/12
Clive Carver"	4/12
David Ryan**	9/12
James Greenstreet	10/12
Brent Fitzpatrick	12/12

\* Dr Davies was appointed to the board on 3 October 2017

" Clive Carver resigned from the board on 22 May 2017

\*\* David Ryan was appointed to the board on 21 February 2017

Authority for the execution of the business plan and the daily running of the business is delegated to the Executive Directors and the senior management team, who meet regularly to review current business performance, operational projects and other day to day activities.

Formal agendas and reports are provided to the Board on a timely basis in advance of Board and Committee meetings and the Chairman ensures that all Directors are properly briefed on issues to be discussed at Board meetings. Directors are able to obtain further advice or seek clarity on issues raised at the meetings from within the Company or from external sources.

All Directors are subject to appraisal by the Board and election by the shareholders. The Non-Executive Directors are responsible for the evaluation of the Chairman.

The Company has established an Audit Committee, an AIM Compliance Committee and a Remuneration Committee with formally delegated duties and responsibilities.

## **CORPORATE GOVERNANCE REPORT (CONTINUED)**

### ***Audit Committee***

The duties of the Audit Committee include reviewing, in draft form, the Company's annual and half-yearly report and accounts and providing advice to the board. Members of the Audit Committee are also responsible for reviewing and supervising the financial reporting process and internal control systems of PowerHouse. The Audit Committee is comprised of the Non-Executive Directors of the Board.

### ***Remuneration Committee***

The Remuneration Committee is responsible for reviewing the scale and structure of the executive Directors' remuneration and the terms of their service contracts with the Company, including share option schemes and any bonus arrangements. The terms and conditions of the arrangements, including remuneration, with non-executive Directors are set by the entire Board of PowerHouse.

### ***AIM Compliance Committee***

The AIM Compliance Committee has the primary responsibility for ensuring procedures, resources and controls are in place to enable compliance with the AIM Rules for Companies, in particular concerning the disclosure of information. The AIM Compliance Committee works closely with the Board to ensure that it consults with the Company's Nominated Adviser on an ongoing basis. The entire Board is appointed to the AIM Compliance Committee.

### ***Investor Relations***

PowerHouse is committed to open communication with all its shareholders. The Company believes it is important to explain business development and financial results to its shareholders and to ensure that suitable arrangements are in place so that the issues and concerns of major shareholders are heard and understood.

Copies of the Annual Report and Accounts are issued to all shareholders who have requested them and copies are available on the Company's investor website [www.powerhouseenergy.net](http://www.powerhouseenergy.net). The Company makes full use of its investor website to provide information to shareholders and other interested parties.

Shareholders are given the opportunity to raise questions at the Annual General Meeting and the Directors are available both before and after the meeting for further discussion with shareholders.



Dr Cameron Davies  
Non-Executive Chairman  
28 June 2018

# INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF POWERHOUSE ENERGY GROUP PLC

## Opinion

We have audited the financial statements of Powerhouse Energy Group Plc (the 'Company') for the year ended 31 December 2017 which comprise the statement of comprehensive income, the statements of financial position, the statements of cash flows, the statements of changes in equity and notes to the financial statements, including a summary of significant accounting policies.

The financial reporting framework that has been applied in the preparation of the financial statements is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union and, as applied in accordance with the provisions of the Companies Act 2006.

In our opinion:

- the financial statement give a true and fair view of the state of the company's affairs as at 31 December 2017 and of the company's loss for the year then ended;
- the financial statement have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the financial statement have been prepared in accordance with the requirements of the Companies Act 2006.

## Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## Conclusions relating to Going Concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

## Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

# INDEPENDENT AUDITOR'S REPORT (CONTINUED)

<p><b>Going concern assumption</b>                  In continuing to apply the going concern basis for the Annual Report and accounts for the period ended 31 December 2017, the Directors should be satisfied that they have a reasonable expectation that the Company will continue in operational existence for the foreseeable future, being at least twelve months from the date of issue of the accounts. In reaching this conclusion, the future prospects of the Company must be considered.</p> <p>At 31 December 2017 the Company's cash balance is £750k. A future fundraising and substantial operating costs cutting will be essential for the Company to be viable beyond mid-2019.</p>	<p><b>Our audit procedures:</b>                  We obtained and reviewed the Directors' assessment and forecasts, including challenging the liquidity position.</p> <p>We reviewed the basis and reasonableness of the key assumptions and assessed the sensitivities of the underlying assumptions, specifically focusing on the assumptions of operating costs reduction and impact of future fund raise.</p> <p>We reviewed documentation in respect of potential liability waivers and assessed the impacts on the Company's liquidity.</p> <p>We also reviewed the letter of support and discussed with the management about their future fund raising plan.</p> <p>Overall we were satisfied that the Company remained able to meet its obligations as they fell due for at least twelve months from the date of approval of the financial statements.</p>
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**Our application of materiality**

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole. Based on our professional judgment, we determined materiality for the financial statements as a whole as follows:

	<b>Company financial statements</b>
Overall materiality	£104,000 (first year audit)
How we determined it	The average of 10% of loss before tax and 2.5% of gross assets
Rationale for benchmark applied	We believe that loss before tax is the primary measure used by the shareholders in assessing the performance of the Company, and is a generally accepted auditing benchmark.

We agreed with the management that we would report to them misstatements identified during our audit above £5,200 as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

**An overview of the scope of our audit**

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we looked at where the directors made subjective judgments, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the directors that represented a risk of material misstatement due to fraud.

# INDEPENDENT AUDITOR'S REPORT (CONTINUED)

## *How we tailored the audit scope*

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the Company, the accounting processes and controls, and the industry in which they operate.

The Group financial statements are not prepared because the management's assessment to take exemption as per s405 CA2006 is deemed appropriate. No consolidation is prepared to include the dormant subsidiary as it is inactive and immaterial.

We performed audits of the complete financial information Powerhouse Energy Group PLC. Our engagement team performed all audit procedures

## **Other information**

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

## **Opinions on other matters prescribed by the Companies Act 2006**

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

## **Matters on which we are required to report by exception**

In the light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the company, or returns adequate for our audit have not been received from branches not visited by us; or
- the company financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

## **Responsibilities of directors**

As explained more fully in the directors' responsibilities statement [set out on page 12], the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

## INDEPENDENT AUDITOR'S REPORT (CONTINUED)

In preparing the financial statements, the directors are responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

### Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at:

[www.frc.org.uk/auditorsresponsibilities](http://www.frc.org.uk/auditorsresponsibilities). This description forms part of our auditor's report.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

### Use of this report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.



**Mark Tenzer (Senior Statutory Auditor)**  
For and on behalf of Jeffreys Henry LLP

**Chartered Accountants**  
**Statutory Auditor**

**Finsgate**  
**5-7 Cranwood Street**  
**London EC1V 9EE**  
**28 June 2018**

# STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2017

	Note	31 December 2017 £	31 December 2016 £
<b>Revenue</b>		-	-
Administrative expenses	3	<b>(1,804,829)</b>	(851,903)
<b>Operating loss</b>		<b>(1,804,829)</b>	(851,903)
Finance costs	4	<b>(69,863)</b>	(482,106)
<b>Loss before taxation</b>		<b>(1,874,692)</b>	(1,334,009)
Income tax expense	5	-	-
<b>Total comprehensive loss</b>		<b>(1,874,692)</b>	(1,334,009)
Loss per share from continuing operations (pence)	6	<b>(0.19)</b>	(0.24)
Diluted loss per share from continuing operations (pence)	6	<b>(0.19)</b>	(0.24)

The notes numbered 1 to 22 are an integral part of the financial information.

# STATEMENT OF FINANCIAL POSITION

AS AT 31 DECEMBER 2017

	Note	2017 £	2016 £
<b>ASSETS</b>			
<b>Non-current assets</b>			
Property, plant and equipment	7	2,601	2,424
Investments	8	1	1
<b>Total non-current assets</b>		<b>2,602</b>	<b>2,425</b>
<b>Current Assets</b>			
Trade and other receivables	9	88,495	6,336
Cash and cash equivalents	10	750,226	148,151
<b>Total current assets</b>		<b>838,721</b>	<b>154,487</b>
<b>Total assets</b>		<b>841,323</b>	<b>156,912</b>
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Trade and other payables	11	(240,856)	(51,184)
Loans	12	(1,402,155)	(3,332,292)
<b>Total current liabilities</b>		<b>(1,643,011)</b>	<b>(3,383,476)</b>
<b>Net liabilities</b>		<b>(801,688)</b>	<b>(3,226,564)</b>
<b>EQUITY</b>			
Share capital	14	8,798,142	6,153,455
Share premium	14	48,681,792	47,031,989
Accumulated deficit	15	(58,281,622)	(56,412,008)
<b>Total deficit</b>		<b>(801,688)</b>	<b>(3,226,564)</b>

The financial statements of PowerHouse Energy Group Plc, Company number 03934451, were approved by the Board of Directors and authorised for issue on 28 June 2018 and signed on its behalf by:



Keith Allaun  
Director

The notes numbered 1 to 22 are an integral part of the financial information.

# STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2017

	2017 £	2016 £
<b>Cash flows from operating activities</b>		
Operating Loss	(1,804,829)	(851,903)
Adjustments for:		
- Share based payment	5,078	68,000
- Expenses settled by shares	190,000	-
- Renewme settlement	-	299,152
- Depreciation	808	-
Changes in working capital:		
- (Increase)/Decrease in trade and other receivables	(82,159)	(4,885)
- (Decrease)/Increase in trade and other payables	189,672	(147,601)
<b>Net cash used in operations</b>	<b>(1,501,430)</b>	<b>(637,237)</b>
<b>Cash flows from investing activities</b>		
- Purchase of fixed assets	(985)	(2,424)
<b>Net Cash flows from investing activities</b>	<b>(985)</b>	<b>(2,424)</b>
<b>Cash flows from financing activities</b>		
Proceeds on issue of shares	4,294,490	700,512
Expenses settled by shares	(190,000)	-
Finance costs	(69,863)	(482,106)
New loans raised	69,863	577,567
Loans repaid	(2,000,000)	(183,911)
<b>Net cash flows from financing activities</b>	<b>2,104,490</b>	<b>612,062</b>
<b>Net (decrease)/increase in cash and cash equivalents</b>	<b>602,075</b>	<b>(27,599)</b>
Cash and cash equivalents at beginning of year	148,151	175,750
<b>Cash and cash equivalents at end of year</b>	<b>750,226</b>	<b>148,151</b>

The notes numbered 1 to 22 are an integral part of the financial information.

# STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2017

	Ordinary Share capital £	Share premium £	Deferred shares (0.5p) £	Deferred shares (4.5p) £	Deferred shares (4.0p) £	Accumulated deficit £	Total £
Balance at 1 January 2016	2,150,815	46,921,180	1,942,483	781,808	389,494	(55,145,999)	(2,960,219)
Transactions with equity participants:							
- Share issue	45,455	4,545	-	-	-	-	50,000
- Share issue	178,571	56,429	-	-	-	-	235,000
- Share issue	17,857	7,143	-	-	-	-	25,000
- Share issue	192,308	42,692	-	-	-	-	235,000
- Share issue	454,664	-	-	-	-	-	454,664
- Share based payment	-	-	-	-	-	68,000	68,000
- Total comprehensive loss	-	-	-	-	-	(1,334,009)	(1,334,009)
Balance at 31 December 2016	3,039,670	47,031,989	1,942,483	781,808	389,494	(56,412,008)	(3,226,564)
Transactions with equity participants:							
- Share issue	178,571	71,429	-	-	-	-	250,000
- Share issue	1,562,500	937,500	-	-	-	-	2,500,000
- Share issue in lieu of services	37,300	32,700	-	-	-	-	70,000
- Share issue	800,000	800,000	-	-	-	-	1,600,000
- Share issue in lieu of services	40,000	40,000	-	-	-	-	80,000
- Share issue in lieu of services	26,316	13,684	-	-	-	-	40,000
- Share issue fees	-	(245,510)	-	-	-	-	(245,510)
- Share based payment	-	-	-	-	-	5,078	5,078
- Total comprehensive loss	-	-	-	-	-	(1,874,692)	(1,874,692)
Balance at 31 December 2017	5,684,357	48,681,792	1,942,483	781,808	389,494	(58,281,622)	(801,688)

The notes 1 to 22 are an integral part of the financial information.

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

## 1. ACCOUNTING POLICIES

PowerHouse Energy Group PLC is a Company incorporated in England and Wales. The Company is a public limited company quoted on the AIM market of the London Stock Exchange. The address of the registered office is 10b Russell Court, Woolgate, Cottingley Business Park, Bingley BD16 1PE. The principal activity of the Company is to continue the development of the newly developed PHE G3-UHt Waste-to-Energy System in order to achieve its full commercial roll-out. The following accounting policies have been applied consistently in dealing with items which are considered material in relation to the financial information.

### 1.1. Basis of preparation

This financial information is for the year ended 31 December 2017 and has been prepared in accordance with International Financial Reporting Standards ("IFRS") adopted for use by the European Union and the Companies Act 2006. These accounting policies and methods of computation are consistent with the prior year.

The Company's only UK subsidiary is non-trading and not material. There are also long-term restrictions on the operations of the Company's subsidiaries in the US and Switzerland. As such the Company has claimed exemptions applicable to it under Companies Act section 405 (2) and 405 (3b) to not present any Consolidated financial statements for the year ended 31 December 2017.

### 1.2. Judgements and estimates

The preparation of financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts in the financial statements.

The component parts of compound instruments (convertible bonds) have a high degree of complexity. At the date of issue, the fair value of the liability component is estimated using the prevailing market interest rate for a similar non-convertible instrument, the residual equity component is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. These are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangement. In classifying the instruments it has been assessed that there is no equity element in relation to the convertible loan notes.

Other areas involving a higher degree of judgements or complexity, or areas where assumptions or estimates are significant to the financial statements such as the impairment of investments and going concern are disclosed within the relevant notes

### 1.3. Going concern

The financial statements have been prepared on a going concern basis, notwithstanding the Company having net liabilities at 31 December 2017 of £802k (2016: £3,227k). Those liabilities include the Hillgrove loan of £1.4m which has been converted to equity since the year end (please refer to Note 21). The Directors believe the going concern basis to be appropriate for the following reasons:

The Company has been provided with a letter of support from one of its shareholders, who has indicated to the Directors that he intends, for at least 12 months from the date of the approval of these financial statements, to make available a maximum sum of £650,000. In addition, the Directors are also of the opinion that they can raise further funds as and when required. Furthermore, the Directors have agreed to waive any future salaries or fees for themselves, if necessary, to allow the Company to repay its debts as and when they fall due.

The Directors consider that these should enable the Company to continue in operational existence for the foreseeable future by meeting its liabilities as they fall due for payment.

If the support of shareholders ceased or the Company was unable to raise further funds it would need to seek alternative finance in order to be able to remain as a going concern. The financial statements do not include the adjustments that would result if the Company is unable to continue as a going concern.

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

## **1.4. Foreign currency translation**

The financial information is presented in sterling which is the Company's functional currency. Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are revalued to the exchange rate at date of settlement or at reporting dates (as appropriate). Exchange gains and losses resulting from such revaluations are recognised in the Statement of Comprehensive Income. Foreign exchange gains and losses are presented in the Statement of Comprehensive Income within administrative expenses.

## **1.5. Revenue**

Revenue represents the amounts derived from the supply of goods and services in the normal course of business, net of discounts, value added tax and other sales related taxes.

## **1.6. Operating Leases**

Rentals payable under operating leases are charged in the profit and loss account on a straight line basis over the lease term.

## **1.7. Finance expenses**

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

## **1.8. Income tax expense**

The tax expense for the period comprises current and deferred tax.

UK corporation tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is recognised in respect of all temporary differences that have originated but not reversed at the balance sheet date where transactions or events that result in an obligation to pay more tax in the future or a right to pay less tax in the future have occurred at the balance sheet date. Temporary differences are differences between the Company's taxable profits and its results as stated in the financial statements that arise from the inclusion of gains and losses in tax assessments in periods different from those in which they are recognised in the financial statements.

A net deferred tax asset is regarded as recoverable and therefore recognised only to the extent that, on the basis of all available evidence, it can be regarded as more likely than not that there will be suitable taxable profits from which the future reversal of the underlying temporary differences can be deducted.

Deferred tax is measured at the average tax rates that are expected to apply in the periods in which the temporary differences are expected to reverse, based on tax rates and laws that have been enacted or substantively enacted by the balance sheet date. Deferred tax is measured on a non-discounted basis.

## **1.9. Property, plant and equipment**

Property, plant and equipment is stated at cost less accumulated depreciation. Cost represents the cost of acquisition or construction, including the direct cost of financing the acquisition or construction until the asset comes into use.

Depreciation on property, plant and equipment is provided to allocate the cost less the residual value by equal instalments over their estimated useful economic lives of 3 years, once the asset is complete.

The expected useful lives and residual values of property, plant and equipment are reviewed on an annual basis and, if necessary, changes in useful life or residual value are accounted for prospectively.

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

## 1.10. Other non-current assets

Other non-current assets represent investments in subsidiaries. The investments are carried at cost less accumulated impairment. Cost was determined using the fair value of shares issued to acquire the investment.

## 1.11. Financial assets

The Company classifies financial assets as loans and receivables within current assets, except for maturities greater than 12 months after the balance sheet date. These are classified as noncurrent assets. Assets are initially recognised at fair value plus transaction costs. Loans and receivables are subsequently carried at amortised cost using the effective interest rate method.

## 1.12. Trade and other receivables

Trade receivables are initially recognised at fair value. Subsequently they are carried at amortised cost less any provision for impairment.

## 1.13. Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits and are recognised and subsequently carried at fair value.

## 1.14. Trade and other payables

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

## 1.15. Financial liabilities

Loans are financial obligations arising from funding received and used to support the operational costs of the Company. These are initially recognised at fair value. Loans are subsequently carried at amortised cost using the effective interest method.

## 1.16. Adoption of new and revised standards

New and revised standards adopted during the year and those standards and interpretations in issue but not yet effective:

IFRS 2	Share based payment
IFRS 9	Financial instruments
IFRS 15	Revenue from contracts with customers
IFRS 16	Leases
IAS 19	Employee benefits (amendment)
IFRIC 22	Foreign Currency Transactions and advance consideration
IFRIC 23	Uncertainty over income tax treatments
Improvements to IFRSs. Annual improvements 2014-2016 cycle: Amendments to IFRS1 and IAS 28	
Improvements to IFRSs. Annual improvements 2015-2017 cycle: Amendments to 4 IFRSs	

There are no other IFRSs or IFRIC interpretations that are not yet effective that would be expected to have a material impact on the Company.

## 1.17. Impairment

### (i) Impairment review

At each balance sheet date, the carrying amounts of assets are reviewed to determine whether there is any indication that those assets have suffered an impairment loss. An impairment loss is recognised whenever the carrying amount of an asset or its cash generating unit exceeds its recoverable amount. Impairment losses recognised in respect of cash generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash generating units and then to reduce the carrying amount of the other assets in the unit on a pro-rata basis. A cash generating unit is the group of assets identified on acquisition that generate cash inflows that are largely independent of the cash inflows from other assets or groups of assets.

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

The recoverable amount of assets or cash generating units is the greater of their fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash generating unit to which the asset belongs.

## (ii) Reversals of impairments

An impairment loss in respect of goodwill is not reversed. In respect of other assets, an impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

## 1.18. Share-based payments

The Company grants options to Directors and employees through approved and unapproved option plans. The fair value of options is determined at the date of grant and is recognised as an expense in the Income Statement. The fair value at the grant date is determined using a Black and Scholes valuation model. At each reporting date the Company revises its estimates of the number of options that are likely to be exercised with any adjustment recognised in the income statement.

Where share-based payments give rise to the issue of new share capital, the proceeds received by the Company are credited to share capital and share premium when the share entitlements are exercised.

## 1.19. Segmental reporting

An operating segment is a component of the Company:

- that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other components of the Company);
- whose operating results are reviewed regularly by the Company's chief decision maker to make decisions about resources to be allocated to the segment and assess its performance; and
- for which discrete financial information is available.

## 1.20. Research and development

An internally generated intangible asset arising from development is only recognised where all of the following have been demonstrated: (i) the technical feasibility of completing the asset; (ii) the intention to complete the asset and the ability to use or sell it; (iii) the availability of resources to complete the asset; and (iv) the ability to reliably measure the cost attributable to the asset during its development.

In all other instances research and development expenditure is recognised as an expense as incurred. Development costs previously recognised as an expense are not recognised as an asset in a subsequent period.

## 2. Staff costs

	2017 £	2016 £
Directors' fees	207,772	194,602
Wages and salaries	11,474	-
Pensions	230	-
	<u>219,476</u>	<u>194,602</u>

Including Directors, the Company had on average 5 employees during the year (2016: 4) and 6 at year end (2016: 4).

No social security costs were incurred during the year or in the prior year.

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

## 3. Administrative expenses

Included in administrative expenses are:

	2017 £	2016 £
Property rentals	10,399	-
Depreciation	808	-
Auditor's remuneration for audit services:		
Fees payable to the Company's auditor for the audit of the Company's annual financial statements	20,000	12,000
Fees payable to the Company's auditor and their associates for other services:	<u>1,000</u>	<u>-</u>

There are no other fees paid to the Company's auditor other than those disclosed above.

## 4. Finance costs

	2017 £	2016 £
Shareholder loan interest	<u>69,863</u>	482,106
	<u>69,863</u>	<u>482,106</u>

## 5. Income tax and deferred tax

As the Company incurred a loss, no current tax is payable (2016: £nil). In addition, there is no certainty about future profits from which accumulated tax losses could be utilised and accordingly no deferred tax asset has been recognised. Accumulated tax losses amount to £9,168,835 (2016: £7,294,143) and reflect tax losses submitted in tax returns and arising during the period. The tax credit is lower (2016: lower) than the standard rate of tax. Differences are explained below.

	2017 £	2016 £
<b>Current tax</b>		
Loss before taxation	<u>1,874,692</u>	<u>1,334,009</u>
Tax credit at standard UK corporation tax rate of 19.25% (2016: 20%)	360,878	266,802
Effects of:		
Expenses not deductible for tax purposes	-	(73,430)
Deferred tax not recognised	<u>(360,878)</u>	<u>(193,372)</u>
Income tax expense	<u>-</u>	<u>-</u>

## 6. Loss per share

	2017	2016
Total comprehensive loss (£)	<b>(1,874,692)</b>	(1,334,009)
Weighted average number of shares	<b>975,055,119</b>	551,433,936
Loss per share in pence	<b>(0.19)</b>	(0.24)
Diluted loss per share in pence	<b>(0.19)</b>	(0.24)

## NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

The following instruments were excluded from the diluted loss per share calculation due to being anti-dilutive but could be dilutive in the future and are therefore disclosed in accordance with IAS 33.

Directors' share options – exercisable at 2.5p per option	11,000,000	11,000,000
Directors' share options – exercisable at 0.75p per option	15,000,000	15,000,000
Share warrants – exercisable at 1p per warrant	5,000,000	-
Hillgrove Loans convertible at 0.5p	£1,402,155	£3,332,292

Shares issued since the year end are disclosed in note 21.

### 7. Property, plant and equipment

	<b>Property, plant and equipment £</b>
<b>Cost</b>	
At 1 January 2017	5,626
Additions	985
Other adjustments	-
At 31 December 2017	<u>6,611</u>
<b>Accumulated depreciation</b>	
At 1 January 2017	3,202
Charge for the year	808
Other adjustments	-
At 31 December 2017	<u>4,010</u>
<b>Carrying amount</b>	
At 31 December 2017	<u>2,601</u>
At 31 December 2016	<u>2,424</u>

### 8. Investments

Investments relate to costs of investments in subsidiary undertakings, namely in PowerHouse Energy, Inc, Pyromex AG and PowerHouse Energy UK Limited. PowerHouse Energy, Inc. is incorporated in California in the United States of America and the Company holds 100 per cent of the common stock and voting rights of the subsidiary. Pyromex AG is based in Zug, Switzerland and the Company holds 100 per cent of the shares and voting rights of the subsidiary. PowerHouse Energy UK Limited is a wholly owned UK based dormant company.

	<b>2017 £</b>	<b>2016 £</b>
Investment - Cost	<b>48,947,155</b>	48,947,155
Accumulated impairment	<b>(48,947,154)</b>	(48,947,154)
	<u>1</u>	<u>1</u>

The registered address of PowerHouse Energy Inc is 145 N Sierra Madre Blvd Pasadena, CA 91107, USA.  
The registered address of Pyromex AG is Chollerstrasse 3, CH-6300, Zug, Switzerland.  
The registered address of PowerHouse Energy UK Limited is 10b Russell Court, Cottingley Business Park, Bingley, UK BD16 1PE

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

## 9. Trade and other receivables

	2017 £	2016 £
Other receivables	77,287	6,336
Prepayments and accrued income	<u>11,208</u>	-
	<b>88,495</b>	<b>6,336</b>

## 10. Cash and cash equivalents

	2017 £	2016 £
Cash balances	750,226	148,151
	<u>750,226</u>	<u>148,151</u>

## 11. Trade and other payables

	2017 £	2016 £
Trade payables	125,141	34,183
Other creditors and accruals	<u>115,715</u>	<u>17,001</u>
	<b>240,856</b>	<b>51,184</b>

Capital commitments not accrued for at the year end amounted to £nil (2016: £Nil).

## 12. Operating leases

Future minimum rentals payable under non-cancellable operating leases are as follows:

	2017 £	2016 £
Amounts payable:		
Within one year	5,419	-
	<u>5,419</u>	<u>-</u>

## 13. Loans

	2017 £	2016 £
At 1 January	3,332,292	2,938,636
New loans raised	69,863	577,567
Loans repaid	(2,000,000)	(183,911)
Interest expense	69,863	482,106
Interest paid	<u>(69,863)</u>	<u>(482,106)</u>
	<b>1,402,155</b>	<b>3,332,292</b>

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

	2017 £	2016 £
Loans classified as:		
- Current	1,402,155	3,332,292
- Non-current	-	-

Hillgrove Investments Pty Limited ("Hillgrove") has provided the Company with a convertible loan agreement, the amount of which has increased from time to time at Hillgrove's option and based upon Company needs. The loan is secured by a debenture over the assets of the Company and carries interest of 15 per cent per annum. Hillgrove has the option at any time to convert the loan in part or whole at a conversion price of 0.5p per share.

In February 2017 Hillgrove accepted a settlement of this loan for a £2 million cash pay-out, which was paid during the year, and the conversion of the residual balance of £1,402,155 into newly issued share capital of the Company at the previously agreed 0.5p conversion price, amounting to 280,430,920 shares. The shares have been issued since the year end and Hillgrove has released the debenture it held over the assets of the Company.

## 14. Share capital & share premium

	0.5 p Ordinary shares	0.5 p Deferred shares	4.5 p Deferred shares	4.0 p Deferred shares
Shares at 1 January 2016	430,163,261	388,496,747	17,373,523	9,737,353
Issue of shares	177,771,275	-	-	-
<b>Shares at 31 December 2016</b>	<b>607,934,536</b>	<b>388,496,747</b>	<b>17,373,523</b>	<b>9,737,353</b>
Issue of shares	528,937,478	-	-	-
<b>Shares at 31 December 2017</b>	<b>1,136,872,014</b>	<b>388,496,747</b>	<b>17,373,523</b>	<b>9,737,353</b>

	0.5 p Ordinary shares	0.5 p Deferred shares	4.5 p Deferred shares	4.0 p Deferred shares	Share Capital	Share Premium
	£	£	£	£	£	£
At 1 January 2016	2,150,815	1,942,483	781,808	389,494	5,264,600	46,921,180
Issue of shares	888,855	-	-	-	888,855	110,809
<b>At 31 December 2016</b>	<b>3,039,670</b>	<b>1,942,483</b>	<b>781,808</b>	<b>389,494</b>	<b>6,153,455</b>	<b>47,031,989</b>
Issue of shares	2,644,687	-	-	-	2,644,687	1,895,313
Share issue costs	-	-	-	-	-	(245,510)
<b>At 31 December 2017</b>	<b>5,684,357</b>	<b>1,942,483</b>	<b>781,808</b>	<b>389,494</b>	<b>8,798,142</b>	<b>48,681,792</b>

All types of deferred shares carry no voting right nor any entitlement to attend general meetings of the Company. They carry only a right to participate in any return of capital once an amount of £100 has been paid in respect of each ordinary share.

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

## 14. Share capital (continued)

On 26 January 2016 the Company issued 9,090,909 ordinary shares of 0.5p each at a price of 0.55p each, totalling £50,000.

On 23 February 2016 the Company issued 35,714,285 ordinary shares of 0.5p each at a price of 0.7p each, totalling £250,000, before issue costs.

On 3 March 2016 the Company issued 3,571,419 ordinary shares of 0.5p each at a price of 0.7p each, totalling £25,000.

On 15 July 2016 the Company issued 38,461,538 ordinary shares of 0.5p each at a price of 0.65p each, totalling £250,000, before issue costs.

On 29 April 2016 the Company announced that a full and final settlement had been reached with Renewme to settle the remaining balance in exchange for the issue of 90,932,961 new Ordinary shares.

On 19 January 2017 the Company issued 35,714,285 ordinary shares of 0.5p each at a price of 0.7p each, totaling £250,000, before issue costs.

On 15 February 2017 & 15 March 2017 the Company issued 250,000,000 and 62,500,000 ordinary shares of 0.5p each respectively at a price of 0.8p each, totaling £2,500,000, before issue costs.

On 27 June 2017 the Company issued 7,460,035 ordinary shares of 0.5p each at a price of 0.9p each, totaling £70,000, before issue costs.

On 24 August 2017 the Company issued 160,000,000 ordinary shares of 0.5p each at a price of 1.0p each, totaling £1,600,000, before issue costs.

On 31 August 2017 the Company issued 8,000,000 ordinary shares of 0.5p each at a price of 1.0p each, totaling £80,000, before issue costs.

On 31 August 2017 the Company issued 5,263,158 ordinary shares of 0.5p each at a price of 0.8p each, totaling £40,000, before issue costs.

## 15. Accumulated deficit

	2017 £	2016 £
As at 1 January	(56,412,008)	(55,145,999)
Loss for the year	(1,874,692)	(1,334,009)
Share based payment	5,078	68,000
At 31 December	<b>(58,281,622)</b>	(56,412,008)

## 16. Convertible Instruments

### 16.1 Warrants

On 4 July 2017, the Company granted 5,000,000 warrants to a consultant (2016: nil). The options may be exercised between the Grant date and the third anniversary of the Grant date and will lapse if not exercised during that period. At the date of grant the shares price was 0.85p and the warrants have an exercise price of 1p per share. There were no other warrants outstanding at year end. The valuation of the warrants followed the same methodology as for share options as disclosed in note 16.3 below. These warrants have incurred a charge of £5,078 during the year (2016: £nil).

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

## 16.2 Hillgrove

In February 2017 Hillgrove exercised the right to convert part of its loan to shares, further details are detailed in note 13.

## 16.3 Share Options

On 8 December 2014, the Company granted 11,000,000 options over ordinary shares to the Board, under the PowerHouse Energy Group plc Unapproved Share Option Plan 2011. The options may be exercised between the Grant date and the tenth anniversary of the Grant date and will lapse if not exercised during that period. The options have an exercise price of 2.5p per share.

On 7 March 2016, the Company granted 11,000,000 options over ordinary shares to the Board, under the PowerHouse Energy Group plc Unapproved Share Option Plan 2011. The options may be exercised between the Grant date and the fifth anniversary of the Grant date and will lapse if not exercised during that period. The options have an exercise price of 0.75p per share.

No further options were issued in 2017.

The number of options outstanding at 31 December 2017:

Date of grant	Granted	Share price on grant	Exercised	Forfeits	At 31 December 2017	Exercise price	Exercise period
8 December 2014	11,000,000	1.875p	-	-	11,000,000	2.5p	9 December 2014 until 8 December 2024
7 March 2016	15,000,000	0.55p	-	-	15,000,000	0.75p	8 March 2016 until 7 March 2021
Total	<u>26,000,000</u>		<u>-</u>	<u>-</u>	<u>26,000,000</u>		

The estimated fair value of the options issued during the year was calculated by applying the Black-Scholes option pricing model. The assumptions used in the calculation were as follows:

	8 December 2014	7 March 2016
Options in issue 31 December 2017	11,000,000	15,000,000
Exercise price	2.5p	0.55p
Expected volatility	127.56%	127.56%
Contractual life	10 years	5 years
Risk free rate	2%	2%
Estimated fair value of each option	1.79p	0.45p

These options have incurred a charge of £nil (2016: £68,000) in the current year.

## 17. Material risks

The Company is subject to various risks relating to political, economic, legal, social, industry, business and financial conditions. Risk assessment and evaluation is an essential part of the Company's planning and an important aspect of the Company's internal control system. The Company's approach to these risks is detailed in the Strategic Report.

### Requirement for further funds

In assessing the going concern, the Directors have reviewed cash flow forecasts for 12 months following the date of these accounts. The cash flow forecasts assumed no further funding of PowerHouse Energy, Inc. and Pyromex AG. The current cash reserves and funding plans forward are considered sufficient to enable the Company to meet its liabilities as they fall due.

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

## 18. Directors' remuneration and share interests

The Directors who held office at 31 December 2017 had the following interests, including any interests of a connected person in the ordinary shares of the Company:

	Number of ordinary shares of 0.5p each	Percentage of voting rights
Nigel Brent Fitzpatrick	103,459	<0.1

The remuneration of the Directors of the Company paid for the year or since date of appointment, if later, to 31 December 2017 is:

	2017 £	2017 £	2017 £	2017 £	2016 £
	Salary/Fee	Pension	Benefits	Total	Total
William Cameron Davies	12,500	-	-	12,500	-
Robert Keith Allaun	163,772	-	-	163,772	93,527
Nigel Brent Fitzpatrick	15,000	-	-	15,000	37,942
James John Pryn Greenstreet	9,000	-	-	9,000	27,133
David Ryan	-	-	-	-	-
Clive Carver	7,500	-	-	7,500	36,000

Share options held by the Directors are detailed in note 16.3. No options have been exercised during the year. Total remuneration includes share based payments arising from the issue of options amounting to £nil (2016: £68,000). There have been no awards of shares to Directors under long term incentive plans.

William Cameron Davies, Nigel Brent Fitzpatrick and James John Pryn Greenstreet have service contracts which can be terminated by providing three months' written notice. Robert Keith Allaun has a service contract which can be terminated by providing six months' written notice.

Robert Keith Allaun's services amounting to £163,772 were provided via Critical Point Solutions Limited and relate wholly to his services as a Director of the Company.

Nigel Brent Fitzpatrick's services amounting to £15,000 were provided via Ocean Park Developments Limited and relate wholly to his services as a Director of the Company.

David Ryan's services were provided via Nayr Consultants Limited, an engineering consultancy. Details of amounts paid are provided in Note 19. Related Parties. This does not include any amount for services as a Director of the Company.

Clive Carver's services amounting to £7,500 were provided via Elk Associates LLP and relate wholly to his services as a Director of the Company.

## 19. Related parties

Hillgrove Investments Pty Limited is a related party by virtue of its shareholding in the Company. During the year Hillgrove Investments Pty Limited loans decreased by a net £1,930,137 and £69,863 of loan interest was settled by way of further loans. The balance outstanding at the year-end was £1,402,155 (2016: £3,332,292).

Waste2tricity Limited is a related party due to common directorships. During the year, Waste2tricity provided business development services to the Company amounting to £230,000.

Nayr Consultants Limited, an engineering consultancy services company, wholly owned by David Ryan and his associates, provided engineering services to the Company during the year amounting to £50,375.

# NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2017

Transactions with other related parties were conducted on an arms' length basis and totalled £nil (2016: £nil).

## 20. Segmental reporting

The Company comprises a single operating segment being a development Company operating solely within the United Kingdom. As such the statement of comprehensive income and the statement of financial position may be used as a report on the segment. No revenue is currently being generated as the equipment is currently being developed and tested.

## 21. Post balance sheet events

On 1 February and 23 April 2018, the Company issued 215,686,275 and 64,744,645 ordinary shares of 0.5p respectively at the agreed price of 0.5p in final settlement of the outstanding loan balance due to Hillgrove of £1,402,155.

On 23 April 2018 the Company issued a further 115,255,355 ordinary shares of 0.5p at a price of 0.5p raising gross proceeds of £576,277.

Additionally, in May 2018, the Company has issued a further 10,000,000 and 7,894,737 ordinary shares of 0.5p at a price of 0.5p and 0.76p respectively in settlement of services provided.

Since the year end, Mr Allaun and Mr Greenstreet acquired 2,000,000 and 1,000,000 ordinary shares of 0.5p in the Company respectively from the market

On 6 March 2018, the Company granted share options to Directors under the Company's Share Option Schemes at an exercise price of 0.6p per share as follows:

Mr Robert Keith Allaun	30,000,000
Mr David Ryan	21,000,000
Mr William Cameron Davies	15,000,000
Mr Nigel Brent Fitzpatrick	12,000,000
Mr James John Pryn Greenstreet	12,000,000

## 22. Ultimate controlling party

There is no controlling party of the Company.