

# AFC Energy plc

Report and Accounts

for the year ended 31 October 2011

# Who we are . . .

## AFC Energy develops low-cost alkaline fuel cell systems that use hydrogen to produce clean electricity.

AFC Energy's fuel cell systems are developed with commercial viability as the key driver and in this regard we have re-engineered proven alkaline fuel cell technology:

- High efficiency levels. Using readily available hydrogen and air as the source of oxygen, electrical efficiency is up to 60% which compares to around 30% for conventional electricity generating technology.
- Low cost production. Fabricating with low cost materials combined with industrially proven production processes.
- Low temperature and pressure. Operating at less than 100 degrees Celsius enables us to use polymer mouldings for many parts.
- Hydrogen sealing. Operating at low pressure, hydrogen is readily sealed within the system.
- Thermal management. A circulating liquid electrolyte simplifies the thermal management of the system.
- Balance of plant. The majority of components are off-the-shelf and mass manufactured for other uses enabling us to benefit from these economies of scale.
- Value engineered for assembly. The component count has significantly reduced and commercial units are designed for easy assembly.

AFC Energy has significantly reduced the cost of its technology to make its fuel cell system a commercially compelling proposition.

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# Highlights

"AFC Energy has made great strides to deliver a commercial product this year. The transition to a successful, revenue generating company has started. Our team has all the right skill sets to build upon our partner/customer relationships to allow the delivery of increasingly larger systems. Momentum is building."

**Ian Williamson** Chief Executive



See further information online:  
[afcenergy.com](http://afcenergy.com)

## FY11 Highlights

- Installed first commercial-scale Beta System unit at Dunsfold, UK
- Installed two further Beta Systems with AkzoNobel at Bitterfeld, Germany
- Progressed with partners, including: AkzoNobel, John Lewis Partnership, Air Products, Waste2Tricity, N2telligence
- Made significant technological advancements, having frozen its system design, deployed it in the field and started to generate data that its customers can use
- Increased activity on protection of intellectual property and registration of patents
- Completed a successful fundraising of £3.93 million (net) in July 2011
- Cash as at 31 October 2011 £5.97 million (31 October 2010: £5.35 million)

## Post Period Highlights

- Strengthened the Board through the appointment of Ian Williamson as Chief Executive Officer and Sir John Sunderland as a Non-Executive Director
- Generated first industrial power from Beta fuel cell system
- Bolstered the technical team with the recruitment of a renowned fuel cell scientist
- Awarded a grant of €405,600 as part of €2.9 million European Union project "LASER-CELL"

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## Chairman's Statement

"AFC Energy continues to make significant technological progress as it optimises the performance of its Beta fuel cell system using the highly valuable data generated by the field trials, and takes significant strides towards commercialisation. The first installations, commissioned by AkzoNobel, in the year have already provided initial evidence of the robustness and effectiveness of AFC Energy's technology. The Board looks forward to increasing its commercial routes to market through partners, both new and existing, and looks forward to translating its technical excellence into commercial success in the near future."

**Tim Yeo**, Chairman



### Market Background

During a period when major economies in the West are implementing austerity measures there is a danger that investment in more efficient, cleaner power generation will not get the priority that it deserves. Despite this risk, however, the rise of the fuel cell continues with global total shipments of stationary power units increasing in 2011 to around 10,000 units (54.6MW), up from 7,400 units (32.9MW) in 2010\*.

This rise has been spread across micro-CHP systems and uninterruptible power systems up to multi-megawatt prime power installations, supported in a number of instances by feed-in tariffs set by governments. One or two companies in particular have enjoyed high profile orders recently. We are all encouraged by the industry's progress as a whole, but in our view it will remain a niche, albeit a growing one, until fuel cells can compete on level economic terms with the conventional power generation technologies of turbines and engines.

The only proven fuel cell type that is likely to be capable of competing on level economic terms with conventional electricity generation is the alkaline fuel

cell. This is why AFC Energy has focused on re-engineering the fuel cell system so that it has the lowest life-time cost of ownership.

However, as reported by Fuel Cell Today, the industry as a whole is set to benefit from the increasing worldwide focus on clean, renewable energy sources, a good example of which can be seen in South Korea. The Renewable Portfolio Standard (RPS) in South Korea will require electricity producers to generate 10% of their output using new and renewable technologies by 2022, equivalent to approximately 6,000MW of new capacity. Fuel cells are awarded the highest weighting of all renewables in the RPS demonstrating the massive opportunity for large scale stationary fuel cell systems in that country alone. The current feed-in tariff is \$0.23 per kilowatt hour of electricity and a vast proportion of the 54.6MW installed in 2011 globally was in South Korea.

### Overview

Due to a year of excellent technical progress, full commercialisation of AFC Energy's technology is a lot closer.

AFC Energy commissioned its first commercial-design unit, known as the

Beta System, at Dunsfold in June and following the completion of a rigorous HAZOP (HAZardous OPerability) study in August, was then able to commission two further Beta Systems with AkzoNobel at its Bitterfeld chlor-alkali plant in October 2011. These units subsequently began producing electricity during late 2011. A comprehensive series of trials is continuing to allow AFC Energy to assess a number of important factors intrinsic to future deployment and development, such as longevity and power density of electrodes.

AkzoNobel was AFC Energy's first major partner and we are grateful for their continued support and advice. The ability to test and modify these systems in the field as well as the laboratory environment has been and will continue to be invaluable.

The Centre for Process Innovation (CPI) continued its independent review of AFC Energy in May 2011 and January 2012. We believe these reviews independently benchmark the progress of our technology. This is covered in more detail in the Operating Review but these positive assessments are also a testament to AFC Energy's rapid progress over the last two years.

\* Source: Fuel Cell Today.

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Congratulations are due to the whole AFC Energy technical team, ably led by Gene Lewis, for these achievements.

The Company has continued to manage its cash resources carefully and at the end of October the net cash position was £5.97 million (31 October 2010: £5.35 million). During the year, AFC Energy raised £3.93 million (net) by way of a placing of new shares, largely to existing investors. As a result of this Linc Energy increased its holding to 12%, which the Board welcomes as a vote of confidence from a significant shareholder.

### Our Partners

As I have already mentioned, the work with our first major partner AkzoNobel continues and it remains our view that the chlor-alkali industry represents a very substantial opportunity given the quantities of high quality hydrogen that are produced as a part of the process. A significant proportion of this is either not used or has relatively low value and therefore provides an abundant source of fuel for our systems.

Linc Energy is AFC Energy's partner in Australia and on underground coal gasification worldwide. During the year we continued to work closely with Linc Energy in preparation for future deployment into these markets.

In the UK, the John Lewis Partnership is making significant progress towards improving their energy efficiency and reducing their carbon emissions through a wide range of initiatives. AFC Energy plc was therefore delighted to sign a commercial Memorandum of Understanding (MoU) with them in April to evaluate the economic potential of using its fuel cell system to generate low carbon emission electricity for Waitrose supermarkets and John Lewis stores. The parties continue to work together to optimise the financial and environmental cases.



## AFC Energy's 'Beta' Fuel Cell generates first industrial power

AFC Energy's Beta fuel cell systems have been generating electrical power at the AkzoNobel site since late last year.

The two Beta commercial-design fuel cell systems, installed since October 2011, have been equipped with electrodes for trials, and are fuelled using AkzoNobel's industrially produced hydrogen. This work follows a series of trials that the Company has been carrying out using a Beta system installed at its UK facilities. AFC Energy uses its own in-house pilot manufacturing to fabricate electrodes required for testing.

This is the first commercial reference site for the generation of data and demonstration of the whole Beta system. The Company expects to be able to publish results from the trials after their completion.

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**Chairman's Statement** continued

AFC Energy's relationship with N2telligence, entered into in May 2011, opens the door for applications where exhaust air from fuel cells, with low oxygen content, can be used to help reduce the risk of fire spreading in buildings such as data centres and archives.

Waste2Tricity Ltd has been working on a number of long lead-time projects to deploy the most efficient economic technologies for the conversion of municipal waste into power. Since 2009, it has had a licence option from AFC Energy to deploy AFC Energy fuel cells on waste to energy projects in the UK. AFC Energy owns 25% of Waste2Tricity and this investment is showing signs of bearing fruit. We are pleased to report that Waste2Tricity has made full repayment to AFC Energy of its loan and accumulated interest which stands at £152,500.

Amongst other things Waste2Tricity has the opportunity of deploying fuel cell systems at Billingham, Teesside as part of the Tees Valley Renewable Energy Facility. This project progressed during the year following the grant of planning permission in August 2011. This project is led by Air Products in partnership with AlterNRG Westinghouse with the aim of building a 49MW plant using municipal waste as feedstock.

**Management and Board**

The Board was delighted to have welcomed Ian Williamson as Chief Executive in September 2011. Ian joined AFC Energy from Air Products, where he had worked for 26 years, and was leading Air Products' new venture into the renewable energy market. Ian was instrumental in Air Products obtaining the planning permission for the municipal waste feedstock project at Billingham in Teesside mentioned above. His experience within the industrial gas sector, particularly centred on the manufacture, provision, distribution and commercial sale of hydrogen, is expected to benefit AFC Energy enormously. Ian's arrival has already had a positive impact on the Company.

During the year, there were two further Board changes. David Smith, who is Chief Operating Officer at one of our partners Linc Energy, joined as a Non-Executive Director in October 2011, while Ed Wilson, who was appointed as Managing Director in February 2011, resigned in May 2011.

We have also received notice that Simon Hunt, Non-Executive Director, has decided not to stand for re-election at the AGM due to the potential for a conflict of business interests with his work on green projects elsewhere. I would like to take this opportunity to thank Simon for his contribution to the Board.

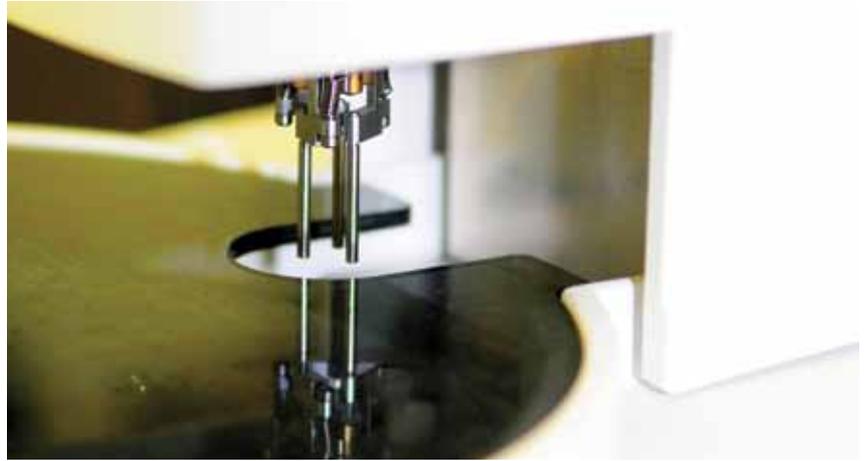
We are delighted that Sir John Sunderland has agreed to join the Board with effect from 8 March. Sir John brings to the Company extensive business experience which will be invaluable as the Company progresses towards commercialisation. Until July 2008 he was Chairman of Cadbury Schweppes PLC, having worked at Cadbury's in various roles, including that of Chief Executive, since 1968. He is a Non-Executive Director of Barclays, Chairman of Merlin Entertainments Limited, an Adviser to CVC Capital Partners and Chancellor of Aston University.

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### Summary and Outlook

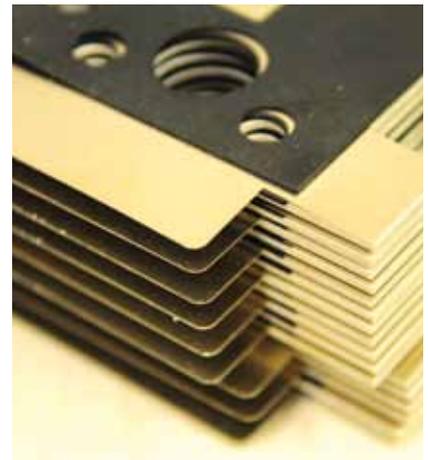
Fuel cells are gaining increasing acceptance worldwide as companies seek progressively to decarbonise, requiring them to embrace renewables technology. To date, however, AFC Energy believes that there has been little consideration of the cost per kilowatt hour of electricity produced when fuel cells are used. This is likely to become an increasingly important component in any calculation and thus play to one of the many key strengths of AFC Energy's fuel cells.

2011 was another year of strong progress towards commercialisation with the first Beta Systems deployed in the field. The further strengthening of the management team will enable AFC Energy to maximise its potential in 2012 and beyond. In a year which sees London hosting the Olympics it is perhaps apt to describe AFC as entering the home straight on its path to commercialisation.

Once again I would like to thank the Board and the outstanding team of hard-working people at AFC Energy as well as its partner companies and suppliers for their efforts during the year, and for the support we have received from investors.

**Tim Yeo**

Chairman  
29 February 2012



# Operating and Financial Review

This has been a very successful year in terms of the technical development of our fuel cells

AFC Energy occupies a very clear space within the fuel cell and future energy landscape. We believe our technology will develop into one of the lowest cost, most efficient fuel conversion mechanisms available. Great strides continue to be made in development terms but also we see increased activity from many interested future customers that understand the potential of AFC Energy's technology and are seeking to apply it to their own needs.

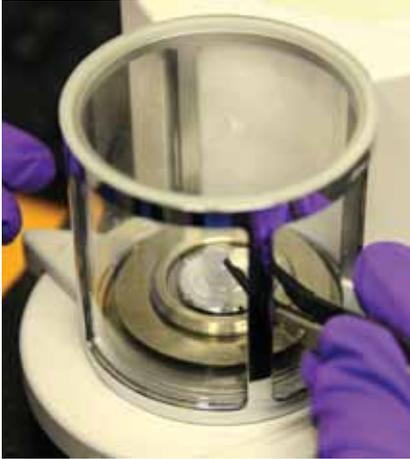
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# Operating and Financial Review



## Technical Progress

This has been a very successful year in terms of the technical development of our fuel cells. We have seen the first industrial deployment, testing and operation of Beta systems at AkzoNobel's Bitterfeld plant in Germany. The focus of working with a prestigious partner at its site has quickened the pace of our development cycles. The availability of hydrogen has allowed us to test stack longevity and performance at minimal cost to the Company. Our modular Beta system design allows us to test multiple cartridges and balance of plant options. We have also been able to perform stack maintenance in the field, which builds on our assertion that this is a very robust technology.

Over the course of the last few years, Dr Jon Helliwell, Project Manager of Fuel Cell Applications at the Centre for Process Innovation (CPI) has been engaged by AFC Energy to conduct periodic independent technical reviews. We believe these reports independently benchmark the progress of our technology. Reviews were conducted in May 2011 and January 2012, and the respective reports issued on 30 June 2011 and 13 February.

The following are extracts from his most recent report and sum up the technical progress achieved between May 2011 and January 2012:

*Over the course of his reviews, the author has noted that AFC Energy has gradually developed a robust materials/electrode methodology and an effective and robust system development and engineering capability culminating in the Beta-system design. The key development over the period is the establishment of two Beta systems at a customer site in Germany and a third on its own site in Dunsfold. These have run for significant periods of time and generated a lot of data.*

*This has been an extremely significant period for AFC Energy. The author is highly encouraged that the company has frozen its system design, deployed it in the field and started to generate data that its customers can use. In an earlier review, the author stated that:*

*'The next phase of the development plan is a critical one for the company. It has to demonstrate the robustness of its Beta-system outside the laboratory environment and it has to ensure that it produces a lot of basic system data on both performance and durability.'*

*The author is highly encouraged by the actions of the company since the last review:*

- *It is demonstrating the robustness of its Beta-system outside the laboratory.*

- *It is producing a lot of basic system data.*
- *It is sharing this data with a customer.*
- *It has frozen its overall system designs.*
- *It is generating highly useful feedback data in its trials that is enabling it to further optimise its systems.*

*The system has proved robust in operation and whilst there have been deviations from expected performance, the reasons for these have quickly been elucidated. The relationship with Akzo is clearly being managed properly and has progressed from a service provider/customer relationship almost to that of development partners. AFC Energy agrees development plans with Akzo in advance of the work being performed and regularly communicates with the Akzo team. The author has reviewed a report summarising technical progress that was recently shared with Akzo. Indeed, the report was so thorough that the author felt that it was an internal report until told otherwise. This clearly demonstrates to the author the level of trust and buy-in that has been achieved with the customer.*

*The technical programme agreed with Akzo is realistic and this has undoubtedly increased the confidence of the*

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## Operating and Financial Review continued

customer that AFC Energy will deliver on its promises. As the electrode design and the overall system design have effectively been frozen, it is now far easier for the organisation to focus on specific issues such as increasing the current density and durability of the fuel cell electrodes. In essence the development activities and manufacturing activities have been separated, but in such a way that they are not remote. This gives both areas a greater degree of focus. The improvements that have come from these initial field trials give the author a great deal of confidence that future Akzo milestones will be met.

The author would like to make the point that the AFC team has never been remote from manufacturing needs or the manufacturability of the product. The team has always recognised the need to produce products capable of low cost and volume manufacture with processes that are not unduly complicated or bespoke. Ian Williamson is undoubtedly correct in asserting that the organisation now needs to develop a Production and Manufacturing capability to meet its ongoing and future requirements. The author believes that Ian Williamson will ensure that the organisation becomes a manufacturing house and he sees this as an extremely positive development. This will allow the organisation to deliver its current milestones for Akzo and build production capability in parallel.

On the team front, it would have been understandable if progress had faltered during the senior personnel changes last year. What is highly encouraging is the fact that the technical team remained focused on their delivery plans. The author has commented in previous reviews on the steps the

company has taken (particularly Gene Lewis) to build a strong team culture in a positive work environment.

Finally, the author firmly believes that AFC Energy is highly likely to deliver low cost, modular fuel cell systems to the stationary power industry. The systems are relatively simple, but use clever engineering and elegant design to minimise cost and complexity. The cells themselves have been designed for manufacture and are capable of using a range of materials. The organisation has examined its cost base in detail and is likely to increase the focus on cost moving forward. The technology is no longer simply a laboratory based technology and in what has been a very exciting period for the company, it is clearly starting to deliver the promise of its robust, low cost fuel cell systems.

The author therefore believes that the company is in a significantly stronger position than it was at the time of the last review and that it will deliver its technology in accordance with its stated technology and commercialisation plans.

The year has seen important progress in the transition of AFC Energy from a research and development organisation to a commercial company. The transition is not yet complete but technical progress has allowed the Company's management to approve investment in a £180,000 production and process development capability for larger scale manufacturing since year end. The facility will enable the increased production of fuel cells with full cartridge assembly. In addition, it will provide an intermediate step between small-scale and high volume in-line production.

### Financial Highlights

AFC Energy has continued to adopt a prudent approach to managing its cash resources against a backdrop of global economic uncertainty. It continually reviews cash balances and forward requirements and seeks to ensure that an adequate funding horizon is maintained whilst minimising shareholder dilution from additional fundraising. The Board was therefore very pleased to be able to take the opportunity to raise a total of £3.93 million after expenses by the placing of 9,999,555 new shares at 40 pence per share, largely with existing investors, including Linc Energy Ltd.

The cash outflow from operating activities increased by £0.69 million compared to the previous year, largely as a result of a £0.38 million increase in R&D expenditure, connected with the construction of the first Beta systems and increased activity and expenditure on protection of its intellectual property and registration of patents.

AFC Energy continued to invest in equipment required for production of fuel cells and also expanded its fuel cell testing capability with a view to maintaining the flow of future generations of fuel cells. Total investment for the year was £0.58 million.

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At the year end, AFC Energy undertook a comprehensive review of fixed and intangible assets. It concluded that impairment of £30,000 has arisen in respect of equipment and that certain of the specific intellectual property and patents, consisting mainly of items acquired from Eneco in 2006, were no longer core to AFC Energy's development and will not contribute significantly to revenue generation in the future. This resulted in an impairment charge of £191,379.

A combination of these asset write-downs, the increased R&D expenditure and consultancy support related to manufacturing scale-up account for the increase in administrative expenses for the year. Although no further options or warrants were issued during the year the charge to the income statement under IFRS 2 relating to historic options and warrants increased to £690,472. This is not a cash cost. Taken together with the increased administrative expenses described, this accounts for the increase in operating loss compared with the previous year.

Looking ahead, AFC Energy does not anticipate a significant change in the costs of its development activities or the investment required for pilot scale manufacturing.

The fall in revenue compared to prior year reflects the fact that the Company did not make a delivery of a fully customer funded system in the year, instead focusing its development resources on the trial of the Beta system with its development partner AkzoNobel.

### Intellectual Property

AFC Energy continues to generate intellectual property as a result of its research and development activities. The Company regularly reviews this intellectual property to determine its value and the best way to protect it. AFC Energy is currently pursuing 12 families of patents with two filed since the last annual report and others in preparation.

AFC Energy endeavours to anticipate future technical developments in the field of alkaline fuel cells and to apply for patent protection for inventions which are likely to be incorporated in future generations of its products. In January 2012 AFC Energy was delighted to recruit renowned fuel cell scientist Naveed Akhtar to help ensure that AFC Energy continues to secure the optimal intellectual property position going forward.

### Health and Safety

The health and safety of our employees and those we work with is regularly reviewed by and on behalf of the Board.

### Commercial Outlook

AFC Energy is on track to drive forward the process of commercialisation.

It is a critical time for any company, as it translates its technical excellence into commercial success. Where we need additional support we will add resource, whilst ensuring expenditure overall is carefully targeted and controlled. It is particularly encouraging that the Company has attracted a world class fuel cell scientist, Naveed Akhtar, to the team. Naveed's experience is already contributing to the technical developments at AFC Energy.

We have ensured that the strategic plans set out for the Company have aligned the commercial and technical aims of the business via a set of focused targets for the coming period:

- 1 Deliver on our set of defined goals for the fuel cell system trials with AkzoNobel.
- 2 Transfer electrode production from technical staff to manufacturing staff.
- 3 Expand, in a controlled way, the number of 'partner' customers. Where we have existing relationships we either progress them or move on.
- 4 Gain experience of more hydrogen production methods and integration requirements.
- 5 Position the Company to access other international markets.

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## Operating and Financial Review continued

AFC Energy occupies a very clear space within the fuel cell and future energy landscape. We believe our technology will develop into one of the lowest cost, most efficient fuel conversion mechanisms available. Great strides continue to be made in development terms but also we see increased activity from many interested future customers that understand the potential of AFC Energy's technology and are seeking to apply it to their own needs.

The Company remains focused on the chlorine industry as its first commercial market; identified as the most likely for AFC Energy's fuel cells to be able to offer the most efficient, robust energy conversion system for that industry. We achieved an important goal this year by beginning our scaled Beta testing at AkzoNobel and we have already generated significant amounts of valuable data. These trials will continue during the current year as further system derivations are tested and assessed with our partner.

One area of our testing is demonstrating that the design of the Beta Systems which has a low lifetime cost of ownership is easy to manufacture, install, operate and maintain using a relatively low skilled workforce. This we believe will greatly increase the accessible international market for AFC Energy's alkaline fuel cell product.

Our commercial strategy remains largely focused around the ESCo model under which AFC Energy would obtain financing to build and supply fuel cell systems to a customer and then share the revenue generated by the installed equipment. Our financial modelling shows that there is a distinct benefit to the Company from doing this, especially as we expect, over time, that new generations of fuel cell cartridges will be increasingly lower cost per kilowatt hour of electricity generated and that our fuel cells will be retrofitted to already installed fuel cell systems.

The models show that payback can be expected to be achieved relatively quickly from sales of electricity generated. In some applications, the water and heat produced by the fuel cell system may also have a considerable value. This model appears attractive to chlorine manufacturers that AFC Energy has engaged in discussions with and we believe AFC Energy will have a highly attractive commercial product.

In addition, AFC Energy continues to work with partners to open other channels to market.

The Company took a 25% stake in Waste2Tricity Limited (Waste2Tricity) in June 2009 and continues to see both political support and commercial opportunities to help resolve the waste issues facing the UK.

Waste2Tricity's involvement with Air Products plc via the latter's plans for a 350,000MT/year waste-to-energy plant in Teesside, UK, continues. The plant remains a potential demonstration opportunity for AFC Energy's alkaline fuel cell technology alongside conventional generating technologies. Waste2Tricity expects that its involvement in this project will enable it to purchase an exclusive UK licence for the Company's fuel cell technology for use in the conversion of waste into electricity. The government's review into the support for green energy provision in the UK has delayed the decision making progress somewhat, although it has highlighted the opportunity to the marketplace and other projects are also being progressed by Waste2Tricity. We are pleased that Waste2Tricity has been able to repay its loan in full.

We continue to work with Linc Energy (ASX:LNC), a 12% shareholder in AFC Energy and our partner for clean power generation in the underground coal gasification market. Whilst opportunities to facilitate further demonstrations for this market segment have been limited during the year, we are currently working together on the next steps in our plans.

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There are many other markets open to AFC Energy although we acknowledge that government funding support is frequently necessary to open these markets up fully and to equalise the playing-field vs. existing, mature, power generation options. To that end, AFC Energy has been active in both the European and national fuel cell targeted funding calls to leverage its near-term commercialisation plans. It should be noted that, in most cases, it is not the costs associated with the fuel cell which need support, but the delivery of the hydrogen itself.

A large step forward was taken by the Company this year with the award by the Joint Technology Initiative of funding support for the Laser-Cell development project. The Laser-Cell project received a grant of €1.4 million to pursue the investigation of electrode design/manufacture. AFC Energy's share of the grant is €405,600. The project has raised AFC Energy's European profile and heightened its credibility within funding circles.

We held two open days for investors to visit and were delighted by both the response and the positive feedback we received from these events. We understand the desire for information concerning the Company's plans and future. To this end we have decided to change the way we manage our communications and to move our external support provision to Luther Pendragon. We believe Luther can offer us a more joined up approach as they provide both financial and commercial communication services. This should lead to more information being available via increased variety of mechanisms.

We look forward to continuing to deliver real progress on AFC Energy's drive to commercialisation.

**Ian Williamson**

Chief Executive Officer  
29 February 2012

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## Directors' Report

The Directors present their report together with the audited financial statements for the year ended 31 October 2011. The comparative period was from 1 November 2009 to 31 October 2010.

**Principal activity and review of business developments**

The principal activity of AFC Energy plc (or 'the Company') is the development of fuel cells.

Reviews of operations, business developments and current projects are included in the Chairman's Statement and the Operating and Financial Review.

**Results and dividend**

The results for the year are set out in the Statement of Comprehensive Income on page 20.

No dividends were paid in the year. The Directors do not intend to declare a dividend in respect of the year.

**Principal risks and uncertainties**

The major risk faced by the business relates to the technical progress in development of the commercial fuel cell system and the fulfilment of contractual obligations with AkzoNobel. Financial risks include the risk of additional development expenditure being required to produce a commercial product. The Company's approach to the management of these risks is described in the Operating and Financial Review.

**Key performance indicators**

Given the nature of the business and that the Company is in the development phase of its products, the Directors are of the opinion that analysis using financial KPIs is not appropriate for an understanding of the development, performance or position of the business at this time. However, the Directors constantly review overall expenditure compared to budget and the Company's cash position. At 31 October 2011, the Company's cash balance was in line with the target set.

	2011 £	2010 £
Cash and cash equivalents at the year end	<b>5,968,429</b>	5,345,716

**Directors and their interests**

The Directors who served during the year were:

Tim Yeo	Non-Executive Chairman
Ian Balchin	Deputy Chairman and Chief Strategy Officer (CEO prior to 21 February 2011)
Dr Gene Lewis	Technical Director
David Marson	Finance Director
Mitchell Field	Non-Executive
Simon Hunt	Non-Executive
David Smith	Non-Executive (appointed 22 September 2011)
Ed Wilson	Managing Director (appointed 21 February 2011, resigned 27 May 2011)
Ian Williamson	Chief Executive Officer (appointed 7 November 2011)

A Director appointed during or after the year must stand for reappointment at the first Annual General Meeting after such appointment. Accordingly, David Smith and Ian Williamson offer themselves for reappointment. In addition, Tim Yeo is required to retire by rotation in accordance with the Company's Articles of Association and, being eligible, offers himself for reappointment.

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On 31 October 2011 the beneficial interests of Directors and their families in the equity share capital of the Company were:

	Number of Ordinary shares of 0.1p 2011	Number of Ordinary shares of 0.1p 2010
Tim Yeo	377,272	377,272
Ian Balchin	50,000	50,000
David Marson	50,000	50,000
Dr Gene Lewis	10,000	10,000
Mitchell Field	2,210,027	2,117,027
Simon Hunt	–	–
David Smith	–	–

On 31 October 2011 the Directors' interests over share capital of the Company were:

	1 Nov 2010	Options/ Warrants granted in year	Options/ Warrants lapsed in year	31 Oct 2011	Exercise price	Date from which exercisable	Expiry date	Type
Tim Yeo	1,500,000	–	–	1,500,000	£0.031	18/04/2012	17/04/2019	Warrant
	1,000,000	–	–	1,000,000	£0.240	14/04/2013	13/04/2020	Warrant
Ian Balchin	1,500,000	–	–	1,500,000	£0.031	18/04/2012	17/04/2019	Warrant
	2,306,000	–	–	2,306,000	£0.240	14/04/2013	13/04/2020	Warrant
David Marson	500,000	–	–	500,000	£0.031	18/04/2012	17/04/2019	Warrant
	586,000	–	–	586,000	£0.240	14/04/2013	13/04/2020	Warrant
Dr Gene Lewis	1,000,000	–	–	1,000,000	£0.031	18/04/2012	17/04/2019	EMI option
	1,954,000	–	–	1,954,000	£0.240	14/04/2013	13/04/2020	Warrant
Mitchell Field	350,000	–	–	350,000	£0.031	18/04/2012	17/04/2019	Warrant
	750,000	–	–	750,000	£0.240	14/04/2013	13/04/2020	Warrant
Simon Hunt	500,000	–	–	500,000	£0.240	14/04/2013	13/04/2020	Warrant

Note:

David Smith had no interest over share capital during the reporting period. Ian Williamson was appointed on 7 November 2011 and was granted one million options to subscribe for shares of 0.1p each in the capital of the Company at an exercise price of 32 pence per share.

## AFC Energy plc

Report and Accounts for the year ended 31 October 2011

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# Directors' Report continued

## Directors' remuneration

Name	Salary £	Bonus £	Share-based payment expense £	Other compensation £	Total 2011 £	Total 2010 £
Tim Yeo	45,000	–	59,290	–	<b>104,290</b>	111,927
Ian Balchin	120,000	50,000	136,723	2,387	<b>309,110</b>	269,047
David Marson (see note 24)	–	–	34,744	70,318	<b>105,062</b>	89,296
Dr Gene Lewis	108,333	–	120,949	3,293	<b>232,575</b>	218,624
Mitchell Field (see note 24)	–	–	44,467	14,583	<b>59,050</b>	46,250
Simon Hunt (see note 24)	–	–	29,645	31,417	<b>61,062</b>	42,728
David Smith (see note 24)	–	–	–	1,667	<b>1,667</b>	–
Ed Wilson (see note 24)	–	–	–	29,020	<b>29,020</b>	–

## Directors' service contracts

Tim Yeo was appointed as Chairman and Non-Executive Director under the terms of a Non-Executive letter dated 20 February 2007 for an indefinite term, subject to a minimum of six months' notice.

Ian Williamson's services are provided under a service agreement with the Company dated 7 November 2011 for an indefinite term, subject to six months' notice by either party.

Ian Balchin's services are provided under a service agreement with the Company dated 17 February 2011 for an indefinite term, subject to twelve months' notice by the Company and six months' notice by the Executive.

David Marson's services are provided under an agreement between the Company and Hudson Raine Ltd dated 8 June 2011, subject to three months' notice by either party (see also note 24).

Dr Gene Lewis's services are provided under a service agreement with the Company dated 3 June 2011 for an indefinite term, subject to twelve months' notice by either party.

Mitchell Field's services as a Non-Executive Director are provided under the terms of a Non-Executive letter dated 10 April 2008 for an indefinite term, subject to a minimum of six months' notice (see also note 24).

Simon Hunt's services as a Non-Executive Director are provided under an agreement between the Company and Cornerstone Capital Ltd dated 13 April 2010, subject to a minimum of six months' notice (see also note 24).

David Smith's services as a Non-Executive Director are provided under an agreement between the Company and Linc Energy Ltd dated 2 September 2011, subject to a minimum of six months' notice (see also note 24).

## Board changes

Details of changes to the membership of the Board are disclosed in note 22 to the financial statements.

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## Capital structure

Details of the Company's share capital are disclosed in notes 16 and 17 the financial statements.

Shareholder funds have been used for the development and testing of an alpha fuel cell system, and latterly the beta fuel system that will become the Company's initial commercial product.

On 29 February 2012, the Company was aware of the following holdings of 3% or more in the Company's issued share capital:

	Number of shares	Approximate percentage of the Company's issued share capital
Age of Reason Foundation	22,602,420	(12.33%)
Linc Energy	22,000,705	(12.00%)
TD Direct Investing Nominees (Europe) Limited	12,194,559	(6.65%)
Barclayshare Nominees Limited	10,103,013	(5.51%)
Eturab Trade Corporation	8,500,000	(4.64%)
Harry Epstein	7,000,000	(3.82%)
LR Nominees Limited	6,427,844	(3.51%)
Hargreaves Landsdown (Nominees) Limited	6,097,824	(3.33%)

## Political and charitable donations

Charitable donations in the year amounted to nil (2010: nil).

## Corporate governance

The Directors seek, as far as is considered appropriate having regard to the size and nature of activities of the Company, to comply with the Combined Code on Corporate Governance applicable to listed companies. The Board is assisted in this regard by a number of committees with delegated authority.

The Company's organisational structure has clearly documented and communicated levels of responsibility, delegated authority and reporting procedures. The professionalism and competence of employees is maintained through recruitment, performance appraisal, written job descriptions and personal training and development plans. The Board supports the highest levels of commitment and integrity from employees. Expected standards of behaviour are set out in the Staff Handbook, a copy of which is given to all employees.

## Audit Committee

The Company's Audit Committee members during the financial year were Mitchell Field (chairman), Tim Yeo and Simon Hunt. The Committee meets at least twice a year and at any other time when it is appropriate to discuss audit, accounting or control issues.

**AFC Energy plc**

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## Directors' Report continued

The Committee's principal responsibilities are:

- to monitor the integrity of the financial statements of the Company, reviewing the annual and interim financial statements to ensure that they present a balanced assessment of the Company's position;
- to review accounting policies;
- to review with management and the Company's external Auditor the effectiveness of internal controls;
- to oversee the publication of reserve and resource statements to ensure compliance with best practice under AIM rules;
- to review with the Company's external Auditor the scope and results of their audit;
- to oversee the relationship with the Auditor.

The Auditor attends meetings of the Committee except when their appointment or performance is being reviewed. Executive Directors attend as and when appropriate.

### Remuneration Committee

The Remuneration Committee's members during the financial year were Simon Hunt (chairman), Tim Yeo and Mitchell Field. The Committee reviews the performance of the Executive Directors and sets the scale and structure of their remuneration and the basis of their service agreements. In determining remuneration, the Committee seeks to enable the Company to attract and retain Executives of the highest calibre. The Committee also makes recommendations to the Board concerning allocation of share options to employees. No Directors participate in discussions or decisions concerning their own remuneration. This Committee is also responsible for nominating candidates, for the approval of the Board, to fill either Executive or Non-Executive vacancies or additional appointments to the Board.

Details of the Directors' remuneration, service agreements and their interests in the share capital of the Company are disclosed in the Directors' Report.

### AIM Rules Compliance Committee

The AIM Rules Compliance Committee comprises Tim Yeo, Simon Hunt and Mitchell Field and meets as appropriate. The Committee monitors internal procedures, resources and controls to enable the Company to comply with AIM rules.

### Payments to creditors

The Company's policy is to settle the terms of payment with its suppliers when agreeing the terms of each transaction, either by accepting the suppliers' terms or by making the suppliers aware of alternative terms, and to abide by the agreed terms. Trade creditors of the Company at 31 October 2011 represented 44 days (2010: 40 days) of annual purchases.

### Liability insurance for Company officers

The Company maintains Directors' and officers' liability insurance cover for its Directors and officers to the extent permitted under the Companies Act 2006.

### Financial risk management objectives

These are detailed in note 20 to the financial statements.

### Research and development

The Company invests substantially in research and development and makes claims under the Government's R&D tax credit scheme. In the year to 31 October 2011, relevant expenditure totalled £1,429,164 (2010: £1,053,371).

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### Going concern

The Company raised £3,922,572 after expenses in July 2011. The Directors are satisfied that the Company has sufficient resources to continue its operations and to meet its commitments for the foreseeable future.

### Post-balance sheet events

Details of post-balance sheet events are provided in note 22 to the financial statements.

### Relations with Shareholders

The Board attaches great importance to maintaining good relationships with Shareholders. The Board regards the Annual General Meeting as an opportunity to communicate directly with investors, who are encouraged to attend and participate.

### Auditor

A resolution to reappoint the Auditor of the Company, Jeffreys Henry LLP, will be proposed at the forthcoming Annual General Meeting. Jeffreys Henry LLP have expressed their willingness to continue as Auditor of the Company.

This report was approved by the Board of Directors on 29 February 2012.



### David Marson

Company Secretary

**AFC Energy plc**

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## Directors, Company Secretary and Advisors

**Tim Yeo**

Tim Yeo has been MP for South Suffolk since 1983. He held various Ministerial posts under Margaret Thatcher and John Major, including Minister of State at the Department of the Environment. Between 1998 and 2005 he was a member of the Shadow Cabinet, shadowing a record seven different departments. Between 2005 and 2010 he was Chair of the Environmental Audit Committee and since 2010 he has been the chairman of the ECC Select Committee. Tim holds a number of non-executive directorships in the energy and health sectors including Univent plc and ITI Energy Ltd. He was appointed chairman of AFC Energy in 2007.

**Ian Williamson**

Ian has significant experience within the industrial gas sector with Air Products particularly centred on the manufacture, provision, distribution and commercial sale of Hydrogen. He is very well known in the industry and his external positions include President of the European Hydrogen Association, Vice President of PATH (the Partnership for the Transition to Hydrogen), Director of CENEX (the UK's Centre of Excellence for Low Carbon and Fuel Cell Technologies) and Board Member of the UK Hydrogen and Fuel Cell Association. Most recently Ian has been leading Air Products' new venture into the renewable energy market and has been instrumental in obtaining planning permission for the proposed 49.9MW advanced gasification power plant to be built in Teesside.

**Ian Balchin**

Ian was CEO of Stanelco plc for five years during which time the company acquired Biotec Holdings. Prior to this Ian held senior management positions at AEA Technology, including director of New Ventures. Ian also has interests in polymer businesses, a technology commercialisation company and investments in several businesses focused on materials and material processing.

**David Marson**

David has been working with the Company since November 2008 as financial management consultant helping to improve its financial systems and business processes. He has an extensive track record in the financial and operational management of small and medium sized technology based businesses, having worked at AEA Technology plc where he held various senior roles as a divisional General Manager and as divisional Finance Director. In this period he was instrumental in the spin-out of a number of successful ventures, including Forensic Alliance Ltd, now a part of LGC Forensics, and Synexus Ltd, the clinical trials patient recruitment organisation. He also held a number of Non-Executive Directorships, including Benitec Ltd, a bio-technology start-up company now listed on ASX.

**Directors**

Tim Yeo  
Ian Williamson  
Ian Balchin  
Mitchell Field  
Simon Hunt  
Dr Gene Lewis  
David Marson (Company Secretary)  
David Smith

**Registered office**

Finsgate  
5–7 Cranwood Street  
London  
EC1V 9EE  
Registered in England: 05668788

**Financial Advisor, NOMAD and Broker**

Allenby Capital plc  
32 Davies Street  
Mayfair  
London  
W1K 4ND

**Bankers**

Barclays Bank PLC  
40/41 High Street  
Chelmsford  
Essex  
CM1 1BE

**Principal place of business**

Unit 71.4 Dunsfold Park  
Stovolds Hill  
Cranleigh  
Surrey  
GU6 8TB  
Tel: 01483 276726  
Fax: 01483 266839

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### Gene Lewis

Dr Gene Lewis joined the Company in November 2008 as Chief Technical Officer, having previously worked at Ceres Power where he was instrumental in the development of their solid oxide fuel cell technology. Gene's leadership skills and his background in fuel cell material science and engineering have significantly strengthened the technical team. Gene has overseen AFC Energy's technical programme since February 2009.



### Mitchell Field

Mitchell owns Richards and Appleby Limited, the company is engaged in the manufacture, sales and distribution of branded toiletries and cosmetics. Among these are well-known heritage brands, including 'Cyclax' which holds a Royal Warrant from Her Majesty the Queen. His principal role is sales and marketing, dealing with blue-chip companies in the UK and exporting to over 60 companies internationally. Mitchell has investments and management interests in fashion, restaurants, property development, and importation and trading companies, and lives in South Wales.



### David Smith

David is Chief Operating Officer and President of Australian Operations at Linc Energy with responsibilities of technology development and demonstration, exploration, procurement and people. He is also a representative Linc Energy director at the Yerostigaz Underground Coal Gasification (UCG) facility in Uzbekistan. David has an Engineer honours degree, Masters of Business & Administration and is a fellow of the Australian Institute of Company Directors. Adam Bond, President – European Operations at Linc Energy, will act as Linc Energy's alternate director when required. Adam is responsible for the development and delivery of Linc Energy's European expansion in the United Kingdom, mainland Europe and Russia.



### Simon Hunt

Simon trained as a corporate lawyer, specialising in corporate finance and M&A (Macfarlanes and Gouldens, now Jones Day), before moving into venture capital management with Gartmore Investment Management Limited, focusing mainly on technology businesses in the US. He later added public company operational experience and investment banking including corporate finance, fund raising and M&A. Simon has worked with companies at all stages of their development both in the UK and the US. He is a founder and Executive Chairman of IPSO Ventures plc which is an innovation investment company and non-executive Chairman of GEM Biofuels plc and Strathdon Investments plc as well as a number of private companies.

### Auditor

Jeffreys Henry LLP  
Finsgate  
5-7 Cranwood Street  
London  
EC1V 9EE

### Registrars

Computershare Investor Services PLC  
The Pavilions  
Bridgwater Road  
Bristol  
BS99 6ZY

### Solicitors

Eversheds LLP  
1 Wood Street  
London  
EC2V 7WS

**AFC Energy plc**

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## Statement of Directors' Responsibilities

The Directors are responsible for preparing the Annual Report and financial statements in accordance with applicable law and International Financial Reporting Standards.

Company law requires the Directors to prepare financial statements for each financial period. Under that law the Directors have elected to prepare the financial statements in accordance with International Financial Reporting Standards as adopted for use in the European Union. The financial statements are required by law to 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 those financial statements, the Directors are required to:

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

The Directors are responsible for keeping adequate accounting records which 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 Company's website ([www.afcenergy.com](http://www.afcenergy.com)) and legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

### **Statement of disclosure to Auditor**

So far as the Directors are aware, there is no relevant audit information of which the Company's Auditor is unaware, and each Director has taken all the steps that he ought to have taken as 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.

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# Independent Auditor's Report to the Shareholders of AFC Energy plc

We have audited the financial statements of AFC Energy plc for the year ended 31 October 2011 which comprise the Statement of Comprehensive Income, the Statement of Financial Position, the Cash Flow Statement, the Statement of Changes in Equity and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union.

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.

## Respective responsibilities of Directors and Auditors

As explained more fully in the Statement of Directors' Responsibilities set out on page 18, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's (APB's) Ethical Standards for Auditors.

## Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Company's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Directors; and the overall presentation of the financial statements.

In addition, we read all financial and non-financial information in the Chairman's Statement, the Operating and Financial Review and the Directors' Report to identify material inconsistencies with the audited financial statements. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

## Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view of the state of the Company's affairs as at 31 October 2011 and of its loss for the year then ended;
- have been properly prepared in accordance with IFRSs as adopted by the European Union; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

## Opinion on other matters prescribed by the Companies Act 2006

In our opinion:

- the information given in the Directors' Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

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

We have nothing to report in respect of the following:

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- adequate accounting records have not been kept; or
- the 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.

## Jonathan Isaacs

(Senior statutory Auditor) Date 29 February 2012  
for and on behalf of Jeffrey's Henry LLP, Statutory Auditor  
Chartered Accountants & Registered Auditors  
Finsgate, 5-7 Cranwood Street, London, EC1V 9EE

## AFC Energy plc

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# Statement of Comprehensive Income

for the year ended 31 October 2011

	Note	Year ended 31 October 2011 £	Year ended 31 October 2010 (restated) £
Revenue		35,468	180,607
Cost of sales		27,498	–
<b>Gross profit</b>		<b>7,970</b>	180,607
Other income		3,996	3,996
Administrative expenses		(4,402,158)	(3,236,371)
Analysed as:			
Administrative expenses		(3,711,686)	(2,708,666)
Equity-settled share-based payments	17c	(690,472)	(527,705)
<b>Operating loss</b>	5	<b>(4,390,192)</b>	(3,051,768)
Financial income	8	44,930	30,461
<b>Loss before tax</b>		<b>(4,345,262)</b>	(3,021,307)
Taxation	10	354,822	250,358
<b>Loss for the financial year and total comprehensive loss attributable to owners of the Company</b>		<b>(3,990,440)</b>	(2,770,949)
Basic loss per share	11	(2.26)p	(1.87)p
Diluted loss per share	11	(2.26)p	(1.87)p

All amounts relate to continuing operations.

The notes on pages 24 to 39 form part of these financial statements.

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# Statement of Financial Position

as at 31 October 2011

	Note	31 October 2011 £	31 October 2010 (restated) £
<b>Assets</b>			
<b>Non-current assets</b>			
Intangible assets	12	149,498	318,851
Property and equipment	13	824,264	632,657
Investment in associate	9a	2,500	2,500
		<b>976,262</b>	954,008
<b>Current assets</b>			
Work in progress		96,242	123,740
Trade and other receivables	9b & 14	734,684	569,924
Cash and cash equivalents	15	5,968,429	5,345,716
		<b>6,799,355</b>	6,039,380
<b>Total assets</b>		<b>7,775,617</b>	6,993,388
<b>Capital and reserves attributable to owners of the Company</b>			
Share capital	16	183,339	173,339
Share premium		18,966,789	15,044,217
Other reserve		1,820,485	1,130,013
Retained deficit		(13,721,105)	(9,730,665)
<b>Total equity attributable to Shareholders</b>		<b>7,249,508</b>	6,616,904
<b>Current liabilities</b>			
Trade and other payables	18	526,109	376,484
		<b>526,109</b>	376,484
<b>Total equity and liabilities</b>		<b>7,775,617</b>	6,993,388

The notes on pages 24 to 39 form part of these financial statements.

These financial statements were approved and authorised for issue by the Board on 29 February 2012.



**Tim Yeo**  
Chairman

**David Marson**  
Finance Director

AFC Energy plc  
Registered number: 05668788

## AFC Energy plc

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## Statement of Changes in Equity

for the year ended 31 October 2011

	Share Capital £	Share Premium £	Other Reserve £	Retained Loss £	Total Equity £
Balance at 1 November 2009 (restated)	127,683	8,940,379	602,308	(6,959,716)	2,710,654
Loss after tax for the year	–	–	–	(2,770,949)	(2,770,949)
Total recognised in income and expense for the year	–	–	–	(2,770,949)	(2,770,949)
Issue of equity shares	45,656	6,298,863	–	–	6,344,519
Share issue expenses	–	(195,025)	–	–	(195,025)
Equity-settled share-based payments	–	–	527,705	–	527,705
Balance at 31 October 2010 (restated)	173,339	15,044,217	1,130,013	(9,730,665)	6,616,904
Loss after tax for the year	–	–	–	(3,990,440)	(3,990,440)
Total recognised in income and expense for the year	–	–	–	(3,990,440)	(3,990,440)
Issue of equity shares	10,000	3,989,822	–	–	3,999,822
Share issue expenses	–	(67,250)	–	–	(67,250)
Equity-settled share-based payments	–	–	690,472	–	690,472
<b>Balance at 31 October 2011</b>	<b>183,339</b>	<b>18,966,789</b>	<b>1,820,485</b>	<b>(13,721,105)</b>	<b>7,249,508</b>

Share capital is the amount subscribed for shares at nominal value.

Share premium represents the excess of the amount subscribed for share capital over the nominal value of these shares net of share issue expenses.

Other reserve represents the credit to equity in respect of equity-settled share-based payments.

Retained earnings represent the cumulative loss of the Company attributable to equity Shareholders.

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# Cash Flow Statement

for the year ended 31 October 2011

	Note	31 October 2011 £	31 October 2010 (restated) £
<b>Cash flows from operating activities</b>			
Loss before tax for the year		(4,345,262)	(3,021,307)
Adjustments for:			
Depreciation and amortisation		377,258	284,173
Loss on disposal of plant and equipment		–	2,765
Impairment of plant and equipment		30,000	–
Impairment of intangible assets		191,379	–
Equity-settled share-based payment expenses	17c	690,472	527,705
Finance income		(44,930)	(30,461)
<b>Cash flows from operating activities before changes in working capital and provisions</b>		<b>(3,101,083)</b>	<b>(2,237,125)</b>
Corporation tax received		258,076	220,643
Decrease/(increase) in trade and other receivables		(40,516)	(83,565)
Decrease/(increase) in trade and other payables		149,625	57,059
<b>Cash absorbed by operating activities</b>		<b>(2,733,898)</b>	<b>(2,042,988)</b>
<b>Cash flows from investing activities</b>			
Purchase of plant and equipment	13	(577,796)	(630,543)
Acquisitions of patents	12	(43,094)	(29,308)
Interest received	8	44,930	30,461
<b>Net cash absorbed by investing activities</b>		<b>(575,960)</b>	<b>(629,390)</b>
<b>Cash flows from financing activities</b>			
Proceeds from the issue of share capital		3,999,822	6,344,519
Costs of issue of share capital		(67,250)	(195,025)
<b>Net cash from financing activities</b>		<b>3,932,572</b>	<b>6,149,494</b>
Net increase in cash and cash equivalents		622,713	3,477,115
Cash and cash equivalents at start of year		5,345,716	1,868,601
<b>Cash and cash equivalents at 31 October</b>	15	<b>5,968,429</b>	<b>5,345,716</b>

**AFC Energy plc**

Report and Accounts for the year ended 31 October 2011

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# Notes forming part of the Financial Statements

## 1. Corporate information

AFC Energy plc ('the Company') is a public limited company incorporated in England & Wales and quoted on the Alternative Investment Market of the London Stock Exchange.

The address of its registered office is Finsgate, 5-7 Cranwood Street, London, EC1V 9EE.

## 2. Basis of preparation and accounting policies

These consolidated financial statements of AFC Energy plc have been prepared in accordance with International Financial Reporting Standards (IFRSs), International Accounting Standards (IASs) and International Financial Reporting Interpretations Committee (IFRIC) interpretations (collectively 'IFRSs') as adopted for use in the European Union and as issued by the International Accounting Standards Board and with those parts of the Companies Act 2006 applicable to companies reporting under IFRS.

The accounting policies set out below have, unless otherwise stated, been applied consistently in these financial statements.

The comparative period from 1 November 2009 to 31 October 2010 has been restated to reverse the previous equity accounting treatment of investment in Waste2Tricity. This has reduced the prior year loss after tax by £17,781 and increased the total equity attributable to Shareholders at 31 October 2010 by £44,432.

Judgements made by the Directors in the application of these accounting policies that have significant effect on the financial statements and estimates with a significant risk of material adjustment in the next year are discussed in note 3.

### a. New and amended standards adopted by the Company

- Amendment to IAS 32 'Classification of Rights Issues' (effective for accounting periods beginning on or after 1 February 2010). This amendment has been endorsed for use in the EU.
- Amendment to IFRS 1 'Additional Exemptions for First-time Adopters' (effective for accounting periods beginning on or after 1 January 2010). This amendment has been endorsed for use in the EU.
- IFRIC 19 'Extinguishing Financial Liabilities with Equity Instruments' (effective for accounting periods beginning on or after 1 July 2010). This interpretation has been endorsed for use in the EU.
- IFRS 2 (Amended) 'Group Cash-settled Share-based Payment Transactions' (effective for accounting periods beginning on or after 1 January 2010). This was endorsed by the EU on 23 March 2010.
- IFRS 7 (amended) 'Limited exemption from Comparative IFRS 7 Disclosures for first time adopters' (effective for accounting periods beginning on or after 1 July 2010). This amendment has been endorsed for use in the EU.
- The IASB 2009 annual improvement project includes further minor amendments to various accounting standards and is effective from various dates from 1 January 2010 onwards. This was endorsed by the EU on 23 March 2010.

### b. Standards, amendments and interpretations to published standards not yet effective

At the date of authorisation of these consolidated financial statements, the IASB and IFRIC have issued the following standards and interpretations which are effective for annual accounting periods beginning on or after the stated effective date. These standards and interpretations are not effective for and have not been applied in the preparation of these consolidated financial statements:

- Amendment to IFRIC 14 'Prepayments of a Minimum Funding Requirement' (effective for accounting periods beginning on or after 1 January 2011). This amendment has not yet been endorsed for use in the EU.

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## 2. Basis of preparation and accounting policies continued

- Revised IAS 24 'Related Party Disclosures' (effective for accounting periods beginning on or after 1 January 2011). This revision has not yet been endorsed for use in the EU.
- IFRS 9 'Financial Instruments' (effective for accounting periods beginning on or after 1 January 2013). This standard has not yet been endorsed for use in the EU.
- IFRS 7 'Financial instruments: disclosures (amendment)' is effective for annual periods beginning on or after 1 July 2011. The amendments requires additional quantitative and qualitative disclosures relating to transfers of financial assets, where financial assets are derecognised in their entirety, but where the entity has a continuing involvement in them and where financial assets are not derecognised in their entirety. The adoption of this will have no effect on the financial statements of the Company.
- IAS 12 'Income taxes (amendment) – Deferred taxes: recovery of underlying assets', is effective for annual periods beginning on or after 1 January 2012. It introduces a rebuttable presumption that deferred tax on investment properties measured at fair value will be derecognised on a sale basis, unless an entity has a business model that would indicate the investment property will be consumed in the business. If consumed a use basis would need to be adopted. The amendments also introduce the requirement that deferred tax on non-depreciable assets measured using the revaluation model in IAS 16 should always be measured on a sale basis. The adoption of this interpretation will have no effect on the financial statements of the Company.
- IFRS 10 Consolidated Financial Statements, IFRS 11 Joint Arrangements, IFRS 12 Disclosures of Interests with Other Entities along with related amendments to IAS 27 Separate Financial Statements and IAS 28 Investments in Associates and Joint Ventures will have an effective date of 1 January 2013. Early adoption of these standards is permitted, but only if all five are early adopted together. The Company does not expect the adoption of this to have a significant impact on its financial position and performance.
- Improvements to IFRS (issued in May 2010). The IASB issued improvement to IFRSs, an omnibus of amendments to its IFRS standards. The amendments have not been adopted as they become effective for annual periods on or after 1 January 2011 or 1 July 2010. The amendments listed below are considered to have a reasonable possible impact on the Company:

IFRS 3 Business combinations  
IFRS 7 Financial instruments: disclosures  
IAS 1 Presentation of financial statements  
IAS 27 Consolidated and separate financial statements  
IFRIC 13 Customer loyalty programmes  
IAS 34 Interim Financial Reporting

The Company expects no impact from the adoption of the above amendments on its financial position or performance.

### c. Capital Policy

The Company manages its equity as capital. Equity comprises the items detailed within the principal accounting policy for equity and financial details can be found in the Statement of Financial Position. The Company adheres to the capital maintenance requirements as set out in the Companies Act.

### d. Revenue

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Company and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received, excluding discounts, rebates, and other sales taxes or duty. Revenue arising from the provision of services is recognised when and to the extent that the Company obtains the right to consideration in exchange for the performance of its contractual obligations.

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**Notes forming part of the Financial Statements** continued**2. Basis of preparation and accounting policies** continued**e. Development costs**

Development expenditure does not meet the strict criteria for capitalisation under IAS 38 and has been recognised as an expense.

**f. Foreign currency**

The financial statements of the Company are presented in the currency of the primary economic environment in which it operates (the functional currency) which is pounds sterling. In accordance with IAS 21, transactions entered into by the Company in a currency other than the functional currency are recorded at the rates ruling when the transactions occur. At each balance sheet date, monetary items denominated in foreign currencies are retranslated at the rates prevailing at the balance sheet date.

**g. Work in Progress**

Work in progress is valued at cost, less the cost of work invoiced on incomplete contracts and less foreseeable losses. Cost comprises purchase cost plus production overheads.

**h. Trade and other receivables**

Trade and other receivables arise principally through the provision by the Company of goods and services to customers (trade debtors). They also include other types of contractual monetary assets. These assets are initially recognised at fair value and are subsequently measured at amortised cost less any provision for impairment.

**i. Loans and other receivables**

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, loans and receivables are carried at amortised cost using the effective interest method less any allowance for impairment. Gains and losses are recognised in profit or loss when the loans and receivables are derecognised or impaired, as well as through the amortisation process.

The Company's loans and receivables include cash and cash equivalents. These include cash in hand, and deposits held at call with banks.

**j. Property and equipment**

Property and equipment are stated at cost less any subsequent accumulated depreciation and impairment losses.

Where parts of an item of property and equipment have different useful lives, they are accounted for as separate items of property and equipment.

Leases in which the Company assumes substantially all the risks and rewards of ownership of the leased asset are classified as finance leases. Leased assets acquired by way of finance lease are stated at an amount equal to the lower of their fair value and the present value of the minimum lease payments at inception of the lease, less accumulated depreciation and impairment losses.

Depreciation is charged to the income statement within cost of sales and administrative expenses on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment. The estimated useful lives are as follows:

– Leasehold improvements	1 to 3 years
– Fixtures, fittings and equipment	1 to 3 years
– Vehicles	3 to 4 years

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## 2. Basis of preparation and accounting policies continued

Expenses incurred in respect of the maintenance and repair of property and equipment are charged against income when incurred. Refurbishment and improvement expenditure, where the benefit is expected to be long lasting, is capitalised as part of the appropriate asset.

The useful economic lives of property, plant and equipment and the carrying value of tangible fixed assets are assessed annually and any impairment is charged to the income statement.

### k. Intangible assets

Expenditure on research activities is recognised in the income statement as an expense as incurred.

Other intangible assets that are acquired by the Company are stated at cost less accumulated amortisation and impairment losses.

Amortisation of intangible assets is charged using the straight-line method to administrative expenses over the following period:

- Patents 20 years

Useful lives are based on the management's estimates of the period that the assets will generate revenue, which are periodically reviewed for continued appropriateness and any impairment is charged to the income statement.

### l. Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with major banking institutions realisable within 180 days.

### m. Other financial liabilities

The Company classifies its financial liabilities as:

#### *Trade and other payables*

These are initially recognised at invoiced value. These arise principally from the receipt of goods and services. There is no material difference between the invoiced value and the value calculated on an amortised cost basis or fair value.

#### *Deferred income*

This is the carrying value of income received from a customer in respect of the order for five systems which has not been fully recognised in the Income Statement pending delivery to the customer. The carrying value is fair value.

### n. Leases

#### *Finance leases*

Finance leases, which transfer to the Company substantially all the risks and benefits incidental to ownership of the leased item, are capitalised at the inception of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between the finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are reflected in profit or loss. Capitalised leased assets are depreciated over the shorter of the estimated useful life of the asset and the lease term, if there is no reasonable certainty that the Company will obtain ownership by the end of the lease term.

#### *Operating leases*

Operating lease rentals are charged to the Income Statement on a straight-line basis over the lease term.

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# Notes forming part of the Financial Statements continued

## 2. Basis of preparation and accounting policies continued

### o. Financial assets

All of the Company's financial assets are loans and receivables. Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets at fair value and comprise trade and other receivables and cash and cash equivalents.

### p. Share-based payment transactions

The Company awards share options and warrants to certain Directors and employees to acquire shares of the Company. The fair value of options and warrants granted is recognised as an employee expense with a corresponding increase in equity. The fair value is measured at grant date and spread over the period during which the Directors and employees become unconditionally entitled to the options or warrants. The fair value of the options and warrants granted is measured using a binomial option valuation model, taking into account the terms and conditions upon which the options and warrants were granted. The amount recognised as an expense is adjusted to reflect the actual number of share options and warrants that vest only where vesting is dependent upon the satisfaction of service and non-market vesting conditions or where the vesting periods themselves are amended by the introduction of new schemes and the absorption of earlier schemes by agreement between the Company and the relevant Directors and employees. Where options or warrants granted are cancelled, all future charges arising in respect of the grant are charged to the income statement on the date of cancellation.

### q. Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event and it is probable that the Group will be required to settle the obligation. Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the balance sheet date and are discounted to present value where the effect is material.

### r. Taxation

Tax on the profit or loss for the year comprises current and deferred tax. Tax is recognised in the income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable or recoverable on the taxable income for the year, using tax rates enacted or substantively enacted at the balance sheet date together with any adjustment to tax payable in respect of previous years.

Deferred tax assets are not recognised due to the uncertainty of their recovery.

## 3. Significant accounting estimates and judgements

### Carrying values of property and equipment

The Company monitors internal and external indicators of impairment relating to its property and equipment. Management has considered whether any indicators of impairment have arisen over certain assets relating to these assets. After assessing these, management has concluded that impairment has arisen in respect of assets with a gross book value of £238,798 during the year and subsequent to 31 October 2011. This has resulted in an impairment charge of £30,000 to the Statement of Comprehensive Income in the year to 31 October 2011.

### Useful lives and impairment of intangible assets, and property and equipment

Intangible assets, and property and equipment are amortised or depreciated over their useful lives. Useful lives are based on the management's estimates of the period that the assets will generate revenue, which are periodically reviewed for continued appropriateness. After undertaking a comprehensive review of intangible assets, including the £299,182 intangible assets acquired from Eneco Ltd in 2006 and the subsequent expenditure incurred in pursuing grant of acquired patent rights, management has concluded that certain of the specific intellectual property and patents acquired from Eneco are no longer core to the Company's development and will not contribute significantly to revenue generation in the future. Accordingly, management has concluded that partial impairment has arisen with respect to intangible assets with a gross book value of £389,126 during the year and subsequent to 31 October 2011. This has resulted in an impairment charge of £191,379 to the Statement of Comprehensive Income in the year to 31 October 2011.

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### 3. Significant accounting estimates and judgements continued

#### Income taxes and withholding taxes

The Company believes that its receivables for tax recoverable are adequate for all open audit years based on its assessment of many factors including past experience and interpretations of tax law. This assessment relies on estimates and assumptions and may involve a series of complex judgements about future events. To the extent that the final tax outcome of these matters is different from the amounts recorded, such differences will impact income tax expense in the period in which such determination is made.

#### Capitalisation of development expenditure

The Company uses the criteria of IAS 38 to determine whether development expenditure should be capitalised. After assessing these, management has concluded it would not be appropriate to capitalise development expenditure incurred during the year ended 31 October 2011.

#### Share-based payments

Certain employees (including Directors and senior Executives) of the Company receive remuneration in the form of share-based payment transactions, whereby employees render services as consideration for equity instruments ('equity-settled transactions').

The fair value is determined by an external valuer using an appropriate pricing model.

The cost of equity-settled transactions is recognised, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award ('the vesting date'). The cumulative expense recognised for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Company's best estimate of the number of equity instruments that will ultimately vest. The profit or loss charge or credit for a period represents the movement in cumulative expense recognised as at the beginning and end of that period.

No expense is recognised for awards that do not ultimately vest, except for awards where vesting is conditional upon a market condition, which are treated as vesting irrespective of whether or not the market condition is satisfied, provided that all other performance and/or service conditions are satisfied. Where the terms of an equity-settled award are modified, the minimum expense recognised is the expense as if the terms had not been modified. An additional expense is recognised for any modification which increases the total fair value of the share-based payment arrangement, or is otherwise beneficial to the employee as measured at the date of modification. Where an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. However, if a new award is substituted for the cancelled award, and designated as a replacement award on the date that it is granted, the cancelled and new awards are treated as if they were a modification of the original award, as described in the previous paragraph.

### 4. Segmental analysis

A segment is a distinguishable component of the Company that is engaged in providing products or services in a particular business sector (business segment) or in providing products or services in a particular economic environment (geographic segment), which is subject to risks and rewards that are different in those other segments. The Company operated in the year in one business segment, the development of fuel cells, and in three principal geographic segments, the United Kingdom, Germany and Australia. All revenue was derived from one customer in each of Germany (£27,498) and Australia (£7,970). All of the gross profit was from Australia. All assets and liabilities were in the UK at the year end.

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## Notes forming part of the Financial Statements continued

### 5. Operating loss

	Year ended 31 October 2011 £	Year ended 31 October 2010 £
This has been stated after charging:		
Depreciation/Impairment of property and equipment	386,189	267,956
Research and Development expenditure	1,429,164	1,053,371
Amortisation/Impairment of intangible assets	212,448	18,982
Equity-settled share-based payment expense	690,472	527,705
Auditor's remuneration – audit	16,000	17,500
Auditor's remuneration – tax	1,000	2,500
Auditor's remuneration – other services	3,050	1,550

### 6. Staff numbers and costs, including Directors

The average numbers of employees in the year were:

	Year ended 31 October 2011 Number	Year ended 31 October 2010 Number
Support, operations and technical	26	20
Administration	5	5
	31	25

The aggregate payroll costs for these persons were:

	£	£
Wages and salaries (including Directors' emoluments)	1,121,323	1,067,526
Social security	129,553	116,718
Equity-settled share-based payment expense	536,854	345,811
	1,787,730	1,530,055

### 7. Directors' remuneration

	Year ended 31 October 2011 £	Year ended 31 October 2010 £
Wages and salaries	323,333	312,262
Social security	35,745	31,800
Equity-settled share-based payment expense	425,818	447,199
Other compensation (see note 24)	152,685	69,322
	937,581	860,583
The emoluments of the Chairman	104,290	111,927
The emoluments of the highest-paid Director	309,110	269,047

The remuneration, details of share options and interests in the Company's shares of each Director are shown in the Directors' Report on pages 12 to 17.

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## 8. Financial income

	Year ended 31 October 2011 £	Year ended 31 October 2010 £
Bank interest receivable	43,425	28,986
Loan interest receivable	1,505	1,475
Total interest receivable	44,930	30,461

### 9a. Investment in Associate

The Company acquired 25% of the share capital of Waste2Tricity Ltd (W2T) (a company registered in England & Wales) on 17 June 2009 for £2,500 by converting £2,500 of the £150,000 loan provided to W2T under an agreement of February 2009. The loan accrues interest at 0.5% above base rate. The loan is shown in Current Assets – Trade and Other Receivables.

The Company's share of the results of its associate was as follows:

	Year ended 31 October 2011 £	Year ended 31 October 2010 £
Revenue	–	–
Profit/(loss)	(5,951)	(17,781)
Assets	3,932	1,771
Liabilities	76,113	30,876

### 9b. Loan to Associate

	Year ended 31 October 2011 £	Year ended 31 October 2010 £
Loan to W2T at 1 November, including accrued interest	150,475	149,000
Loan interest receivable	1,505	1,475
Loan at 31 October	151,980	150,475

## AFC Energy plc

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Notes forming part of the Financial Statements continued

## 10. Taxation

	Year ended 31 October 2011 £	Year ended 31 October 2010 £
Recognised in the income statement		
Research and development tax credit – current year	354,822	258,076
Research and development tax credit – prior year adjustment	–	(7,718)
<b>Total tax credit</b>	<b>354,822</b>	250,358
<i>Reconciliation of effective tax rates</i>		
Loss before tax	(4,345,262)	(3,039,088)
Tax using the domestic rate of corporation tax of 26.7% (2010: 28%)	1,160,185	850,945
Effect of:		
Expenses not deductible for tax purposes	186,110	156,239
Research and development allowance	(348,630)	(221,208)
Research and development tax credit	354,822	258,076
Depreciation in excess of capital allowances	72,090	9,410
Losses surrendered for research and development	730,217	516,152
Other adjustments	–	–
Unutilised losses carried forward	520,398	390,352
Total tax credit for the year	<b>354,822</b>	250,358

## 11. Loss per share

The calculation of the basic loss per share is based upon the net loss after tax attributable to ordinary Shareholders of £3,990,440 (2010: loss of £2,770,949) and a weighted average number of shares in issue for the year.

	Year ended 31 October 2011	Year ended 31 October 2010
Basic loss per share (pence)	(2.26)p	(1.87)p
Diluted loss per share (pence)	(2.26)p	(1.87)p
Loss attributable to equity Shareholders	(3,990,440)	(2,770,949)
	<b>Number</b>	Number
Weighted average number of shares in issue	176,599,336	148,396,520

## Diluted earnings per share

The diluted loss per share is the same as the basic loss per share, as the loss for the year has an anti-dilutive effect.

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## 12. Intangible assets

	2011 Patents £	2010 Patents £
<b>Cost</b>		
Balance at 1 November	397,712	368,403
Additions	43,094	29,308
Balance at 31 October	440,806	397,712
<b>Amortisation</b>		
Balance at 1 November	78,860	59,878
Charge for the year	21,069	18,982
Impairment	191,379	–
Balance at 31 October	291,308	78,860
Net book value	149,498	318,852

For details of impairment charge, see note 3.

## 13. Property and equipment

	Leasehold improvements £	Fixtures, fittings and equipment £	Total £
<b>Cost</b>			
At 31 October 2009	150,152	706,379	856,531
Additions	19,820	610,723	630,543
Reclassification	14,037	(14,037)	–
Disposals	–	(48,788)	(48,788)
At 31 October 2010	184,009	1,254,278	1,438,286
Additions	32,188	545,608	577,796
At 31 October 2011	216,197	1,799,886	2,016,083
<b>Depreciation</b>			
At 31 October 2009	143,258	443,204	586,462
Charge for the year	3,140	262,051	265,191
Reclassification	10,672	(10,672)	–
Disposals	–	(46,023)	(46,023)
At 31 October 2010	157,070	648,560	805,630
Charge for the year	21,268	334,921	356,189
Impairment	–	30,000	30,000
At 31 October 2011	178,337	1,013,481	1,191,819
<b>Net Book Value</b>			
At 31 October 2011	37,860	786,404	824,264
At 31 October 2010	26,939	605,718	632,657

For details of impairment charge, see note 3. There are no assets held under finance leases.

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# Notes forming part of the Financial Statements continued

## 14. Trade and other receivables

	2011 £	2010 £
Trade receivables	—	391
Corporation Tax receivable	<b>354,822</b>	250,358
Other receivables	<b>306,121</b>	260,016
	<b>734,684</b>	569,924

There were no trade and other receivables that were past due or considered to be impaired. The trade and other receivables balances are categorised as loans and other receivables. There is no significant difference between the fair value of the trade and other receivables and the values stated above.

## 15. Cash and cash equivalents

	2011 £	2010 £
Cash at bank	<b>738,821</b>	—
Bank deposits	<b>5,229,608</b>	5,345,716
	<b>5,968,429</b>	5,345,716

Cash at bank and bank deposits consist of cash. There is no material foreign exchange movement in respect of cash and cash equivalents.

## 16. Issued share capital

	Number	Ordinary shares £	Share premium £	Total £
At 31 October 2009	127,682,854	127,683	8,940,380	<b>9,068,063</b>
Issue of shares on 10 December 2009 <sup>1</sup>	21,500,000	21,500	1,992,494	<b>2,013,994</b>
Issue of shares on 2 February 2010 <sup>2</sup>	840,000	840	83,160	<b>84,000</b>
Issue of shares on 22 February 2010 <sup>2</sup>	450,000	450	44,550	<b>45,000</b>
Issue of shares on 1 March 2010 <sup>2</sup>	400,000	400	39,600	<b>40,000</b>
Issue of shares on 25 October 2010 <sup>3</sup>	22,466,353	22,466	3,944,032	<b>3,966,499</b>
At 31 October 2010	173,339,207	173,339	15,044,217	<b>15,217,556</b>
Issue of shares on 4 July 2011 <sup>4</sup>	9,999,555	10,000	3,922,572	<b>3,932,572</b>
At 31 October 2011	183,338,762	183,339	18,966,789	<b>19,150,128</b>

1 21,500,000 ordinary shares with a par value of 0.1p per share were issued at 10p per ordinary share by way of a placing to UK investors. Gross proceeds from the issue amounted to £2,150,000.

2 1,690,000 options and warrants were exercised between 2 February and 1 March 2010 at an exercise price of 10p per ordinary share.

3 16,763,650 ordinary shares with a par value of 0.1p per share were issued at 17.72p per ordinary share by way of a placing to Linc Energy and a further 5,702,703 ordinary shares with a par value of 0.1p per share were issued at 18.5p per ordinary share by way of a placing to a group of investors.

4 9,999,555 ordinary shares with a par value of 0.1p per share were issued at 40.00p per ordinary share by way of a placing to Linc Energy and to a group of investors.

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### 16. Issued share capital continued

The total authorised number of Ordinary shares is 700,000,000 shares (2010: 700,000,000 shares) with a par value of 0.1p per share (2010: 0.1p per share). All issued shares are fully paid.

The Company considers its capital and reserves attributable to equity Shareholders to be the Company's capital. In managing its capital, the Company's primary long-term objective is to provide a return for its equity Shareholders through capital growth. Going forward the Company will seek to maintain a gearing ratio that balances risks and returns at an acceptable level and also to maintain a sufficient funding base to enable the Company to meet its working capital needs. The Company's activities are at a pre-revenue stage and management considers that no useful target debt to equity gearing ratio can be identified at this time.

Details of the Company's capital are disclosed in the Company statement of changes in equity.

There have been no other significant changes to the Company's management objectives, policies and processes in the year nor has there been any change in what the Company considers to be capital.

### 17a. Share options

	Number of options	Exercise price	Weighted average remaining contractual life
At 31 October 2009	10,144,990	3.13–23p	
Options granted in the year	5,100,000	17.5–24p	
Options exercised in the year	(840,000)	10p	
Options lapsed in the year	(3,204,990)	3.13–23p	
At 31 October 2010	11,200,000	3.13–24p	6.62 yrs
Options lapsed in the year	(370,000)	17.5–24p	
At 31 October 2011	10,830,000	3.13–24p	5.69 yrs

### 17b. Warrants

	Number of warrants	Exercise price	Weighted average remaining contractual life
At 31 October 2009	8,789,980	3.13–22p	
Warrants granted in the year	7,206,000	24–30p	
Warrants exercised in the year	(850,000)	10p	
Warrants lapsed in the year	(3,189,980)	10–22.3p	
At 31 October 2010	11,956,000	3.13–30p	8.87 yrs
At 31 October 2011	11,956,000	3.13–30p	7.87 yrs

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Notes forming part of the Financial Statements continued

## 17c. Equity-settled share-based payments charge

## Share options

Option price (p)	Average grant date share price (p)	Average expected volatility (p.a.)	Average risk-free interest rate (p.a.)	Average dividend yield (p.a.)	Average implied option life (years)	Average fair value per option (p)	Amount expended in the 2011 accounts £
10	9	46%	4.4%	0%	3.5	2.5	–
22	20	46%	4.4%	0%	3.5	6	–
23	21	46%	4.4%	0%	3.5	6	–
23	14	46%	4.4%	0%	3.5	2	–
3.13	3.13	113.8%	4.4%	0%	3.0	2	23,443
17.5	18.75	188%	4.4%	0%	3.5	14.07	99,474
24	23.75	188%	4.4%	0%	3.5	17.80	26,377
20.80	20	188%	4.4%	0%	3.0	15	155,641
Adjustment for changes in assumptions – vesting							(24,433)
Adjustments – prior year							–
Adjustments for expected leavers on current options – 10%							(26,461)
Total charge for the year (2010: £50,267)							254,041

## Warrants

Warrant price (p)	Average grant date share price (p)	Average expected volatility (p.a.)	Average risk-free interest rate (p.a.)	Average dividend yield (p.a.)	Average implied option life (years)	Average fair value per option (p)	Amount expended in the 2011 accounts £
10	20	46%	4.4%	0%	3.5	10	–
22	20	46%	4.4%	0%	3.5	6	–
3.13	3.13	113.8%	4.4%	0%	3.0	2	–
24	23.75	188%	4.4%	0%	3.5	17.8	421,315
30	23.75	188%	4.4%	0%	3.5	17.64	5,874
Adjustment for performance conditions (non-market)							–
Adjustment for changes in assumptions – vesting							9,242
Adjustments for expected leavers on current warrants – 0%							–
Total charge for the year (2010: £477,439)							436,430
Total equity-settled share-based payment charge (2010: £527,705)							690,472

Expected volatility has been based on the historical volatility of share price returns over one year to the date of grant of the options and warrants. Vesting requirements are one year and three years for the exercise of warrants and options respectively.

The fair value of services received in return for share options and other share-based incentives granted is measured by reference to the fair value of share options and incentives granted. This estimate is based on a Black–Scholes model, adjusted for non-vesting market-related conditions, which is considered most appropriate considering the effects of the vesting conditions, expected exercise period and the dividend policy of the Company.

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### 18. Trade and other payables

	2011 £	2010 £
Trade payables	322,241	139,743
Deferred income	96,242	123,740
Other payables	36,075	35,064
Accruals	71,550	77,937
	<b>526,109</b>	376,484

### 19. Operating lease commitments

	2011 £	2010 £
Non-cancellable operating leases are as follows:		
Within one year	89,081	75,253
Between one and five years	90,672	120,247
Greater than five years	—	—
	<b>179,753</b>	195,500

The lease commitments relate to accommodation and three vehicles.

### 20. Financial instruments

In common with other businesses, the Company is exposed to risks that arise from its use of financial instruments. This note describes the Company's objectives, policies and processes for managing those risks and the methods used to measure them. Further quantitative information in respect of these risks is presented throughout these financial statements. The significant accounting policies regarding financial instruments are disclosed in note 2 and the significant accounting estimates and judgements are set out in note 3.

#### Principal financial instruments

The principal financial instruments used by the Company, from which financial instrument risk arises, are as follows:

	2011 £	2010 £
Trade and other receivables	734,684	569,924
Cash and cash equivalents	5,968,429	5,345,716
Trade and other payables	526,109	376,484

#### General objectives, policies and processes

The Board has overall responsibility for the determination of the Company's risk management objectives and policies and, while retaining ultimate responsibility for them, it has delegated part of the authority for designing and operating processes that ensure the effective implementation of the objectives and policies to the Company's finance team. The Board receives reports from financial team through which it reviews the effectiveness of the processes put in place and the appropriateness of the objectives and policies it sets.

The overall objective of the Board is to set policies that seek to reduce ongoing risk as far as possible without unduly affecting the Company's competitiveness and flexibility. Further details regarding these policies are set out overleaf.

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**Notes forming part of the Financial Statements** continued**20. Financial instruments** continued**Credit risk**

Credit risk arises principally from the Company's trade and other receivables and cash and cash equivalents. It is the risk that the counterparty fails to discharge its obligation in respect of the instrument. The maximum exposure to credit risk equals the carrying value of these items in the financial statements as shown below:

	2011 £	2010 £
Trade and other receivables	734,684	569,924
Cash and cash equivalents	5,968,429	5,345,716

The Company's principal trade and other receivables arose from: a) work in progress on the contract with AkzoNobel for which the Company has already received payment (held as a payment in advance pending completion of the work), b) a loan to W2T; and c) an R&D tax credit. The recoverability of the W2T amount shown is expected without material adjustment during the first half of 2011/12. Credit risk with cash and cash equivalents is reduced by placing funds with banks with acceptable credit ratings and government support where applicable.

**Liquidity risk**

Liquidity risk arises from the Company's management of working capital and the amount of funding required for the development programme. It is the risk that the Company will encounter difficulty in meeting its financial obligations as they fall due. The Company's policy is to ensure that it will always have sufficient cash to allow it to meet its liabilities when they become due. The Company raised £3.95 million net of costs in July 2011 to provide additional financial resources.

The principal liabilities of the Company are trade and other payables in respect of the ongoing product development programme. Trade and other payables are all payable within two months with the exception of the payment in advance noted above. The Board receives cash flow projections on a regular basis as well as information on cash balances.

**Interest rate risk**

The Company is exposed to interest rate risk in respect of surplus funds held on deposit.

**Fair value of financial liabilities**

	2011 £	2010 £
Trade and other payables	526,109	376,484

There is no difference between the fair value and book value of trade and other payables.

**Currency risk**

The Company does not currently enter into forward exchange contracts or otherwise hedge its potential foreign exchange exposure. The Board considers that this exposure is not material pending commercialisation of the Company's products. The Board monitors and reviews its policies in respect of currency risk on a regular basis. At 31 October 2011 the Company held no monetary assets or liabilities in currencies other than the functional currency of the operating units involved (2010: nil).

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### 21. Capital commitments

The Company had capital commitments of £30,014 for testing equipment outstanding at 31 October 2011 (2010: £158,115).

### 22. Board changes and post-balance sheet events

Ian Williamson was appointed as Chief Executive Officer on 7 November 2011.

### 23. Ultimate controlling party

There is no ultimate controlling party.

### 24. Related party transactions

During the year ended 31 October 2011:

£69,618 (plus VAT) was invoiced by Hudson Raine Ltd (a company registered in England & Wales) for the services of David Marson as a Director and Company Secretary of AFC Energy plc (2010: £52,006). Mr Marson is also a Director and Shareholder of Hudson Raine Ltd. At 31 October 2011, the sum owing to Hudson Raine Ltd was nil (2010: nil).

£31,417 (plus VAT) was invoiced by Cornerstone Capital Ltd (a company registered in England & Wales) for the services of Simon Hunt as a Director of AFC Energy plc (2010: £13,083). Mr Hunt is also a Director and Shareholder of Cornerstone Capital Ltd. At 31 October 2010, the sum owing to Cornerstone Capital Ltd was nil (2010: nil).

£139,000 (plus VAT) was invoiced by Cranwood Management Ltd (a company registered in England & Wales) for consultancy services. The company is owned by Adam White. Members of Mr White's family are nominated beneficiaries of the Age of Reason Foundation, which is a major Shareholder in the Company. At 31 October 2011, the sum owing to Cranwood Ltd was nil (2010: nil).

£15,319 (plus VAT) was invoiced by Richards and Appleby Ltd (a company registered in England & Wales) for the services of Mitchell Field as a Director of AFC Energy plc (2010: nil). Mr Field is also a Director and Shareholder of Richards and Appleby Ltd. At 31 October 2011, the sum owing to Richards and Appleby Ltd was nil (2010: nil).

£1,667 was invoiced by Linc Energy Ltd (a company registered in Australia) for the services of David Smith as a Director of AFC Energy plc (2010: nil). Linc Energy Ltd is a major shareholder in the Company. At 31 October 2011 the amount owing to Linc Energy Ltd was £1,667 (2010: nil).

£103,453 (plus VAT) was invoiced by Parilis Ltd (a company registered in England & Wales) for consultancy services and latterly, for the services of Ed Wilson as a Director of AFC Energy plc (2010: nil). Mr Wilson is also a Director and Shareholder of Parilis Ltd. At 31 October 2011, the sum owing to Parilis was nil (2010: nil).

£1,505 loan interest was receivable from Waste2Tricity (a company registered in England & Wales). The sum owing to Waste2Tricity at 31 October 2011 was nil (2010: nil). During the year ended 31 October 2009, AFC Energy plc provided Waste2Tricity with an interest bearing loan of £150,000 under the terms of an agreement to supply AFC fuel cells to Waste2Tricity for integration into its system for the conversion of municipal solid waste. The Company subsequently converted £2,500 of the loan to equity for a 25% share of Waste2Tricity (see note 9). The Shareholders in Waste2Tricity include Adam White, Eturab Corporation and Ian Balchin. Members of the White family are nominated beneficiaries of the Age of Reason Foundation. Both the Age of Reason Foundation and Eturab Corporation are substantial Shareholders in AFC Energy. Ian Balchin's shareholding in Waste2Tricity was granted in lieu of payment for work done for Waste2Tricity before he was employed by AFC Energy.

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## Shareholder Notes



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