AFC Energy plc

Report & Accounts

for the year ended 31 October 2010

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## Report & Accounts for the year ended 31 October 2010

# 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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## About AFC Energy plc

## Operational and financial highlights

- Testing of commercial metal-based electrodes
- First revenue
- £6m fundraising
- Centrica 250kW reservation of capacity
- Pilot manufacturing
- · Linc Energy exercise of option following successful trial

## Since the period end

- Constructing first Beta systems
- Strengthened management team to support anticipated growth

AFC Energy has seized the opportunity to apply modern engineering materials and manufacturing methodologies to an already proven fuel cell technology. We have re-engineered the alkaline fuel cell to radically reduce its cost and provide the prospect, at maturity, of a fuel cell that can compete with conventional turbines on economics. The Company is opening up a significant lead in this field through its intellectual property and commercial relationships.

lan Balchin, Deputy Chairman and Chief Strategic Officer

AFC is a much stronger company than a year ago. Progress has been made technically, commercially and financially. Experienced management has been recruited. We have added world-class partners and our financial position is sounder. This provides a strong platform from which to drive forward our projects and begin to deliver on our potential. AFC invoiced its first commercial revenue during the year. The Board expects that these revenues will increase through 2011 and 2012.

Tim Yeo, Chairman

#### Chairman's Statement

## Operating Framework

The environmental challenges of the 21st century are critical. If the effects of climate change are to be mitigated, carbon emissions from our energy sources must be reduced and commercially viable low or zero carbon technologies are urgently needed. By focusing on low cost, low carbon energy generation, we can drive consumption of energy towards more sustainable and secure sources.

AFC Energy is helping to address this challenge by developing a very low carbon form of electricity and is well placed to contribute to decarbonising our energy sources

In the short-term, switching to a low carbon economy may impose a small extra cost on consumers and businesses. Before long, I believe, this will turn out to be an investment whose eventual financial rewards are large. There will be first mover advantage for companies who invest in low carbon business models.

The scale of the challenge is enormous. No country has ever yet managed to reduce its greenhouse gas emissions consistently while its economy has been growing. But achieving exactly that is what the whole world must start doing. AFC Energy is positioning itself to be part of the solution – a fundamental building block of the hydrogen economy.

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#### Overview

The past year has been another in which the Company has taken significant strides towards its goal of commercialising its low cost alkaline fuel cell system

A vital part of this has been the progressive strengthening of the technical team over the last eighteen months and the development programme (which is described in detail in the Operating Review) has made exciting and rapid headway. This has again been recognised by further positive independent reviews carried out in April and November 2010 by the Centre for Process Innovation.

As I write, the Company is constructing its first Beta Fuel Cell System and is planning the necessary steps for moving towards volume production of this modular system. Managing the interface between development and manufacturing is key to achieving this and I am pleased to report the appointment of Ed Wilson as Director of Manufacturing – and after the yearend as Managing Director – in this regard. He is the former Chief Executive of CEL International and has a wealth of operational, commercial and project management experience, including manufacturing fuel cell systems and components.

This was also a year in which AFC welcomed on board a significant new shareholder. Further to the agreement made in December 2009 between the Company, Linc Energy and 89 Coal and the successful deployment and operation of a fuel cell system in Australia, Linc Energy exercised its option to extend licence rights, resulting in the purchase of 16.76 million AFC shares. As a result, Linc Energy now holds approximately 10% of the enlarged share capital of the Company. We have been delighted by the support received from Peter Bond and his colleagues at Linc Energy.

The exercise of this option resulted in a £3 million inflow into the company. At the same time, the Company raised a further £1 million by a placing of shares with a group of private investors who wished to make a strategic investment. The arrival of these new shareholders has led to further business opportunities for AFC. These transactions, together with the £2 million raised in December 2009, significantly strengthened the cash position of the Company. At the end of October 2010, the net cash position was £5.35 million. With the Company continuing to keep tight control over its operational costs, this cash provides a strong platform from which to achieve our goals over the next two years.

The deployment and utilisation of our fuel cell systems in conjunction with Linc's Underground Coal Gasification (UCG) expertise could provide a significant change in coal usage worldwide

## Partnerships and projects

The Company's first major partner was AkzoNobel and the project to utilise AFC's fuel cells to generate electricity from surplus hydrogen at AkzoNobel's chlor-alkali sites has made significant progress. Trials of the Alpha system will be followed by trials of the Beta system, which are planned for later this year.

It has become clear as the Company, its technology and economic environments continue to develop, that there are additional opportunities for deployment beyond the Chlorine industry. We have decided that, in conjunction with strategic partners, we should progress these opportunities in parallel in order to maximise their commercial potential, once our fuel cell systems have completed development.

The partnership with Linc Energy and B9 Coal, though still at an early stage, is potentially important. The deployment and utilisation of our fuel cell systems in conjunction with Linc's Underground Coal Gasification (UCG) expertise could provide a significant change in coal usage worldwide. The Company's Alpha fuel cell system was successfully demonstrated in Australia during the year and we expect Linc to be ready to deploy Beta fuel cell systems once development is complete. Our relationship with Linc Energy could eventually lead to many hundreds of megawatts of fuel cell systems being deployed to produce clean energy from coal

#### Chairman's Statement continued

Elsewhere, we are continuing to work on the SuperGreen power station project with our partners Air Products and WSP Group, we are part of a consortium (including Linc and B9 Coal) for a proposed Carbon Capture and Storage (CCS) project at Lynemouth, we are also partnered with Powerfuel Power Ltd through B9 Coal in a fuel cell power station project at Hatfield Colliery with the potential for 300MW of fuel cell systems, though progress with this project depends on finding a buyer for Powerfuel

Through our partnership with Waste2Tricity Limited, we hope to have the opportunity to deploy fuel cell systems at Air Products' planned energy from waste plant in Teesside

We are working with Centrica plc, who have reserved 250kW of future capacity for use in a flagship project

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## Management and Board

During the year, we have further strengthened the Company's management team

There have been a number of changes to the Board during the year and since the year end. Ian Balchin, who joined AFC in 2008 and was appointed Chief Executive in 2009, is stepping up to be Deputy Chairman with particular responsibility for strategy and business development. Ian has led the company with skill through an important phase of its development and I am delighted that his talents will continue to be deployed on our behalf.

As already mentioned, Ed Wilson, who has been working with us since the middle of 2010, was appointed initially as Director of Manufacturing and then, in February 2011, as Managing Director Ed's experience, particularly in manufacturing and engineering, will be invaluable as the Company continues the commercialisation of its technology

I am grateful to the Board and the whole management team for their hard work and support throughout the year

## Summary and Outlook

AFC is a much stronger company than a year ago Progress has been made technically, commercially and financially Experienced management has been recruited. We have added world-class partners and our financial position is sounder. This provides a strong platform from which to drive forward our projects and begin to deliver on our potential. AFC invoiced its first commercial revenue during the year. The Board expects that these revenues will increase through 2011 and 2012.

None of this year's achievements could have been made without a dedicated team and, once again, I would like to thank them for their outstanding efforts. I would also like to thank our shareholders and commercial partners for their continuing support and we shall continue to work hard to ensure their expectations are met.

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Tım Yeo

Chairman

8 March 2011

AFC invoiced its first commercial revenue during the year. The Board expects that these revenues will increase through 2011 and 2012

## **Operating and Financial Review**

We believe that the successful commercialisation of AFC Energy's fuel cell system will be as important to a hydrogen economy as the internal combustion engine was to the petrochemical industry

AFC Energy has seized the opportunity to apply modern engineering materials and manufacturing methodologies to an already proven fuel cell technology. We have re-engineered the alkaline fuel cell to radically reduce its cost and provide the prospect, at maturity, of a fuel cell that can compete with conventional turbines on economics. The Company is opening up a significant lead in this field through its intellectual property and commercial relationships.

## **Technical Progress**

The Company has taken further significant strides towards commercialisation, both in terms of technical development and the recruitment of key technical personnel

From a technical perspective, there have been five key developments

Firstly, the Company has moved to using metal-based electrodes. This development is projected to deliver significantly lower lifetime costs with a corresponding opportunity to optimise operating efficiency in areas such as power density and cell longevity. The volumetric power density of a cartridge has been increased by a factor of three with potential to improve further on this. Furthermore, a significant number of the components used to fabricate the cell are designed to be reused when cartridges are replaced – lowering lifetime operational costs and reducing the environmental footprint of the fuel cell system. Our development work has recognised the need for the materials and the cartridge design to facilitate volume manufacture. The Company has installed production based equipment and has the ability to support cell manufacture on a scale that supports our initial commercial activities.

Secondly, the Company has sourced mature mass manufacturing technologies used in sectors such as telecommunications, food and automotive for depositing catalyst coatings on electrodes. The use of these industrially accepted processes will increase cell performance and reliability in a commercially viable manner. Production rates of fuel cells are planned to significantly increase over the next 18 months to support commercial activities whilst we validate the manufacturing technology.

Thirdly, considerable progress has been made with modifications that simplify the fluid flow through the fuel cells and cartridges. The resulting cartridge design has been optimised for electrical current collection, heat management and water recovery. The Company has applied for patents relating to this breakthrough, which virtually eliminates all leakage currents – which are a source of much concern in other multi-cell cartridge designs.

Fourthly, significant progress has been made in the area of system control. Based on an operating design approved by AkzoNobel, system operation is now completely automated.

Fifthly, as the technology moves towards commercialisation the Company continues to develop quality processes befitting a company that is making a transitional change from that of a development focused to a production focused organisation. These processes will help enable a seamless, controlled transition of future developments from the laboratory into production.

The Company has moved to using metal-based electrodes.
This development is projected to deliver significantly lower lifetime costs

## From Alpha to Beta

The Company's Alpha (small scale) system was installed and tested at both AkzoNobel's Bitterfeld site and Linc Energy's Chinchilla site during the year. The key to future success though is the Beta (modular large scale) system and this has progressively been developed in parallel with the Alpha system throughout 2010. The development of the metal based electrodes has been integral to this – facilitating a radically simplified and operationally more efficient overall system design.

In summary, the benefits that the Beta system is designed to deliver include a combination of technical and commercial fundamentals with reduced part costs, optimised electrical output, high efficiencies in the conversion of hydrogen and the reuse of components. From the initial commercial deployment of the Beta system onward, we expect a sustained and progressive improvement in performance as the technology matures.

In support of these technical achievements, we have procured the use of external specialists to support the design of the wider system and interfaces which are key to the modular build and hence the ability to supply ever larger electrical outputs whilst retaining the inherent flexibility of a modular system

Since the end of the reporting period, the Company has begun the construction of the first Beta systems

## Financial highlights

During the year, the Company raised a total of £6 million after expenses, through the placing of 21.5 million shares in December 2009 and a further 22.47 million shares in October 2010. In addition, it received £169,000 in February/March 2009 through the exercise of options and warrants issued in February 2007 as part of a pre-IPO fundraising.

We were pleased to be able to recognise our first revenue, for the delivery and testing of a system for Linc Energy

We continued to maintain tight control over operational costs, whilst at the same time strengthening our technical team and accelerating the pace of technical development. Consequently, the cash outflow from operating activities was only £306,000 higher than the previous year, despite the delivery of the test system to Linc Energy and the onsite testing undertaken at both AkzoNobel and Linc.

This year, we invested substantially in new pilot manufacturing facilities housed in additional accommodation adjacent to our existing laboratories, as well as in improved materials characterisation and electrode development capabilities. Total investment in plant and equipment was £631,000

In order to incentivise and retain employees and directors during the key commercialisation phase in the development of the Company, a total of 12,306,000 options and warrants were issued during the year A total of 8,084,970 options and warrants were exercised, lapsed or cancelled, leaving a total of 11,200,000 options and 11,956,000 warrants outstanding at 31 October 2010. The charge of £527,705 to the income statement under IFRS2 in the year relating to these options and warrants is not a cash cost and accounts for two thirds of the increase in the reported loss compared with the previous year.

Since the end of the reporting period, the Company has begun the construction of the first Beta systems.

## Operating and Financial Review continued

## **Intellectual Property**

We regularly review the intellectual property generated by our technical programme and apply for patent protection for significant inventions

## 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

Overall, AFC Energy finds itself with no shortage of potential markets and partners ready to work with us in commercialising the Beta system as it begins to become available

Our initial target market is the chlorine industry which generates surplus hydrogen. We have begun testing our commercial electrode architecture with this hydrogen and expect to be installing our first Beta system in a chlorine plant this year.

Whilst we anticipate selling the first few megawatts of power generating capacity, our intention is to move to an Energy Supply Company (ESCo) business model as soon as practically possible Under the ESCo model, 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 we will be able to retrofit them to installed fuel cell systems

The models show that payback can 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.

In summary, we believe that AFC Energy has the makings of a highly attractive commercial product

To access other markets, the Company will continue working with and through third parties. In this way, we intend to harness the expertise and resources available from partner companies to accelerate the timescales for reaching new markets whilst improving the likelihood of success and minimising the distraction this causes the Company

The second market opportunity that we have developed is with Waste2Tricity Limited, a company focused on the efficient conversion of municipal solid waste into electricity. During the year, Waste2Tricity announced its involvement and support for Air Products' plan for a renewable energy plant in the Tees Valley, United Kingdom. By diverting non-recyclable waste from landfill, the proposed plant will offer an environmentally responsible solution for the production of renewable energy in the North East. The plant is being considered as a potential demonstration opportunity for AFC Energy's alkaline fuel cell technology alongside conventional generating technologies. Air Products believe this project has the potential to aid the region's moves towards developing a hydrogen economy.

We believe that AFC Energy has the makings of a highly attractive commercial product 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. Whilst this has taken slightly longer than originally envisaged, it is currently in discussions regarding some major commercial opportunities which have potential to generate revenue for the Company.

The third market opportunity is Underground Coal Gasification (UCG). We have also entered into a contract with B9 Coal Limited and Linc Energy (ASX LNC). Linc Energy is a leader in the development of converting underground coal into synthetic gas for processing into diesel and/or electrical power.

The carbon dioxide produced from power generation is relatively easy to capture and has the prospect of being pumped back underground to be stored in the caverns created when the coal is burnt out – offering the tantalising prospect of clean electricity from coal. Linc Energy plans to install hundreds of megawatts of generating capacity over the next few years.

Elsewhere, as commercial momentum builds, we have begun to take orders reserving future production capacity. The first order in this regard was placed during the reporting period by Centrica plc for 250kW of capacity for use with a flagship project. We are also in discussions with many other global organisations about developing future markets.

In the UK, the Company is expecting that the introductions of legislation and regulation, such as the CRC Energy Efficiency Scheme (CRC), to reduce carbon emissions has the potential to create a favourable driver for the introduction of clean energy generating technologies such as an alkaline fuel cell system. The CRC was introduced in April 2010 to address barriers preventing large public and private sector organisations from adopting cost effective energy efficiency opportunities. The barriers being addressed specifically include uncertain reputational benefits of demonstrating leadership, insufficient financial drivers, split incentives between landlords and tenant and organisational inertia amongst large electricity users. We are working with partners to offer fuel cell systems in conjunction with on-site hydrogen generation to produce zero carbon electricity. The infrastructure to achieve this can easily be converted to operate on biogas and will be carbon capture ready, offering the prospect of negative carbon electricity.

We look forward to reporting our continued progress towards commercialisation and thank all those working for and with the Company for their support

#### Ian Balchin

Deputy Chairman & Chief Strategic Officer

8 March 2011

We are working with partners to offer fuel cell systems in conjunction with on-site hydrogen generation to produce zero carbon electricity

## **Directors' Report**

The Directors present their report together with the audited financial statements for the year ended 31 October 2010 The comparative period was from 1 November 2008 to 31 October 2009

## Principal activity and review of business developments

The principal activity of AFC Energy plc (or 'the Company') was 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 17

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

	2010	2009
	£	£
Cash and cash equivalents at the year end	5,345,716	1,868,601

#### Directors and their interests

The Directors who served during the year were

Tim Yeo

David Marson

Ian Balchin

Chief Executive Officer (appointed 6 November 2009)

Non-Executive Chairman

Dr Gene Lewis **Technical Director** Finance Director

Terry Walsh Commercial Director (resigned 10 March 2010)

Non-Executive (resigned 31 May 2010) Dr Michael Mangan

Mitchell Field Non-Executive

Simon Hunt Non-Executive (appointed 13 April 2010)

A Director appointed during or after the year must stand for re-appointment at the first Annual General Meeting after such appointment. Accordingly, Simon Hunt and Ed Wilson offer themselves for re-appointment. In addition, Mitchell Field is required to retire by rotation in accordance with the Company's Articles of Association, and being eligible, offers himself for re-appointment

On 31 October 2010 the Directors' interests in the equity share capital of the Company were

	Number of Ordinary shares of 0 1 p	Number of Ordinary shares of 0 1p
	2010	2009
Tım Yeo	377,272	227,272
lan Balchin	50,000	_
David Marson	50,000	-
Dr Gene Lewis	10,000	-
Mitchell Field	2,117,027	2,097,845
Simon Hunt		

On 31 October 2010 the Directors' interests over share capital of the Company were

	1 Nov 2009	Options/ Warrants granted in year	Options/ warrants lapsed in year	31 Oct 2010	Exercise price	Date from which exercisable	Expiry date	Туре
Tım Yeo	1,117,490	-	(1,117490)		£0 223	23/02/2008	22/02/2010	Warrant
	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

## **Directors' Report** continued

#### Directors' remuneration

	Salary	Share-based payment expense	Other compensation	Total 2010	Total 2009
Name	£	£	£	£	£
Tım Yeo	45,000	66,927	_	111,927	49,147
Ian Balchin	122,300	144,360	2,387	269,047	_
David Marson	_	37,290	52,006	89,296	16,833
(see note 24)					
Dr Gene Lewis	95,833	120,945	1,846	218,624	26,902
Terry Walsh	37,462	_	-	37,462	80,666
Dr Michael Mangan	11,667	1,782	_	13,449	20,968
Mitchell Field	-	46,250	-	46,250	968
Simon Hunt	_	29,645	13,083	42,728	_
(see note 24)					

#### 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 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 1 January 2011, subject to two months' notice by either party (see also note 24)

Dr Gene Lewis's service contract with the Company commenced on 1 November 2008 for an indefinite term, subject to six months' notice by either party

Mitchell Field was appointed as a Non-Executive Director under the terms of a Non-Executive letter dated 10 April 2008 for an indefinite term, subject to a minimum of six months' notice

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

Ed Wilson's services are provided under an agreement between the Company and Parilis Ltd for an indefinite term, subject to a minimum of three months' notice

## **Board changes**

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

## Capital structure

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

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

On 7 March 2011, the Company was aware of the following holdings of three per cent 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	13 04%
Linc Energy	16,763,650	9 67%
TD Waterhouse Nominees (Europe) Ltd	12,196,201	7 04%
Barclayshare Nominees Ltd	9,507,649	5 49%
Eturab Trade Corporation	8,000,000	4 62%
Harry Epstein	7,000,000	4 04%
LR Nominees Ltd	6,256,585	3 61%
HSDL Nominees Ltd	6,226,128	3 59%

#### Political and charitable donations

Charitable donations in the year amounted to £ nil (2009 £ 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 comprises Mitchell Field, 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. The Committee will meet the external Auditors, without executive Board members being present, to review accounting and internal control matters.

The Committee's principal objectives are to review annual and interim financial statements, to review accounting policies, to review with management and the Company's external Auditors the effectiveness of internal controls, to oversee the publication of reserve and resource statements to ensure compliance with best practice under the new AIM rules, and to review with the Company's external Auditors the scope and results of their audit. Mitchell Field chairs the Audit Committee

#### Remuneration Committee

The Remuneration Committee's members are Simon Hunt, Tim Yeo and Mitchell Field who review the performance of the Executive Directors and set 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. Simon Hunt chairs the Remuneration Committee

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

## **Directors' Report** continued

## 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 2010 represented 40 days (2009) 57 days) of annual purchases.

## Liability insurance for Company officers

The Company has in place a Directors' and Officers' insurance policy

#### 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 2010, relevant expenditure totalled £1,053,371 (2009. £932,085)

#### Going concern

The Company raised £2,000,000, after expenses in December 2009 and a further £4,000,000 after expense in October 2010. 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.

#### **Auditors**

A resolution to re-appoint the Auditors 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 Auditors of the Company

This report was approved by the Board of Directors on 8 March 2011

David Marson

Company Secretary

## 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 proper 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) 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 Auditors are 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 Auditors are aware of that information

# Independent Auditors' Report to the shareholders of AFC Energy plc

We have audited the financial statements of AFC Energy plc for the year ended 31 October 2010 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, including the opinions, has been prepared for and only for the Company's members as a body in accordance with Sections 495 to 497 of the Companies Act 2006 and for no other purpose. We do not, in giving this opinion, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing

## Respective responsibilities of Directors and auditors

As explained more fully in the Directors' Responsibilities Statement set out on page 15, 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 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.

## 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 2010 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

 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

#### Mark Tenzer

(Senior statutory auditor) Date 8 March 2011

for and on behalf of Jeffreys Henry LLP, Statutory Auditor Chartered Accountants & Registered Auditors Finsgate, 5-7 Cranwood Street, London, EC1V 9EE

# Statement of comprehensive income for the year ended 31 October 2010

		Year ended 31 October	Year ended 31 October
		2010	2009
	Note	£	£
Revenue		180,607	_
Direct expenses			
Gross profit/(loss)		180,607	-
Other income		3,996	4,664
Administrative expenses		(3,236,371)	(2,345,651)
Analysed as			
Administrative expenses		(2,708,666)	(2,280,731)
Equity-settled share-based payments	17c	(527,705)	(64,920)
Operating loss	5	(3,051,768)	(2,340,987)
Financial income	8	30,461	67,890
Share of loss of Associate	9a	(17,781)	(26,651)
Loss before tax		(3,039,088)	(2,299,748)
Taxation	10	250,358	219,220
Loss for the financial year and total comprehensive			<u></u>
loss attributable to owners of the Company		(2,788,730)	(2,080,528)
Basic loss per share	11	(1 88)p	(1 63)p
Diluted loss per share	11	(1 88)p	(1 63)p

All amounts relate to continuing operations

The notes on pages 21 to 35 form part of these financial statements

# Statement of financial position for the year ended 31 October 2010

		31 October 2010	31 October 2009
	Note	2010 £	2009 £
Assets			
Non-current assets			
Intangible assets	12	318,851	308,525
Property and equipment	13	632,657	270,069
Trade and other receivables	9b	-	124,849
		951,508	703,443
Current assets		<del>,</del>	-
Work in progress		123,740	123,740
Trade and other receivables	9b & 14	527,992	307,644
Cash and cash equivalents	15	5,345,716	1,868,601
		5,997,448	2,299,985
Total assets		6,948,956	3,003,428
Capital and reserves attributable to owners of the Company			
Share capital	16	173,339	127,683
Share premium		15,044,217	8,940,379
Other reserve		1,130,013	602,308
Retained deficit		(9,775,097)	(6,986,367)
Total equity attributable to shareholders		6,572,472	2,684,003
Current liabilities			
Trade and other payables	18	376,484	319,425
		376,484	319,425
Total equity and liabilities		6,948,956	3,003,428

The notes on pages 21 to 35 form part of these financial statements

These financial statements were approved and authorised for issue by the Board on 8 March 2011

Tim Yeo

David Marson

Chairman

Finance Director

AFC Energy plc

Registered number 05668788

# Statement of Changes in Equity for the year ended 31 October 2010

	Share Capital £	Share Premium £	Other Reserve £	Retained Loss £	Total Equity £
Balance at 1 November 2008	127,683	8,940,379	537,388	(4,905,839)	4,699,611
Loss after tax for the year	-	-	-	(2,080,528)	(2,080,528)
Total recognised in income and expense for the year	_	_	_	(2,080,528)	(2,080,528)
Equity-settled share-based payments			64,920		64,920
Balance at 31 October 2009	127,683	8,940,379	602,308	(6,986,367)	2,684,003
Balance at 1 November 2009	127,683	8,940,379	602,308	(6,986,367)	2,684,003
Loss after tax for the year	_	-	-	(2,788,730)	(2,788,730)
Total recognised in income and expense for the year		-		(2,788,730)	(2,788,730)
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	173,339	15,044,217	1,130,013	(9,775,097)	6,572,472

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

# Cash Flow Statement for the year ended 31 October 2010

		31 October 2010	
	Note	2010 £	2009 £
Cash flows from operating activities		•	
Loss before tax for the year		(3,039,088)	(2,299,748)
Adjustments for			
Depreciation and amortisation		284,173	345,005
Loss on disposal of plant and equipment		2,765	
Equity-settled share-based payment expenses	17c	527,705	64,920
Finance income		(30,461)	(67,890)
Share of loss of associate		17,781	26,651
Cash flows from operating activities before changes in working capital and provisions		(2,237,125)	(1,931,062)
Corporation tax received		220,643	463,721
Decrease/(increase) in trade and other receivables		(83,565)	38,411
Decrease/(increase) in trade and other payables		57,059	(119,273)
Cash absorbed by operating activities		(2,042,988)	(1,548,203)
Cash flows from investing activities			
Purchase of plant and equipment	13	(630,543)	(105,192)
Acquisitions of patents	12	(29,308)	(18,820)
Disposal of plant and equipment		_	12,722
Loans to Associates	9a	_	(150,000)
Interest received	8	30,461	67,890
Net cash absorbed by investing activities		(629,390)	(193,400)
Cash flows from financing activities			
Proceeds from the issue of share capital		6,344,519	_
Costs of issue of share capital		(195,025)	_
Net cash from financing activities		6,149,494	-
Net increase/(decrease) in cash and cash equivalents		3,477,115	(1,741,603)
Cash and cash equivalents at start of year		1,868,601	3,610,204
Cash and cash equivalents at 31 October	15	5,345,716	1,868,601

## 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

#### 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

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

The following new and revised IFRSs have also been adopted in these financial statements. The application of these new and revised IFRSs has not had any material impact on the amounts reported for the current and prior years but may affect the accounting for future transactions or arrangements.

- Amendments to IFRS 2 'Share-based Payment Group Cash-settled Share-based Payment Transactions' The
  amendments clarify the scope of IFRS 2, as well as the accounting for group cash-settled share-based payment
  transactions in the separate (or individual) financial statements of an entity receiving the goods or services when
  another group entity or shareholder has the obligation to settle the award
- Amendments to IFRS 5 'Non-current Assets Held for Sale and Discontinued Operations (as part of Improvements
  to IFRSs issued in 2008)' The amendments clarify that all the assets and liabilities of a subsidiary should be
  classified as held for sale when the Group is committed to a sale plan involving loss of control of that subsidiary,
  regardless of whether the Group will retain a non-controlling interest in the subsidiary after the sale
- IFRIC 17 'Distributions of Non-cash Assets to Owners' The Interpretation provides guidance on the appropriate accounting treatment when an entity distributes assets other than cash as dividends to its shareholders
- IFRIC 18 'Transfers of Assets from Customers' The Interpretation addresses the accounting by recipients for
  transfers of property, plant and equipment from 'customers' and concludes that when the item of property, plant
  and equipment transferred meets the definition of an asset from the perspective of the recipient, the recipient
  should recognise the asset at its fair value on the date of the transfer, with the credit being recognised as revenue
  in accordance with IAS 18 'Revenue'
- IFRS 3 (revised), 'Business combinations' and consequential amendments to IAS 27, 'Consolidated and separate financial statements', IAS 28, 'Investments in associates' and IAS 31, 'Interests in joint ventures', effective prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after 1 July 2009

The revised standard continues to apply the acquisition method to business combinations, with some significant changes. For example, all payments to purchase a business are to be recorded at fair value at the acquisition date, with contingent payments classified as debt subsequently re-measured through the statement of comprehensive income. There is a choice on an acquisition-by-acquisition basis to measure the minority interest in the acquiree either at fair value or at the minority interest's proportionate share of the acquiree's net assets. All acquisition-related costs should be expensed.

IAS 38 (amendment), 'Intangible assets' The amendment is part of the IASB's annual improvements project
published in April 2009 and the company will apply IAS 38 (amendment) from the date IFRS 3 (revised) is adopted
The amendment clarifies guidance in measuring the fair value of an intangible asset acquired in a business
combination and it permits the grouping of intangible assets as a single asset if each asset has a similar useful
economic life. The amendment will not result in a material impact on the Company's financial statement.

## Notes forming part of the Financial Statements continued

## 2. Basis of preparation and accounting policies continued

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 IAS32 '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 IFRS1 'Additional Exemptions for First-time Adopters' (effective for accounting periods beginning on or after 1 January 2010) This amendment has not yet been endorsed for use in the EU
- IFRIC19, 'Extinguishing Financial Liabilities with Equity Instruments' (effective for accounting periods beginning on or after 1 July 2010). This interpretation has not yet been endorsed for use in the EU.
- Amendment to IFRIC14, '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
- IFRS2 (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.
- IFRS7 (amended) 'Limited exemption from Comparative IFRS7 Disclosures for first time adopters' (effective for accounting periods beginning on or after 1 July 2010). This amendment has not yet been endorsed for use in the EU
- Revised IAS24 '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
- IFRS9 '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
- The IASB2009 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.

The Directors anticipate that the adoption of these standards and interpretations will not have a material impact on the Company's financial statements in the period of initial adoption

#### 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 balance sheet. 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.

#### 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 IAS21, 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

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

Patents20 years

## Notes forming part of the Financial Statements continued

## 2. Basis of preparation and accounting policies continued

#### I 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 recognised in the Income Statement pending delivery to the customer. The carrying value is fair value

#### n 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 lease rentals are charged to income in equal annual amounts over the lease term.

#### 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 the period over which they will be recovered

## 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 £48,788 during the year and subsequent to 31 October 2010. This has resulted in an impairment charge of £2,766 to the Statement of Comprehensive Income in the year to 31 October 2010.

#### Useful lives 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.

#### 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 IAS38 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 2010

#### 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 operating segment, the development of fuel cells, and in two principal geographic areas, the United Kingdom and Australia, but also conducted some system tests at AkzoNobel's site in Bitterfeld, Germany All revenue was derived from one customer in Australia. There were no assets or liabilities in Australia at the year end

# Notes forming part of the Financial Statements continued

# 5. Operating loss (2009: loss)

This has been stated after charging	Year ended 31 October 2010 £	Year ended 31 October 2009 £
Depreciation of property and equipment	267,956	326,858
Research and Development expenditure	1,053,371	932,085
Amortisation of intangible assets	18,982	18,147
Equity-settled share-based payment expense	527,705	64,920
Auditors' remuneration – audit	17,500	17,500
Auditors' remuneration - other services	4,050	7,330

# 6. Staff numbers and costs, including Directors

The average number of employees in the year were	Year ended 31 October 2010 Number	Year ended 31 October 2009 Number
Support, operations and technical	20	20
Administration	5	4
	25	24
The aggregate payroll costs for these persons were	£	£
Wages and salaries (including Directors' emoluments)	1,067,526	1,013,576
Social security	116,718	112,532
Equity-settled share-based payment expense	345,811	57,843
	1,530,055	1,183,951

## 7. Directors' remuneration

	Year ended 31 October 2010 £	Year ended 31 October 2009 £
Wages and salaries	312,262	189,250
Social security	31,800	15,904
Equity-settled share-based payment expense	447,199	28,385
Other compensation (see note 21 & 22)	69,322	82,553
	860,583	316,092
The emoluments of the Chairman were	111,927	49,147
The emoluments of the highest-paid Director were	269,047	80,666

The remuneration, details of share options and interests in the Company's shares of each Director is shown in the Directors' Report on pages 10 to 14

#### 8. Financial income

	Year ended 31 October 2010 £	Year ended 31 October 2009 £
Bank interest receivable	28,986	66,390
Loan interest receivable	1,475	1,500
Total interest receivable	30,461	67,890

#### 9a Investment in Associate

The Company acquired 25% of the share capital of Waste2Tricity Ltd (W2T) 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 balance of the loan is repayable in full by 1 September 2011 and accrues interest at 0.5% above base rate. The loan is shown in Current Assets - Trade and Other Receivables (2009. Non-current Assets - Trade and Other Receivables)

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

	Year ended 31 October 2010	Year ended 31 October 2009
Revenue	-	_
Profit/(loss)	(17,781)	(26,651)
Assets	1,771	7,236
Liabilities	30,876	18,685

#### 9b. Loan to Associate

	Year ended 31 October 2010 £	Year ended 31 October 2009 £
Loan to W2T at 1 Nov, including accrued interest	126,324	149,000
Share of W2T losses after write off of investment	(17,781)	(24,151)
Loan at 31 October	108,543	124,849

# Notes forming part of the Financial Statements continued

#### 10. Taxation

Recognised in the income statement	Year ended 31 October 2010 £	Year ended 31 October 2009 £
Research and development tax credit – current year	258,076	228,361
Research and development tax credit – prior year adjustment	(7,718)	(9,141)
Total tax credit	250,358	219,220
Reconciliation of effective tax rates		
Loss before tax	(3,039,088)	(2,299,748)
Tax using the domestic rate of corporation tax of 28% (2009 28%)	850,945	643,929
Effect of		
Expenses not deductible for tax purposes	156,239	26,037
Research and development allowance	(221,208)	(195,318)
Research and development tax credit	258,076	228,361
Depreciation in excess of capital allowances	9,410	58,536
Losses surrendered for research and development	516,152	399,631
Other adjustments	_	_
Unutilised losses carried forward	390,352	355,043
Total tax credit for the year	250,358	228,361

## 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 £2,788,730 (2009) loss of £2,080,528) and a weighted average number of shares in issue for the year

	Year ended 31 October 2010	Year ended 31 October 2009
Basic loss per share (pence)	(1 88)p	(1 63)p
Diluted loss per share (pence)	(1 88)p	(1 63)p
Loss attributable to equity shareholders	(2,788,730)	(2,080,528)
	Number	Number
Weighted average number of shares in issue	148,396,520	127,682,854

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

# 12. Intangible assets

	2010 Patents	2009 Patents
Cost	<u>£</u>	£
Balance at 1 November	368,403	349,583
Additions	29,308	18,820
Balance at 31 October	397,712	368,403
Amortisation		
Balance at 1 November	59,878	41,731
Charge for the year	18,982	18,147
Balance at 31 October	78,860	59,878
Net book value	318,852	308,525

# 13. Property and equipment

	Leasehold Improvements	Fixtures, fittings and equipment	Total
	£	£	£
Cost			
At 1 November 2008	146,992	737,636	884,628
Additions	3,160	102,032	105,192
Disposals	_	(133,289)	(133,289)
At 31 October 2009	150,152	706,379	856,531
Additions	19,820	610,723	630,543
Re-classifiaction	14,037	(14,037)	_
Disposals	_	(48,788)	(48,788)
At 31 October 2010	184,009	1,254,278	1,438,286
Depreciation			
At 1 November 2008	94,145	286,025	380,170
Charge for the year	49,113	277,745	326,858
Disposals	-	(120,566)	(120,566)
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
Net Book Value			
At 31 October 2010	26,939	605,718	632,657
At 31 October 2009	6,894	263,175	270,069

There are no assets held under finance leases

## Notes forming part of the Financial Statements continued

#### 14. Trade and other receivables

	2010	2009
	t	<u>t</u>
Trade receivables	391	4,579
Other receivables	468,442	254,195
Prepayments	59,159	48,870
	527,992	307,644

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

	2010 £	2009 £
Cash at bank		_
Bank deposits	5,345,716	1,868,601
	5,345,716	1,868,601

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 2008 and 31 October 2009	127,682,854	127,683	8,940,380	9,068,063
Issue of shares on 10 December 20091	21,500,000	21,500	1,992,494	2,013,994
Issue of shares on 2 February 2010 <sup>2</sup>	840,000	840	83,160	84,000
Issue of shares on 22 February 2010 <sup>2</sup>	450,000	450	44,550	45,000
Issue of shares on 1 March 2010 <sup>2</sup>	400,000	400	39,600	40,000
Issue of shares on 25 October 2010 <sup>3</sup>	22,466,353	22,466	3,944,032	3,966,499
At 31 October 2010	173,339,207	173,339	15,044,217	15,217,556

<sup>1 21,500,000</sup> 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 \*o £2,150 000.

The total authorised number of Ordinary shares is 700,000,000 shares (2009 700,000,000 shares) with a par value of 0.1p per share (2009 0.1p per share). All issued shares are fully paid

<sup>&</sup>lt;sup>2</sup> 1,690,000 options and warrants were exercised between 2 February and 1 March 2010 at an exercise price of 10p per ordinary share

<sup>&</sup>lt;sup>3</sup> 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

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 (p)	Weighted Average remaining contractual life
At 1 November 2008	7,523,660	10-23p	
Options granted in the year	6,600,000	3 13	
Options lapsed in the year	(3,978,670)	10-23	
At 31 October 2009	10,144,990	3 13-23	
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 13-24	6 62 yrs

#### 17b. Warrants

	Number of warrants	Exercise price (p)	Weighted Average remaining contractual life
At 1 November 2008	4,039,980	10-22	
Warrants granted in the year	4,750,000	3 13	
At 31 October 2009	8,789,980	3 13-22	
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

## Notes forming part of the Financial Statements continued

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

Sh	are	opt	ions

Option price	Average grant date share price	Average expected volatility	Average risk-free interest rate	Average dividend yield	Average implied option life	Average fair value per option	Amount expensed in the 2010 accounts
(p)	(p)	(pa)	(pa)	(pa)	(years)	(p)	£
10	9	46%	4 4%	0 0%	3 5	2 5	
22	20	46%	4 4%	0 0%	3 5	6	20,168
23	21	46%	4 4%	0 0%	3 5	6	_
23	14	46%	4 4%	0 0%	3 5	2	2,882
3 13	3 13	113 8%	4 4%	0 0%	3	2	48,498
17 5	18 75	188 0%	4 4%	0%	3 5	14 07	33,712
24	23 75	188 0%	4 4%	0%	3 5	17 80	15,890
20 80	20	201 6%	4 4%	0%	30	15	49,419
Adjustment for	changes in assi	ımptıons - ve	sting				(110,349)
Adjustments -	prior year						3,367
Adjustments fo	r expected leav	ers on curren	t options – 10%				(13,320)
Total charge fo	r the year (2009	£51,432)					50,267

#### Warrants

Warrant price	Average grant date share price	Average expected volatility	Average risk-free interest rate	Average dividend yield	Average implied warrant life	Average fair value per warrant	Amount expensed in the 2009 accounts
(p)	(p)	(pa)	( <b>p</b> a)	(pa)	(years)	(p)	£
10	20	46%	4 4%	0 0%	3 5	10	_
22	20	46%	4 4%	0 0%	3 5	6	_
3 13	3 13	113 8%	4 4%	0 0%	3	2	24,185
24	23 75	188 0%	4 4%	0%	3 5	17 8	421,315
30	23 75	188 0%	4 4%	0%	3 5	17 64	5,874
Adjustment for	r performance o	conditions (no	n-market)				_
Adjustment for	r changes in ass	sumptions – v	esting				26,065
Adjustments fo	or expected lea	vers on curre	nt warrants – 0%	•			-
Total charge fo	or the year (200	9 £13,488)					477,439
Total equity-se	ttled share-bas	ed payment c	harge (2009 £6	4,920)			527,705

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

## 18. Trade and other payables

	2010 £	2009 £
Trade payables	139,743	133,875
Deferred income	123,740	123,740
Other payables	35,064	31,723
Accruals	77,937	30,087
	376,484	319,425

## 19. Operating lease commitments

	2010 £	2009 £
Non-cancellable operating leases are as follows		
Within one year	75,253	7,200
Between one and five years	120,247	3,600
	195,500	10,800

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

	2010 £	2009 £
Trade and other receivables	527,992	307,644
Cash and cash equivalents	5,345,716	1,868,601
Trade and other receivables > 1 yr	<u>-</u>	124,849
Trade and other payables	376,484	319,425

#### 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

## 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

	2010 £	2009 £
Trade and other receivables	527,992	307,644
Cash and cash equivalents	5,345,716	1,868,601
Trade and other receivables > 1 yr	_	124,849

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 repayable in September 2011. The recoverability of the W2T amount shown is expected without material adjustment based on W2T projections of revenue arising from contracts. 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 £2 million net of costs in December 2009 and a further £4 million net of expenses in October 2010 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 2 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

	2010	2009
	£	£_
Trade and other receivables	376,484	319,425

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 2010 the Company held no monetary assets or liabilities in currencies other than the functional currency of the operating units involved (2009. Enil)

## 21. Capital commitments

The Company had capital commitments of £158,115 for testing equipment outstanding at 31 October 2010 (2009 £nil)

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

Simon Hunt was appointed as a Non-Executive Director on 13 April 2010. Terry Walsh stepped down as a Director on 10 March 20 and Mike Mangan retired on 31 May 2010.

On 5 November 2009, Ian Balchin was appointed to the Board as Chief Executive Officer. He was subsequently appointed Executive Deputy Chairman on 21 February 2011 and ceased to be Chief Executive Officer on that date. On the same day, Ed Wilson was appointed Managing Director.

## 23 Ultimate controlling party

There is no ultimate controlling party

#### 24. Related-party transactions

During the year ended 31 October 2010, £52,006 (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 (2009 £ 40,701) Mr Marson is also a Director and shareholder of Hudson Raine Ltd At 31 October 2009, the sum owing to Hudson Raine Ltd was nil (2009 £ nil)

During the year ended 31 October 2010, £13,083 (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 (2009 £ nil) Mr Hunt is also a Director and shareholder of Cornerstone Capital Ltd. At 31 October 2009, the sum owing to Cornerstone Capital Ltd was nil (2009 £ nil)

During the year ended 31 October 2009, AFC Energy plc provided Waste2Tricity (a company registered in England and Wales) with an interest bearing loan of £150,000 repayable in full by December 2010, under the terms of an agreement to supply AFC fuel cells to W2T 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 W2T (see note 9) and also agreed a revised repayment date of 1 September 2011. Tim Yeo and Terry Walsh joined the board of W2T in December 2008, when AFC Energy was exploring collaborative opportunities with W2T in the UK waste to energy market. Both directors also served on the board of AFC Energy. Terry Walsh resigned as a director of W2T on 18 January 2010 and as a director of AFC Energy on 10 March 2010 and Tim Yeo resigned as a director of W2T on 30 September 2010. In addition, shareholders in W2T 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 was appointed Chief Executive Officer of AFC Energy on 5 November 2009 and became Deputy Chairman on 21 February 2011 at which point he ceased to be CEO. His shareholding in W2T was granted in lieu of payment for work done for W2T before he was employed by AFC Energy. During the year ended 31 October 2010, W2T invoiced AFC Energy plc £7,800 for marketing services. The sum owing to W2T at 31 October 2010 was nif (2009. £nil)

During the year ended 31 October 2010, £150,000 (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 2010, the sum owing to Cranwood Ltd was nil (2009. £ nil)

## **Directors, Company Secretary and Advisors**

#### **Directors**

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

## Registered office

Finsgate 5-7 Cranwood Street London EC1V 9EE

Registered in England 05668788

## Financial Advisor, NOMAD and Broker

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#### **Bankers**

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## Principal place of business

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#### Solicitors

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#### Registrars

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