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24 July 2020

AFC Energy plc
("AFC" or the "Company")

Interim Results

AFC Energy plc (AIM: AFC), a leading developer of hydrogen power generation technologies, is pleased to announce its Interim Results for the 6 months ended 30 April 2020.

Highlights

- Successful launch and demonstration of AFC Energy's EV charging solution culminating in a national roadshow across the United Kingdom.
- Commenced negotiations with Extreme E for a bespoke H-Power unit with a binding contract being reached in July 2020.
- Reinforced sales staff to manage inbound prospects resulting from increased visibility to customers by having a physical demonstration. These negotiations laid the platform to conclude the strategic collaboration with ACCIONA.
- Raised £ 1.4 million when lockdown occurred to continue work unabated during the lockdown with no staff furloughed nor made redundant.
- Commenced product development work on HydroX-Cell(L)160 system for launch later this year.
- Invested in research and development staff in support of the AlkaMem product which has led to membrane samples being delivered to third parties for validation.
- As a result of the actions above after the end of the reporting period, a further £ 31.6 million was raised to fund further product development, scale up of manufacturing and reinforce sales coverage.

Adam Bond, Chief Executive Officer of AFC Energy, said "2020 continues to be a transformational year for the international Hydrogen economy. With unprecedented investment into the sector from both private and public institutions, AFC Energy remains focussed on the consolidation of its position as a leading developer of alkaline, zero emission fuel cell systems."

"We anticipate that in the second half we will continue to make large strides forward benefiting from a wider technology platform, growing project pipeline across key target markets and new enquiries from strategic partners financed by a strengthened balance sheet. These factors, together with the commitment of AFC Energy's management and staff, places the Company in a solid position for the realisation of its growth potential into 2020 and beyond".

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Overview

The six months to 30 April 2020 and subsequent months have been a very exciting time for AFC Energy. Despite the global challenges experienced from the COVID-19 pandemic and resulting economic consequences, we have continued to see an ever-increasing alignment of key macro factors supporting the evolution of the Hydrogen economy.

The release in June 2020 of Germany’s €9bn National Hydrogen Strategy, together with the European Union’s own “Hydrogen Strategy For A Climate-Neutral Europe” released in July have consolidated Hydrogen as a fundamental enabler of the decarbonisation agenda. For the first time, the strong convergence of Government policy in support of Hydrogen, large scale private sector investment, and technology readiness in both fuel cell and hydrogen generation, should enable companies such as AFC Energy to capitalise on the emerging pipeline of opportunities presented.

Having maintained full employment without furloughing staff during the COVID-19 “lockdown”, work has continued to focus on securing fuel cell deployment opportunities across key markets whilst strengthening the readiness of the technology.

Positive Affirmation of Markets and Sentiment

The positive global sentiment affirming Hydrogen fuel cell technology has seen a strong growth in the number of applications in which fuel cells are now seen as a key element of industrial and Government carbon reduction strategies. Whether used in heavy motive applications such as trains and trucks, or in stationary applications, the market adoption and acceptance of fuel cells continues to grow.

Importantly, several fuel cell technologies exist in the marketplace, each offering different positive characteristics – we must all play to our strengths. In the case of AFC Energy, stationary power applications that look to transition away from diesel generation and support the rapid charging of battery electric vehicles continues to leverage the alkaline fuel cell’s strengths such as the ability to accept readily available, lower grade Hydrogen carrier fuels, such as Ammonia, as an alternative to higher grade Hydrogen with its high cost of transportation and storage.

Within our immediate target markets, further strengthening of regulatory and fiscal support for temporary power (displacing diesel) and deployment of rapid and ultra-rapid EV charging continue to support our business plan. These factors include:

- the bringing forward of the UK's date for full displacement of new fossil fuel combustion cars to 2035;
- growth in Battery Electric Vehicle registrations in the UK year on year to June 2020 of 261.8%, even during "lockdown" (versus diesel cars whose registrations fell 59.8% year on year over the same period) (*Source: SMMT*);
- removal by the UK Government in the March 2020 budget of substantial subsidies on "red diesel" currently used in off-grid power generation adding £0.50 / litre to the cost of diesel in such applications; and
- strengthening regulatory environments on emissions from Non Road Mobile Machinery (including temporary diesel generators) from September 2020.

These, and other factors, all contribute to a strengthening of the opportunities available to AFC Energy through its fuel cell platform.

Product Development – HydroX-Cell(L)

Beginning with the launch in December 2019 and finishing immediately prior to "lockdown" in March 2020, AFC Energy completed our "Dunstable to Dundee Dash" – a 500 mile journey across the UK showcasing our EV charging demonstration unit to a wide audience. Our demonstration unit was designed and built to appeal to the widest possible audience. The system's flexibility was highlighted in the fact that it was used to demonstrate both EV charging and construction applications within the roadshow programme.

Since this time, we have continued our engagement directly with attendees to better understand their needs so that we can simplify and tailor the product to meet their specific requirements in the most cost-effective way possible.

The general principles within the EV charging market is the same lesson learned many times over in professional sports - "Bigger and Faster" often determines the outcome of the match when opponents are technically evenly matched. In the majority of cases, the consumer is more focussed and, therefore, willing to pay a premium, for a faster charge. This understanding, reflected in driver range anxiety, is being demonstrated with many charge point operators releasing ever faster charge points, currently up to 350 kW, and motor manufacturers in turn installing bigger and bigger batteries.

The 20kW unit and subsequent demonstrations have successfully proven the basic underlying design concepts of the fuel cell system, but as we indicated at the time of launch, our competitive strategy is to improve power density which will support ever faster charging. However, scaling up also offers certain cost competitive advantages both in respect to the Gas Delivery System (GDS or previously Balance of Plant) and fuel costs. The next steppingstone in our development plan is the HydroX-Cell 160 (L) which has two design components:

- Scale up – how do we place eight times more power in four times the space of the demonstration unit; and
- Value engineering – incorporate iterative design improvements identified in the build and operation of the 20kW unit into the larger system.

Our plan as announced in December 2019 was to deliver a 160kW nameplate system by mid-2020. To conserve cash during the lockdown we focused our attention on understanding customer needs, system engineering and design work, which was predominantly desktop and hence, deferring delivery of the 160kW unit until late 2020.

Our commercial strategy focuses on off grid applications where electricity costs are at a premium and can be multiple times higher than that available from the grid, with further material price uplifts available depending on the complexities of the installation and location. In these markets the cost of providing the fuel at point of use is, by far, the most important operating cost of the system, with electrode longevity becoming less of a price determining factor in terms of our price competitiveness. Whilst the Hydrogen Council in their report “Path to Hydrogen Competitiveness – A Cost Perspective” published on 20 January 2020 concluded that “Scaling up existing hydrogen technologies will deliver competitive low-carbon solutions across a wide range of applications by 2030 and may even offer competitive low-carbon alternatives to conventional fuels in some segments” we believe we must also play our part by constantly striving to improve the fuel efficiency of our systems and the steps we have taken include:

- avoiding the use of materially higher cost scientific grade (“five nines”) hydrogen – a significant advantage compared to PEM fuel cells;
- the ability to utilise Hydrogen derived from Ammonia as fuel stock – energy density three to four times that of Hydrogen reducing logistic and storage costs – a key benefit in off-grid, distributed power applications; and
- scaling up to HydroX-Cell L160 (L) – provides annual consumption of fuel to support discounted bulk buying opportunities.

Since the time of our system launch and roadshow, we have continued to focus our work on fuel efficiency and value engineering. Through our commercial activities we are assessing the off grid market and we believe that this market seeks solutions with:

- better emissions credentials than the diesel generator but not as expensive as a PEM fuel cell; and
- that can manage intermittency with lower capital cost, footprint and recycling challenges of battery storage,

which is where we are positioned as of today.

Our long-term testing of electrodes continued during lockdown and continues to increase our confidence in the reliability, longevity, and robustness of the system.

Product Development – HydroX-Cell(S) and AlkaMem

In November 2019, AFC Energy announced the branding of its new, high power density anion exchange membrane (AEM) based fuel cell technology, branded HydroX-Cell(S).

The HydroX-Cell(S) stack, when available from 2022, is expected to deliver equivalent or better performance in terms of power density versus current day PEM fuel cells, whilst benefiting from the attributes of the alkaline chemistry, including the ability to accept lower grade Hydrogen fuel.

These attributes will make the HydroX-Cell(S) stack, when configured across multi-stack configurations, ideal for applications including maritime (shipping) and rail where space constraints require high power density, but at a fraction of the footprint of the HydroX-Cell(L) system.

Progress continues to be made in the design, scale up and validation activities associated with the HydroX-Cell(S) technology. During the period, we have progressed not only the development activity on the AlkaMem membrane used within this fuel cell stack, but have also appointed new members of staff to work alongside the existing membrane development team focussing on system design, balance of plant configuration, durability, membrane humidification and water management. These activities continued during the COVID-19 lockdown and, alongside the stack development work, we are also working towards manufacturing processes and procedures, which will enable us to produce sufficient membrane quantities for system deployment from 2022. These processes and procedures contain high levels of intellectual property and know how.

Testing and development work continue to focus predominantly on the AlkaMem membrane's application within the high-power density fuel cell stack. This work is coming along well with new patents and manufacturing processes being developed to enable not only the supply of membranes for fuel cell applications, but also for other third-party applications.

Interest in the AlkaMem membrane for applications outside of fuel cells has grown and after the reporting period samples have been delivered to manufacturers for testing in their applications and equipment. We expect to receive feedback on this testing over the coming months and build relationships with customers so that we can develop a better understanding of their needs.

This work will open up new markets, such as electrolysis previously considered unattainable utilising alkaline technology. This continues to be seen by many to be a game changer in the deployment of fuel cell technology in both stationary and mobile applications.

Strategic Partners

Extreme E

On 15 July 2020, the collaboration with Extreme E was announced, the world's first all-electric, off road, rally championship taking motor racing to some of the most extreme environments on the planet. AFC Energy is working with Extreme E as a provider of zero emission, off grid power for rapid charging of race vehicles in multiple remote locations across the 2021 racing season. These locations, including arctic to desert environments, will highlight not only the existence of a viable alternative to diesel generation, but will affirm its reliability and robustness across a range of climatic conditions where previously there was no viable nor emission free alternative to the incumbent diesel generators..

Expected to be viewed by a global audience of 220 million people, Extreme E not only represents first revenues but also provides a unique platform to showcase AFC's value proposition to a global television audience of prospective partners and customers.

ACCIONA

In June 2020, AFC Energy announced a collaboration with international construction group, ACCIONA, for the field testing of a 160kW fuel cell system within a Spanish construction site. The field test, expected to last a few months, will highlight the potential for constructors to commence a tangible decarbonisation of construction sites, not only in Europe, but globally. The support and interest of such a recognised brand as ACCIONA will provide an independent validation of our fuel cell system in off grid construction environments.

The field test is expected to be held in the first quarter of 2021 (COVID-19 quarantining dependent) and, if successful, should form the platform to build a long term mutually beneficial relationship.

De Nora

Our commercial relationship with De Nora remains as strong as ever. Our collaboration under the Joint Development Agreement was extended in late 2019 to enable delivery of further electrode enhancements which have been identified by both scientific teams over the course of the reporting period. Regular meetings, calls and video conferences are held across the De Nora network and whilst physical meetings during the lockdown were not possible, the quality of engagement between our two companies has not fallen and we continue to see benefits from our collaboration on a regular basis. De Nora continues to work with us on our electrode pairings on an exclusive basis in the field of alkaline fuel cell technology.

Commercial Markets

EV Charging

An insight we identified through engagement with the market at our EV launch event and roadshow, is the differing policy objectives, commercial models and demand assumptions reflected across those in attendance and the industry in general.

Clearly, the traditional "plug into the grid" which is seen as the simple solution masks the larger issue being the capacity constraints across the grid and distribution networks, and the balancing of renewable energy sources with demand will all require incremental investment to be borne by operators in generating and storage assets.

Government recognised this issue and introduced support for grid reinforcement. We believe that this initiative has been long overdue and will certainly unblock some marginal sites. That said, commentators continue to question whether the level is sufficient to cover the additional strain being placed on the grid

by the increase in speed of charge points and the growing size of batteries the motor manufacturers are installing.

Therefore, the rationale for our solution remains unchanged and we welcome all initiatives that accelerate the growth of the EV market. We believe charging operators will become ever more sophisticated in their technology and only see it as a matter of time before we have mixed technology platforms. We are already beginning to look to the future and think about how our system can be used to import grid electricity to offer cheap 24/7 ultra-rapid EV charging but at the same time can export clean electricity to balance the grid. We believe that this is a critical policy area that does not sit neatly in the business models of national and local Government, charging operators, balancing plant operators nor the grid operators.

Feedback from the market following our EV system launch and roadshow events further demonstrate market interest in our product. For most though, the AFC Energy fuel cell forms part of a larger energy portfolio strategy and as such, shareholders should be mindful of what would be a reasonable timeline between “enquiry” and “sale” as the solution provided by AFC Energy in this regard should not be seen as a commoditised consumable for which simple “buy” decisions can be made without taking into account other considerations. The announcement of our collaboration with Extreme E announced in July 2020, confirms this assertion where discussions first commenced in January 2020 and various configurations were considered to meet the specific needs of the application.

The number of enquiries which we are seeing has led to the employment of additional sales staff with sector experience to lead these discussions through to what we expect to be commercial deployments in due course.

Construction and Temporary Power

The last few months have seen growing interest received from the construction and temporary power markets looking for clean solutions to transition away from diesel gensets.

The pipeline of new opportunities in the construction market is driven to a large extent by fiscal and regulatory changes such as the UK Government’s recent announcement in the March 2020 budget pertaining to the removal of subsidies on red diesel used at construction and temporary power sites, alongside the emission reduction targets for Non Road Mobile Machinery (NRMM) which come into force later this year.

A number of larger, blue ribbon construction projects, such as HS2, are proactively using “innovation budgets” to motivate contractors to engage in decarbonisation roadmaps in an effort to reduce the greenhouse footprint of construction sites. In London, an estimated 14% of all PM2.5 emissions, which relate to that class of particulate matter with direct correlation to health issues, particularly around respiratory disease, stem from the construction industry.

In addition to construction activities, temporary power used at festivals and sporting events are also seeing an increase in inbound enquiries to AFC Energy, again, predicated on the growth in regulatory, fiscal, and in this instance, social expectations arising from the movement towards cleaner air.

Marketing and Communication

We believe and support that education and understanding is one of the foundations upon which the hydrogen economy must be built. This not only applies to an understanding of the macro issues regarding climate change and pollution but also the wider community understanding the differing technologies and how their strengths and weaknesses complement one another. The AFC Energy web site and our annual report, together with RNS releases, at the appropriate times, are our principal form of communication channels with investors and have all been enhanced in recent months. We endeavour to continue those enhancements, but you will have noticed an increase in our presence in social media showcasing and explaining our products to potential customers and legislators.

We must however balance the timing and content between the interests of the different stakeholder groups. Activities which have taken place include multiple advertising and in-depth articles in trade magazines, roadshows and presentations to trade associations in recent months. We have also received editorial coverage on our EV charging and off-grid power products from a number of national and international publications including the Wall Street Journal, The Telegraph, The I Newspaper, New Statesman and Motoring Research – as well across a wide range of automotive, clean tech and energy trade media. We will continue to invest in this communication and recent experience shows that targeted content and audience provides a better commercial response than high level general communication which will manifest itself in more specific communication in content and communication channel.

Financial review

During the six months to 30 April 2020, an operating loss of £2.1 million (30 April 2019: £2.1 million) was recorded reflecting continuing close control of overheads. The net cash inflow in the six-months to 30 April 2020 was £ 1.2 million (30 April 2019: £ 0.7 outflow) after raising £4.1 million from the issue of shares before expenses. The cash balance at 30 April 2020 was £2.5 million (30 April 2019: £1.9 million) with a further £4.0 million (before expenses) available to be drawn down from the convertible bond facility. The Directors do not expect to draw down this facility following the completion of the 1 July 2020 fundraise (referred to below).

The Board of AFC Energy does not intend to declare a dividend in respect of this period.

Post 30 April 2020 Events

On 1 July 2020, AFC Energy announced a successful oversubscribed fund raise of £31.6 million before expenses.

This is a transformational fund raise and reflects the confidence the markets have in our business plan. Furthermore, it is an affirmation that Hydrogen and fuel cells, in particular, are seen as a viable technology platform to address climate change.

The proceeds from the raise will facilitate:

- the multiple manufacture of new H-Power™ fuel cell systems capable of deployment in the next 12-24 months to meet projected customer demand - including the 160kW H-Power™ system for trialling by ACCIONA in 2021;
- the employment of new manufacturing, product engineers and commercial staff in support of the deployment of H-Power™ systems into the Company's key target markets (electric vehicles and construction);
- the development and implementation of its strategy for scale up of manufacturing and system assembly;
- an acceleration in the development of the Company's AlkaMem™ anion exchange membrane with scale up of manufacture and validation testing pre commercial deployment; and
- the delivery of solid-state membrane fuel cell system (HydroX-Cell(S)™) for published target release date in 2022 with a view to the opening of new markets.

In addition, the fundraising will also support and finance the warranties required in connection with systems deployed into commercial applications.

Outlook

We believe the outlook in the coming months to be very exciting with further developments across existing partnerships and, importantly, new customers and partners expected.

The £31.6m fundraise has significantly strengthened the balance sheet with growth capital from several leading institutions new to the register.

The raise will enable material inroads into the scaling up of the manufacturing capability, internal staffing and system deployment, further demonstrating the underlying strength within the wider Hydrogen economy. We also expect the raise to support our credentials in future industrial and strategic partnering which could provide the basis for a transformational underpinning of the business today and into the future.

I believe that we are "delivering emissions free solutions to today's energy challenges" built upon sustainable win-win outcomes for all stakeholders whether they be Government, grid operators, end users or our shareholders and I look forward to providing further updates to the market during the rest of 2020 and the coming year.

Adam Bond

Chief Executive Officer

23 July 2020

STATEMENT OF COMPREHENSIVE INCOME

For the six months ended 30 April 2020

		Six-months ended 30 April 2020	Six-months ended 30 April 2019	Year ended 31 October 2019
		£	£	£
	Note	Unaudited	Unaudited	Audited
Cost of sales		-	(1,301)	(26)
Gross loss		-	(1,301)	(26)
Other income		28,187	-	39,729
Administrative expenses		(2,161,300)	(2,132,382)	(3,606,266)
Operating loss		(2,133,113)	(2,133,683)	(3,566,563)
Finance cost	3	(8,709)	(1,107)	(52,805)
Loss before tax		(2,141,822)	(2,134,790)	(3,619,368)
Taxation	4	321,273	213,500	768,528
Loss for the financial period and total comprehensive loss attributable to owners of the Company		(1,820,549)	(1,921,290)	(2,850,840)
Basic loss per share	5	(0.40)p	(0.49)p	(0.68)p
Diluted loss per share	5	(0.40)p	(0.49)p	(0.68)p

All amounts relate to continuing operations.

STATEMENT OF FINANCIAL POSITION

As at 30 April 2020

		30 April 2020	30 April 2019	31 October 2019
		£	£	£
	Note	Unaudited	Unaudited	Audited
Assets				
Non-current assets				
Intangible assets	6	616,519	455,862	606,041
Right of use assets	7	304,621	-	361,738
Property and equipment	8	477,618	229,882	396,935
Long term receivable		100,000	-	-
		1,498,758	685,744	1,364,714
Current assets				
Inventory	9	95,423	163,720	95,423
Other receivables	10	1,433,658	1,358,534	1,151,998
Cash and cash equivalents	11	2,514,326	1,892,249	1,327,935
Restricted cash	11	261,165	259,094	259,072
		4,304,572	3,673,597	2,834,428
Total assets		5,803,330	4,359,341	4,199,142
Capital and reserves attributable to owners of the Company				
Share capital	12	477,362	425,773	447,988
Share premium	12	51,100,883	46,413,339	47,389,424
Other reserve		2,204,774	2,923,022	2,204,774
Retained deficit		(49,005,806)	(46,408,419)	(47,185,257)
Total equity attributable to Shareholders		4,777,213	3,353,715	2,856,929
Current liabilities				
Trade and other payables	13	407,935	704,454	667,811
Lease liabilities	14	113,431	-	113,431
		521,366	704,454	781,242
Non-current liabilities				
Lease liabilities	14	203,579	-	259,799
Provisions	15	301,172	301,172	301,172
		504,751	301,172	560,971
Total liabilities		1,026,117	1,005,626	1,342,213
Total equity and liabilities		5,803,330	4,359,341	4,199,142

STATEMENT OF CHANGES IN EQUITY

For the six months ended 30 April 2020

	Share Capital £ Unaudited	Share Premium £ Unaudited	Other Reserve £ Unaudited	Retained Deficit £ Unaudited	Total Equity £ Unaudited
Balance at 31 October 2019	447,988	47,389,424	2,204,774	(47,185,257)	2,856,929
Comprehensive loss for the period	-	-	-	(1,820,549)	(1,820,549)
Issue of equity shares	29,374	3,744,792	-	-	3,774,166
Equity-settled share-based payments	-	(33,333)	-	-	(33,333)
Transactions with owners	29,374	3,711,459	-	-	3,740,833
Balance at 30 April 2020	477,362	51,100,883	2,204,774	(49,005,806)	4,777,213

For the six months ended 30 April 2019

	Share Capital £ Unaudited	Share Premium £ Unaudited	Other Reserve £ Unaudited	Retained Deficit £ Unaudited	Total Equity £ Unaudited
Balance at 31 October 2018	391,698	45,506,524	2,908,021	(44,487,129)	4,319,114
Comprehensive loss for the period	-	-	-	(1,921,290)	(1,921,290)
Issue of equity shares	34,075	906,815	-	-	940,890
Equity-settled share-based payments	-	-	15,001	-	15,001
Transactions with owners	34,075	906,815	15,001	-	955,891
Balance at 30 April 2019	425,773	46,413,339	2,923,022	(46,408,419)	3,353,715

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 charge to equity in respect of equity-settled share-based payments.

Retained deficit represents the cumulative loss of the Company attributable to equity shareholders.

CASH FLOW STATEMENT

For the six months ended 30 April 2020

	Six-months ended 30 April 2020	Six-months ended 30 April 2019	Year ended 31 October 2019
	£ Unaudited	£ Unaudited	£ Audited
Cash flows from operating activities			
Loss before tax for the period	(2,141,822)	(2,134,790)	(3,619,368)
Adjustments for:			
Amortisation of intangible assets	29,740	17,329	35,388
Depreciation of right of use asset	57,117	-	114,233
Depreciation of property and equipment	67,568	48,067	88,950
Depreciation of decommissioning asset	15,682	15,682	31,364
Equity-settled share-based payment expenses	-	15,001	(543,741)
Interest received	(1,111)	(2,813)	(4,173)
Gain on disposal of investment	-	-	(20,000)
Cash flows from operating activities before changes in working capital and provisions	(1,972,826)	(2,041,524)	(3,917,347)
R&D tax credits received	-	599,459	1,299,360
Increase/(Decrease) in restricted cash	(2,093)	6,680	6,702
Decrease in inventory	-	-	68,297
(Increase)/Decrease in other receivables	39,613	(199,905)	76,910
(Decrease)/increase in trade and other payables	(259,876)	62,907	26,264
Cash absorbed by operating activities	(2,195,182)	(1,572,383)	(2,439,814)
Cash flows from investing activities			
Purchase of plant and equipment	(163,933)	(634)	(224,253)
Additions to intangible assets	(40,218)	(30,505)	(198,743)
Interest received	1,111	2,813	4,173
Proceeds from disposal of investment	-	-	20,000
Net cash absorbed by investing activities	(203,040)	(28,326)	(398,823)
Cash flows from financing activities			
Proceeds from the issue of share capital	3,958,667	1,022,640	1,888,940
Costs of issue of share capital	(317,834)	(81,750)	(149,750)
Lease payments	(56,220)	-	(124,686)
Net cash from financing activities	3,584,613	940,890	1,614,504
Net (decrease)/increase in cash and cash equivalents	1,186,391	(659,819)	(1,224,133)
Cash and cash equivalents at start of period	1,327,935	2,552,068	2,552,068
Cash and cash equivalents at end of period	2,514,326	1,892,249	1,327,935

NOTES FORMING PART OF THE FINANCIAL STATEMENTS

1. SIGNIFICANT ACCOUNTING POLICIES

Details of the significant accounting policies are set out below.

a. Basis of preparation

The interim results for the six-months ended 30 April 2020 are unaudited. They have been prepared in accordance with IAS 34 'Interim Financial Reporting' as adopted by the EU. The interim results have been drawn up using the accounting policies and presentation consistent with those disclosed and applied in the annual report and accounts for the year ended 31 October 2019. The comparative information contained in the report does not constitute the accounts within the meaning of section 240 of the Companies Act 1985 and section 435 of the Companies Act 2006.

The unaudited comparative information for the six months to 30 April 2019 has not been restated to reflect those adjustments required by IFRS 16 which was first adopted in the preparation of the audited accounts for the year ended 30 October 2020. Had the Standard been adopted at the time when the interim results for the six months ended 30 April 2019 then a right-of-use asset and related lease liability would have been recognised in the following amounts

Non – current assets - Right of use assets	£ 333,180
Current liabilities – Lease liabilities	£ (113,431)
Non – current liabilities – Lease liabilities	£ (219,749)

The financial statements have been prepared on a going concern basis notwithstanding the trading losses being carried forward and the expectation that the trading losses will continue for the near future as the Company transitions from research and development to commercial operations.

The Company currently consumes cash resources and will continue to do so until sales revenues are sufficiently high enough to generate net cash inflows. Management have prepared and reviewed five-year financial projections aligned with ongoing technological, operational and commercial strategies. During the initial period of commercialisation there will be negative cash flows dependent upon the speed at which revenue grows. Therefore, the Company continues to be dependent upon securing additional funding, either through the injection of capital from share issues, the sale of licenses to commercially exploit the intellectual property in defined markets, appointment of well-funded channel partners to finance commissioning, project finance for build and operate plants, and trade finance. During the current period day to day financing requirements have been met through issue of equity and the cash reserves brought forward from the previous period.

At 30 April 2020 unrestricted cash resources were £2.5 million, a £4 million equity financing facility with an institutional investor is available to fund working capital. After the end of the reporting period further funding of £ 31.6 million (before expenses) was obtained through an equity fund raise. In addition, the Directors anticipate receiving commitments for further funding from new and existing shareholders. The Directors have reasonable expectation that sufficient funding exists to meet payment obligations as and when they fall due although there can be no certainty that shareholders approve sufficient non pre-emptive share allotment authority to the Directors nor that certain stock market conditions are maintained.

The directors' expect that taking into account current cash resources and financial forecasts including measures that can be taken to continue to reduce expenditure and the funds raised from the equity financing facility, the Company has adequate resources to continue in operational existence for the foreseeable future (being a period of at least twelve months from the date of this report). Thus, the Directors believe that it is reasonable to continue to adopt the going concern basis in preparing the annual report and financial statements. The financial statements do not include any adjustments that would result from the basis of preparation being inappropriate.

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

b. 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.

c. Grants

The Company participated in two projects, ALKAMMONIA and POWER-UP, which receive funding from the European Union ("EU"). These grants were based on periodic claims for qualifying expenditure incurred by all the entities participating in each

project consortium. The Company acted as coordinator for the projects and submitted claims and received funding on behalf of the other participants in each project consortium. Grant funds of other participants were paid over to them as soon as they were received and only the grant funding relating specifically to the Company's activities is reflected in the statement of comprehensive income. The qualifying expenditure was shown in the statement of comprehensive income as cost of sales. Grants, including grants from the EU, were recognised in the statement of comprehensive income in the same period as the expenditure to which the grant relates.

d. Other Income

Other income represents sales by the Company of waste materials.

e. Development Costs

Identifiable non-recurring engineering and design costs and other prototype costs incurred to develop a technically and commercially feasible product are capitalised.

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 Statement of Financial Position date, monetary items denominated in foreign currencies are retranslated at the rates prevailing at the Statement of Financial Position date.

g. Inventory

Inventory is recorded at the lower of cost and net realisable value.

h. Other Receivables

Other receivables arise principally through the provision by the Company of activities associated with grant-funded projects. 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. Tangible fixed assets

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

Right-of-use assets are measured at either:

- Their carrying amount as if IFRS 16 has been applied since commencement, discounted using the lessee's incremental borrowing rate at the date of initial application
- An amount equal to the lease liability, adjusted for any prepaid or accrued lease payments

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

Depreciation is charged to the statement of comprehensive income 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:

- Right of use asset - building life of the lease
- Leasehold improvements 1 to 3 years
- Decommissioning asset life of the lease

- Fixtures, fittings and equipment 1 to 3 years
- Motor vehicles 3 to 4 years
- Demonstration equipment 5 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 statement of comprehensive income.

k. Intangible Assets

Expenditure in establishing a patent is capitalised and written off over its useful life.

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:

- Development costs 5 years
- 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 statement of comprehensive income.

l. Impairment testing of intangible assets and property, plant and equipment

At each statement of financial position date, the Group reviews the carrying amounts of the assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). In assessing whether an impairment is required, the carrying value of the asset is compared with its recoverable amount. The recoverable amount is the higher of the fair value less costs of disposal (FVLCD) and value in use (VIU).

m. Cash and Cash Equivalents

Cash and cash equivalents comprise cash balances and call deposits with major banking institutions realisable within three months. Restricted cash is €300,000 held in escrow to support a bank guarantee in favour of Air Products GmbH relating to contractual obligations by the Company in relation to the Stade site in Germany.

n. Other Financial Liabilities

The Company classifies its financial liabilities as:

Trade and Other Payables

A liability is recognised for the amount expected to be paid if the Company has a present legal or constructive obligation to pay this amount as a result of past event and the obligation can be estimated reliably. 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 advance which has not been fully recognised in the statement of comprehensive income pending delivery to the customer. The carrying value is fair value.

o. Lease liabilities

Transitional arrangements

IFRS 16 Leases became mandatorily effective on 1 January 2019 and has been applied for the first time in the 2019 accounting period which resulted in changes to the accounting policies. The company transitioned to IFRS 16 using the modified retrospective approach and as a result the cumulative effect of initial application is recognised in retained earnings at 1

November 2018. The prior period figures were not adjusted. On adoption of IFRS 16, the company elected to apply relief provisions available and has not reviewed contracts under the definition of a lease per IFRS16, which had previously not been classified as lease under the principles of IAS17. Therefore, only contracts entered into, or modified, on or after 1 November 2018 have the definition of a lease per IFRS 16 applied. In addition, the company decided to apply recognition exemptions to leases with a term not exceeding 12 months and leases where the underlying assets are of low value. For leases classified as operation leases under IAS 17, these lease liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of 1 November 2018. The company has used the following practical expedients permitted by IFRS 16 when applying this for the first time to leases previously classified as operating leases:

- Applied a single discount rate to a portfolio of leases with similar characteristics
- Applied the exemption not to recognise liabilities for leases with less than 12 months of lease term remaining
- Excluded initial direct costs for the measurement of right-to-use assets as the date of the initial application
- Used hindsight in determining the lease term where the contract contains options to extend or terminate the lease

Right-of-use assets are measured at either:

- Their carrying amount as if IFRS 16 has been applied since commencement, discounted using the lessee's incremental borrowing rate at the date of initial application
- An amount equal to the lease liability, adjusted for any prepaid or accrued lease payments

No adjustments are required on transition to IFRS 16 for leases where the company acts as a lessor, except for a sub-lease. A reassessment of the classification of a sub-lease is required under IFRS 16. The company recognised lease liabilities in relation to leases that were classified as 'operating lease' under the principles of IAS 17 – Leases. On transition, no additional right-to-use assets and lease liabilities were recognised with the difference allocated to retained earnings.

Measurement and recognition of leases as lessee

At lease commencement date, a right of use and lease liability are recognised on the Statement of Financial Position. The right of use asset is measured at cost, which comprises the initial measurement of the lease liability, any initial direct costs incurred, an estimate of costs to dismantle and remove the asset at the end of the lease term and any lease payments made in advance of the lease commencement date.

Lease payments included in the measurement of the lease liability are made up of fixed payments (including in substance fixed), variable payments based on an index or rate, amounts expected to be payable under a residual value guarantee and payments arising from options reasonably certain to be exercised.

Subsequent to initial measurement, the liability will be reduced for payments made and increased for interest. It is remeasured to reflect any reassessment or modification, or if there are changes in in-substance payments.

When the lease liability is remeasured, the corresponding adjustment is reflected in the right of use asset, or profit and loss if the right of use asset is already reduced to zero.

Short term leases and low value assets have been accounted for using the practical expedients set out in IFRS 16 and the payments are recognised as an expense in profit or loss on a straight-line basis over the lease term.

p. Financial assets at amortized cost

A financial asset is measured at amortized cost if it is held within a business model whose objective is to hold assets to collect contractual cash flows and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, and is not designated as FVPL. Financial assets classified as amortized cost are measured subsequent to initial recognition at amortized cost using the effective interest method. Cash, restricted cash, other receivables are classified as and measured at amortized cost.

q. Financial liabilities

Financial liabilities are classified as measured at amortized cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition.

Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss. Other financial liabilities are subsequently measured at amortized cost using the effective interest

method. Gains and losses are recognized in net earnings when the liabilities are derecognized as well as through the amortization process. Borrowing liabilities are classified as current liabilities unless the Company has an unconditional right to defer settlement of the liability for at least 12 months after the statement of financial position date. Accounts payable and accrued liabilities and finance leases are classified as and measured at amortized cost.

r. Share-Based Payment Transactions

The fair value of options and warrants granted is recognised as an employee expense with a corresponding increase in Other Reserve. The fair value of the expense is estimated at grant date using the Black-Scholes option valuation model considering the terms and conditions upon which they were granted and a Log normal Monte Carlo stochastic model for market conditions. The expense accrues from the grant date until the options and warrants have unconditionally vested. Where vesting is dependent upon market or non-market performance criteria the vesting period is estimated at the grant date and, in the case of non-market performance criteria, is revised annually. When an option or warrant is exercised the balance is transferred to share capital with excess value going to the premium account whereas those that lapse are transferred to retained earnings. Where options or warrants are amended by the introduction of new schemes and the absorption of earlier schemes by agreement between the Company and the beneficiary the net difference in valuation is charged to earnings in the appropriate period.

s. Provisions

Provisions are recognised when the Company has a present obligation as a result of a past event and it is probable that the Company 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 Statement of Financial Position date and are discounted to present value where the effect is material.

t. Taxation

Tax on the profit or loss for the year comprises current and deferred tax. Tax is recognised in the statement of comprehensive income 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 Statement of Financial Position 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.

u. R&D Tax Credits

The Company's research and development activities allow it to claim R&D tax credits from HMRC in respect of qualifying expenditure; these credits are reflected in the statement of comprehensive income in administrative expenses or in the taxation line depending on the nature of the credit.

v. Pension Contributions

The Company operates a defined contribution pension scheme which is open to all employees and makes monthly employer contributions to the scheme in respect of employees who join the scheme. These employer contributions are currently capped at 3% of the employee's salary and are reflected in the statement of comprehensive income in the period for which they are made.

2. SEGMENTAL ANALYSIS

Operating segments are determined by the chief operating decision maker based on information used to allocate the Company's resources. The information as presented to internal management is consistent with the statement of comprehensive income. It has been determined that there is one operating segment, the development of fuel cells. In the period to 30 April 2020, the Company operated mainly in the United Kingdom and in Germany. All non-current assets are in the United Kingdom.

3. FINANCE COST

	Six-months ended 30 April 2020	Six-months ended 30 April 2019	Year ended 31 October 2019
	£	£	£
	Unaudited	Unaudited	Audited
Lease interest	(6,532)	(284)	(16,955)
Bank charges	(3,288)	(3,636)	(40,023)
Bank interest receivable	1,111	2,813	4,173
Total finance cost	(8,709)	(1,107)	(52,805)

4. TAXATION

	Six-months ended 30 April 2020	Six-months ended 30 April 2019	Year ended 31 October 2019
	£	£	£
	Unaudited	Unaudited	Audited
Recognised in the statement of comprehensive income:			
R&D tax credit - current period	321,273	213,500	602,995
R&D tax credit - prior year	-	-	165,533
Total tax credit	321,273	213,500	768,528

5. LOSS PER SHARE

The calculation of the basic loss per share is based upon the net loss after tax attributable to ordinary Shareholders and a weighted average number of shares in issue for the period.

	Six-months ended 30 April 2020	Six-months ended 30 April 2019	Year ended 31 October 2019
	£	£	£
	Unaudited	Unaudited	Audited
Basic loss per share (pence)	0.40p	0.49p	0.68p
Diluted loss per share (pence)	0.40p	0.49p	0.68p
Loss attributable to equity Shareholders	£1,820,549	£1,921,290	£2,850,840
Weighted average number of shares in issue	460,105,587	395,246,363	418,024,570

Diluted earnings per share:

There are share options and warrants outstanding as at 30 April 2020 which, if exercised, would increase the number of shares in issue. However, the diluted loss per share is the same as the basic loss per share, as the loss for the period has an anti-dilutive effect.

6. INTANGIBLE ASSETS

	Development costs £	Patents £	Total £
<i>Cost:</i>			
At 31 October 2019	149,460	729,396	878,856
Additions	19,365	20,853	40,218
At 30 April 2020 (unaudited)	168,825	750,249	919,074
<i>Amortisation:</i>			
At 31 October 2019	-	272,815	272,815
Charge for the period	11,255	18,485	29,740
At 30 April 2020 (unaudited)	11,255	291,300	302,555
<i>Net Book Value:</i>			
At 31 October 2019	149,460	456,581	606,041
At 30 April 2020 (unaudited)	157,570	458,949	616,519

7. RIGHT OF USE ASSETS

	Buildings £
31 October 2019	475,971
Additions	-
30 April 2020 (unaudited)	475,971
<i>Depreciation</i>	
31 October 2019	114,233
Charge for the year	57,117
30 April 2020 (unaudited)	171,350
<i>Net Book Value</i>	
30 April 2020 (unaudited)	304,621
31 October 2019	361,738

8. PROPERTY AND EQUIPMENT

	Leasehold improvements £	Decommissioning Asset £	Fixtures, fittings and equipment £	Motor vehicle £	Demonstration equipment £	Total £
Cost						
31 October 2019	221,512	301,172	1,324,791	17,994	193,404	2,058,873
Additions	-	-	33,594	-	130,339	163,933
30 April 2020 (unaudited)	221,512	301,172	1,358,385	17,994	323,743	2,222,806
Depreciation						
31 October 2019	221,512	201,850	1,220,582	17,994	-	1,661,938
Charge for the year	-	15,682	45,985	-	21,583	83,250
30 April 2020 (unaudited)	221,512	217,532	1,266,567	17,994	21,583	1,745,188
Net Book Value						
30 April 2020 (unaudited)	-	83,640	91,818	-	302,160	477,618
31 October 2019	-	99,322	104,209	-	193,404	396,935

9. INVENTORY

	30 April 2020 £ Unaudited	30 April 2019 £ Unaudited	31 October 2019 £ Audited
Inventory	95,423	163,720	95,423

10. OTHER RECEIVABLES

	30 April 2020 £ Unaudited	30 April 2019 £ Unaudited	31 October 2019 £ Audited
<i>Current:</i>			
R&D tax credits receivable	924,268	747,868	602,995
EU grants receivable	106,598	106,642	106,642
Other receivables	125,955	504,024	150,009
Prepayments	276,837	-	292,352
	1,433,658	1,358,534	1,151,998

There is no significant difference between the fair value of the receivables and the values stated above.

11. CASH AND CASH EQUIVALENTS

	30 April 2020	30 April 2019	31 October 2019
	£	£	£
	Unaudited	Unaudited	Audited
Cash at bank	430,728	862,423	718,057
Bank deposits	2,083,598	1,029,826	609,878
	2,514,326	1,892,249	1,327,935

Cash at bank and bank deposits consist of cash. There is no material foreign exchange movement in respect of cash and cash equivalents. Restricted cash, not included in cash and cash equivalents, is €300,000 (30 April 2019: €300,000) held in escrow to support a bank guarantee in favour of Air Products GmbH relating to contractual obligations by the Company in relation to the Stade site in Germany.

12. ISSUED SHARE CAPITAL

	Ordinary shares Number	Share Capital £	Share premium £	Total £
	Unaudited	Unaudited	Unaudited	Unaudited
At 31 October 2019	447,987,790	447,988	47,389,424	47,837,412
Issue of shares on 18 November 2019	2,600,000	2,600	517,400	520,000
Issue of shares on 20 January 2020	5,882,353	5,882	994,118	1,000,000
Issue of shares on 22 January 2020	5,882,353	5,882	994,118	1,000,000
Issue of shares on 31 January 2020	526,316	526	99,474	100,000
Exercise of options on 13 March 2020	483,332	484	38,183	38,667
Issue of shares on 23 March 2020	14,000,000	14,000	1,386,000	1,400,000
Cost of shares issued	-	-	(317,834)	(317,834)
At 30 April 2020	477,362,144	477,362	51,100,883	51,578,245

All issued shares are fully paid.

On 11 April 2019, a £4 million convertible unsecured loan facility was signed for a period of 36 months from the signing date with a further six-month period, post the expiry date of the facility, to repay any outstanding amounts. The facility can be drawn down in £25,000 principal increments at the Company's discretion provided that,

1. the total amount drawn down in any one 60-day period does not exceed £500,000,
2. the total amount repayable does not exceed £4 million,
3. the volume weighted average price of the three previous trading days is greater than 2 pence, and
4. the headroom to allot non pre-emptive shares is 125% of the number of shares that would be required to convert at the time of the drawdown.

The draw down will be 90% of the principal amount and outside these parameters draw down will be by mutual consent. The principal amount is convertible at the lender's discretion at the lower of market price at draw down and the volume weighted average price of the three previous trading days at the time of conversion. Early redemption can be made at the request of the Company at 105% of the principal amount. In the case of a change in control or default then the draw down amounts are redeemed at 105% and 120% of the principal amount respectively. An acceptance fee of £200,000 was settled by issue of shares and a further fee of 5% is payable on draw downs. To date no draw down has been made from the facility

13. TRADE AND OTHER PAYABLES

	30 April 2020	30 April 2019	31 October 2019
	£	£	£
	Unaudited	Unaudited	Audited
<i>Current liabilities:</i>			
Trade payables	2,486	384,999	298,590
Deferred income	-	28,187	28,187
Finance lease liability	-	6,649	-
Other payables	204,794	193,700	182,096
Accruals	200,655	90,919	158,938
	407,935	704,454	667,811

14. LEASE LIABILITIES

	30 April 2020	30 April 2019	31 October 2019
	£	£	£
	Unaudited	Unaudited	Audited
Lease liabilities less than 12 months	113,431	-	113,431
Lease liabilities more than 12 months	203,579	-	259,799
	317,010	-	373,230

15. PROVISIONS

	30 April 2020	30 April 2019	31 October 2019
	£	£	£
	Unaudited	Unaudited	Audited
Decommissioning provision	301,172	301,172	301,172

The Company has set up a decommissioning provision associated with a commitment to remove the plant and equipment installed at the Stade site in Germany at a future date and for dilapidations associated with the leasehold premises at Dunsfold in the UK.

16. EVENTS AFTER THE REPORTING PERIOD

After the end of the reporting period the following shares have been issued (before expenses)

	Ordinary shares Number	Share Capital £	Share premium £	Total £
	Unaudited	Unaudited	Unaudited	Unaudited
Exercise of options on 5 June 2020	587,500	588	119,312	119,900
Exercise of options on 8 June 2020	40,000	40	6,120	6,160
Exercise of options 19 June 2020	500,000	500	103,250	103,750
Issue of shares on 3 July 2020	24,364,875	24,365	3,874,015	3,898,380
Issue of shares on 6 July 2020	71,107,125	71,107	11,306,033	11,377,140
Issue of shares on 20 July 2020	102,028,000	102,028	16,222,452	16,324,480

17. PUBLICATION OF NON-STATUTORY ACCOUNTS

The financial information contained in this interim statement does not constitute accounts as defined by the Companies Act 2006. The financial information for the preceding period is based on the statutory accounts for the year ended 31 October 2019. Those accounts, upon which the auditors issued an unqualified opinion, have been delivered to the Registrar of Companies.

Copies of the interim statement may be obtained from the Company Secretary, AFC Energy PLC, Unit 71.4 Dunsfold Park, Cranleigh, Surrey GU6 8TB, and can be accessed from the Company's website at www.afcenergy.com.