

Investor Presentation

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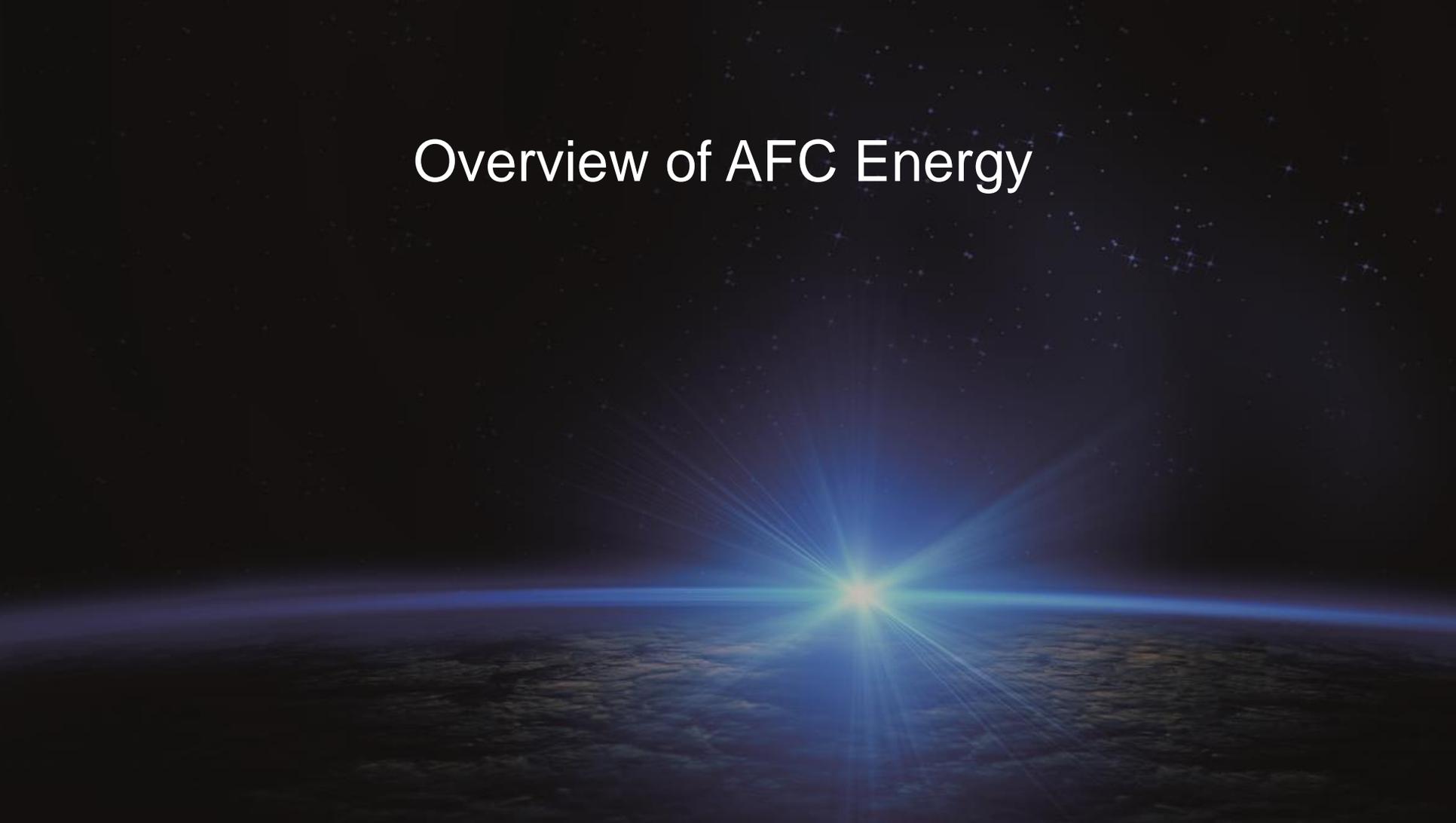
1. Overview
of AFC Energy

2. Technology
Overview

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Overview

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Overview of AFC Energy

The background of the slide features a dark, starry space scene. A bright, multi-colored starburst (yellow, orange, and blue) is positioned in the lower center, with a horizontal blue lens flare extending across the frame. The overall aesthetic is futuristic and high-tech.

Overview of AFC Energy / Overview

- AFC Energy (AIM: AFC) is the world's leading developer of industrial scale alkaline fuel cells
- AFC Energy's objective is to be a world class energy company that leverages the deployment of its low-cost, high performance alkaline fuel cell technology to the global energy market
- The Company's short-term growth and development opportunity is predicated on the successful commissioning of its pilot plant 240kW fuel cell system (KORE) in Germany, in Q4 2015
- AFC Energy continues to make substantive progress towards the development of a commercial fuel cell that competes favourably with fossil fuels/alternative energy technologies
- The current focus is:
 - Full commissioning of KORE in Germany
 - Establishment of commercial scale manufacturing capability, generating associated cost efficiencies
 - Improvement of fuel cell operating performance and design optimisation
 - Power plant development opportunities

Overview of AFC Energy / Key Investment Highlights

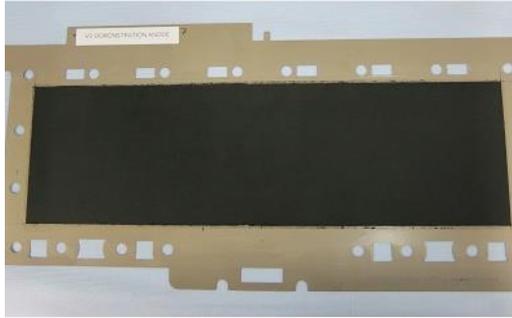
Technology Demonstration	Successfully delivered power into the German electricity grid, from the first tier of the KORE fuel cell system in Germany, in October 2015
Low Cost Fuel Cell	Alkaline fuel cells operate at low temperatures (sub 100 degrees Centigrade) and pressures, which significantly reduces material and operating costs
Multiple Revenue Opportunities	Targeting generation of revenue from the sale of balance of plant, leasing of modular fuel cell cartridges, operation and maintenance fees and dividends from the sale of power and water
Diverse Application	Power generation in the industrial sector, but ancillary applications are also being investigated
Global Scale	1 Gigawatt (1,000MW) of fuel cell capacity targeted for development by the end of 2020
Execution Ready	Seeking to appoint manufacturing services provider and value engineering strategic partner

Technology Overview

The background of the slide is a digital illustration of a planet's horizon from space. A bright, glowing blue light source is positioned on the horizon line, creating a lens flare effect with multiple rays of light extending upwards and outwards. The sky above the horizon is a deep, dark blue, filled with numerous small, distant stars. The planet's surface below the horizon is dark and textured, suggesting a rocky or metallic terrain.

Technology Overview / Components

3 major components of the 240 kW KORE system



Electrodes (x4848)

Electrodes: produce the power



Cartridges (x24)

Cartridges: house 101 fuel cells, each with 2 electrodes – one anode and one cathode



Balance of Plant (x1)

Balance of Plant: regulates fluid (potassium hydroxide electrolyte) and gas (hydrogen and oxygen) supply and management, superstructure, safety systems, C&E, integration into customer site

Technology Overview / Manufacturing

Automated extrusion of electrode layers



Automated electrode stacking



Technology Overview / AFC's Competitive Advantage

- Simple
- 45+ families of patents covering key technology
- Basic modular design
- Standard industrial materials
- Low-cost scale-up to automated manufacturing
- Designed for reuse or recycling
- Ease of O&M

AFC KORE module, both as a 3D model and in assembly



Technology Overview / Project POWER-UP

- Project POWER-UP will prove the ability of AFC Energy's alkaline fuel cell system to deliver the technical performance, longevity and stability of power output that commercial end-users demand
- In December 2014, announced 11 key milestones for progression in 2015. Delivered 10 of 11 to date
- First power produced from the KORE system using one fuel cell cartridge on 31 July 2015 as scheduled
- Achieved effective operation of one entire tier (8 cartridges) of the KORE system at maximum temporary output of 40kW, in October 2015
- Fuel cell system has been thoroughly reviewed and signed off by German engineers for safety and robustness of design

Key Highlights:

- First power generation achieved from the KORE system in July 2015
- Agreed PPA for the sale of power in July; successfully delivered first power into the grid, in Stade, Germany, in October 2015
- Fast tracking the date for demonstration of 240kW KORE system, to December 2015

Business Overview

The background of the slide is a dark, starry space scene. A bright, multi-colored starburst (yellow, orange, and blue) is positioned in the lower center, with numerous light rays emanating from it. A thin, glowing blue horizontal line stretches across the middle of the image, resembling a horizon or a celestial equator. The overall color palette is dominated by deep blues, blacks, and the vibrant colors of the starburst.

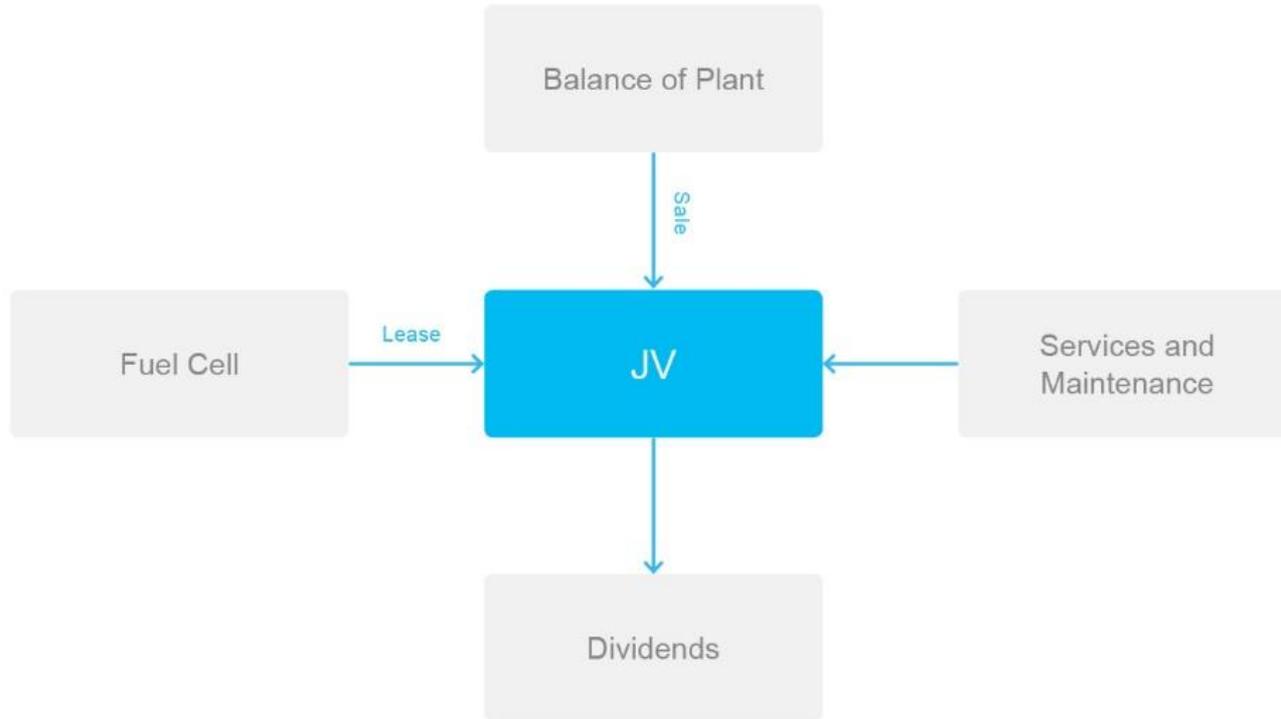
Business Overview / Business Model

- Business model is to install, own, operate and maintain alkaline fuel cell power projects
- AFC also seeks to be a fuel cell power provider and will target joint ventures, in which AFC aligns its interests with those of its clients, by having “skin in the game” for power projects
- AFC Energy will focus on what it is good at: developing the technology for enhanced fuel cell operational performance, and will therefore outsource non-core activities such as manufacturing and engineering
- Ongoing focus on regional commercial plays where market dynamics accelerate fuel cell deployment – particularly targeting “early adopters”, as costs remain towards the top of the cost curve
- Aim to move progressively down the supply cost curve, as technology is developed further, increased manufacturing economies of scale are achieved, power project scale is increased and design improvement opportunities are exploited
- Fuel cell cartridges have a modular design which helps standardise manufacturing and assembly processes, streamline procurement, disassembly and recycling, and simplify power plant construction, operation and maintenance

Business Overview / Commercial Pipeline

- In April 2015, AFC executed an Memorandum of Understanding with Dubai Carbon Centre of Excellence.
Majority shareholders: Emirates National Oil Company, Dubai Electricity and Water Authority, Dubai Aluminium
- Aim is to assess deployment of AFC fuel cells across several infrastructure projects, including: “The World” Development by Nakheel, Al Maktoum International Airport and Dubai Expo 2020
- Heads of Agreement reached with Thailand’s largest industrial gas company, Bangkok Industrial Gas, to deploy fuel cells into the Rayong region. Initial programme to be delivered across 3 phases, totalling 10MW
- In March 2015, AFC Energy executed its first landmark Joint Development Agreement (JDA) with Samyoung Corporation and Chang Shin Chemical in South Korea for a cumulative 50MW project, across two phases
- Three parties to engage in joint venture agreement with participating equity stakes planned as follows:
 - AFC Energy: 40%
 - Samyoung : 45%
 - Chang Shin: 15%
- Aim is for Samyoung Corporation to provide EPC and project management services, with Chang Shin to provide hydrogen, land and logistical support on site for deployment of the project

Business Overview / JV Model



Conclusion

A cosmic scene featuring a bright starburst or lens flare effect centered on the horizon of a planet. The starburst is composed of numerous sharp, radiating lines of light in shades of blue and cyan, emanating from a central point. The planet's surface is visible below the horizon, showing a dark, textured landscape. The sky above is a deep, dark blue, filled with numerous small, distant stars. The overall composition is symmetrical and evokes a sense of vastness and finality.

Conclusion

- As the Company “leaves the lab” and demonstrates its ability to generate clean energy “in the field”, the value proposition is becoming increasingly well recognised by market commentators
- The Company is targeting 1 Gigawatt (1,000MW) of AFC Energy fuel cell capacity, either installed, or under development, by the end of 2020
- Following full commissioning of the 240 kW Stade Project (targeting December 2015), the focus remains on procuring safe, reliable and cost effective alkaline fuel cell power generation technology
- Long term operational data from the Stade Project will demonstrate commercial longevity, underpin an order book, and in turn support the identification of an optimal solution for manufacturing and recycling
- Targeting partners who are most likely to be “early adopters” of the technology, within diversified, international markets. This will help to demonstrate commercial proof of concept, and underpin a long term sustainable business model



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