



Annual General Meeting

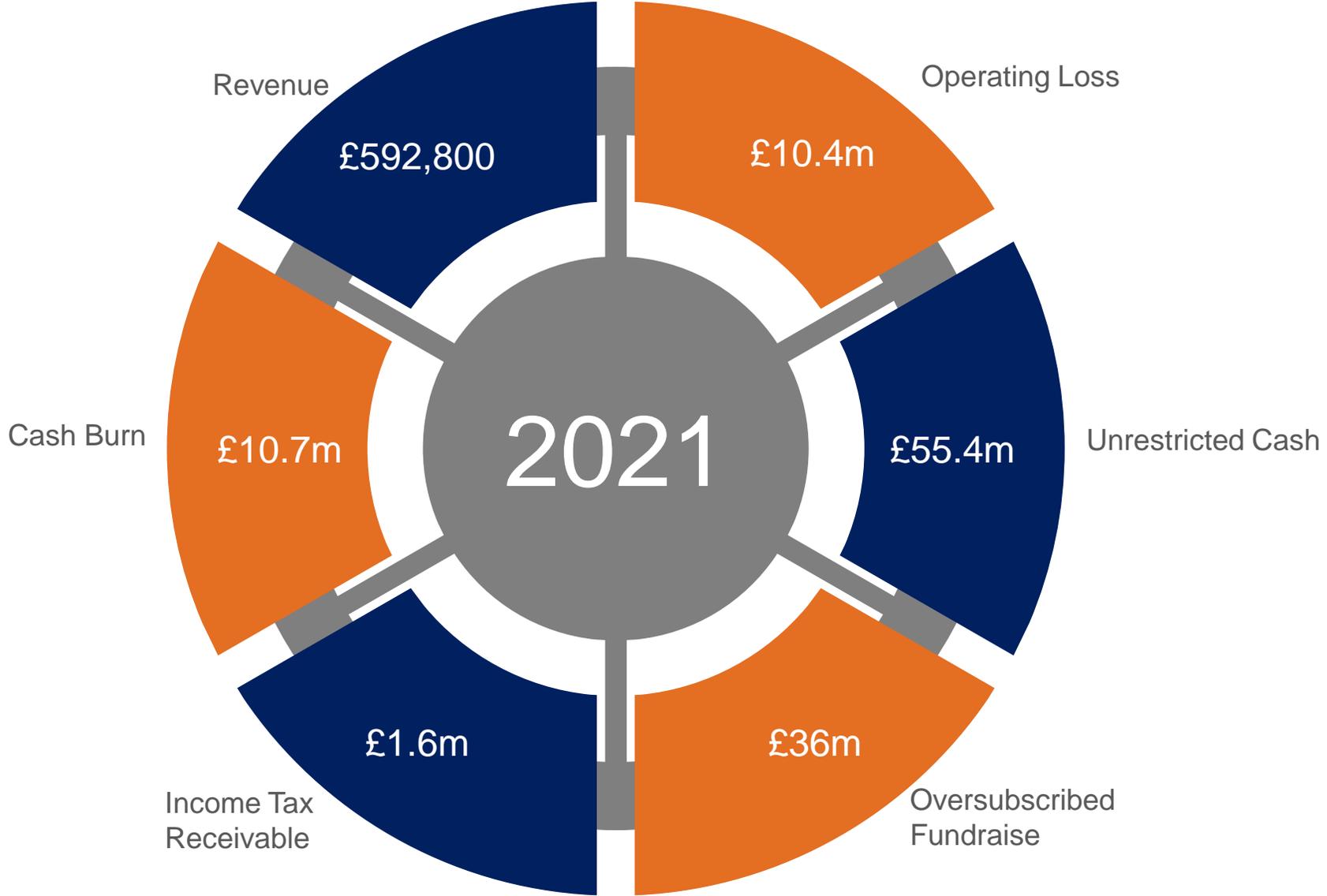
April 2022

THE WORLD'S LEADING ALKALINE FUEL CELL BUSINESS

- Market leading alkaline fuel cell technology
- Growing list of international partners
- Field demonstrated technology
- Highly skilled team of 85+, growing to >150
- Strong balance sheet
- Growing order book



Financial Highlights



KEY ADDRESSABLE MARKETS

TODAY: STATIONARY



RAPID
EV CHARGING

CONSTRUCTION



TEMPORARY POWER

FUTURE TARGET MARKETS: STATIONARY AND MOBILE



PORTS

MARITIME



DATA CENTRES



RAIL

Three Pillar Technology Strategy

Fuel Conversion & Filtration Technologies



Ammonia Cracking
[$2\text{NH}_3 \rightarrow 3\text{H}_2 + \text{N}_2$]



Steam Methanol Reforming
[$\text{CH}_3\text{OH} + \text{H}_2\text{O} \rightarrow 3\text{H}_2 + \text{CO}_2$]



Hydrogen Purification & Compression



Fuel Cell Technologies



Solid Polymer & Liquid FC



Ionic Polymers
[hydrocarbon, non-PFSA]



Integrated Energy Solutions



Power Tower (10kW + Battery)



Stationary, Temporary & Back-up Power configurations (40kW – 0.5MW)



Marine Applications > 1MW

Commercial Highlights

Contracted Pipeline
(at March 2022)

£5m

Progressing Global Distributors

3



EV Charging

- First £4m “S” Series fuel cell order placed

Data Centre

- Marketing of AFC Energy’s fuel cell system to ABB clients

Maritime

- Design collaboration for ship propulsion and aux power



Temporary Power

- Largest Caterpillar diesel generator dealer in the world
- MOU for distributor agreement in Saudi and MENA



Micro Grid

- Microgrid utilising electrolysers and fuel cells
- Engaging on technology switch to S Series fuel cell
- Site wide civils delayed – expected deployment 2023



Urban-Air Port^{ltd}

EV Charging

- Initial lease of fuel cell system - Coventry (April 2022)
- Collaboration for remote EV charging (incl. VTOL)



EV Charging

- Successful lease of system for Season 1
- Repeat lease order for Season 2
- High profile enquiries stemming from Extreme E p’ship
- Reviewing initiatives for future seasons



Maritime

- AiP for first alkaline fuel cell & Ammonia cracker design
- Engaging with Vard clients now for system integration

ABB Partnership: Highlights

Corporate



- Corner stoned fundraise in April 2021
- High level corporate engagement with Management Team
- Quality of engagement has led to extension of partnership to other verticals



EV Charging



- Successful integration of AFC Energy fuel cell and ABB charger in Europe
- First commercial order for 200kW "S" Series Fuel Cell for EV Charging
- First system deployment expected 2023
- 80 Countries of current operation (EV)



Data Centre



- Engaging with ABB data centre global leads on market opportunity
- Direct customer pitching of fuel cell systems (alongside ABB)
- Marketing of Fuel Cell platform by ABB at conferences and client brochures



Maritime



- Introduction to Vard for Zero Coaster programme
- Recognition of strong market in ammonia / methanol propulsion from fuel cells
- Direct engagement with ABB partners for fuel cell and ammonia cracker design



Construction Industry Highlights



- Plant Hire Oriented Business Model
- First Deployments adopt Leasing Model
- Power focus 10 – 100 kW/Unit



- First Spanish deployment – June 22
- Strong Interest in Flex Fuel capability
- Assessing next deployment sites



- Power and H2 fuel scope of supply
- Strong relationships with Plant Hires
- Site regulator consultations in 2021



Operational Highlights

Head Count

87
(as of 6 April 2022)

Technology Robustness

- ✓ Successful Field Operation in Extreme Conditions
 - Desert
 - Arctic
 - Rain
 - Humidity

Technology Advantage

- ✓ Implementing Flex Fuel Strategy
 - Hydrogen
 - Ammonia
 - Methanol

Technology Scale-up

- ✓ Investment in Manufacturing Facilities
- ✓ Investment in Supply Chain for new "S" Series
- ✓ Concept development for membrane scale up

Technology Diversification

- ✓ Delivered first "S" Series Fuel Cell Stack
- ✓ Hybrid Fuel Cell (HFC) technology Introduction
- ✓ Receipt of first commercial ammonia cracker

Technology Relevance

- ✓ Partner engagement on product roadmap
- ✓ Concept design of maritime application
- ✓ Industry collaboration for construction sites



Usage Cases

100% CLEAN
ENERGY
EXTREME.LIVE

DO NOT OVERSTOW

AFCU2100012
2.9m
9'6"

AFC Energy

EXTREME.E

Power Tower Product Series



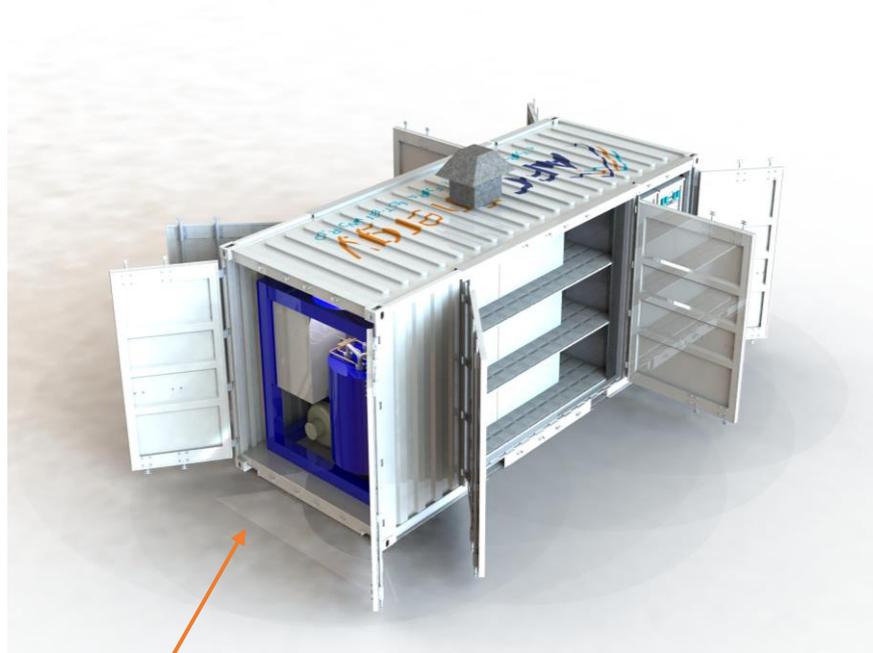
10kW Power Tower EV with integrated Type-2 AC Charger



10kW Power Tower – 3 Phase AC Output

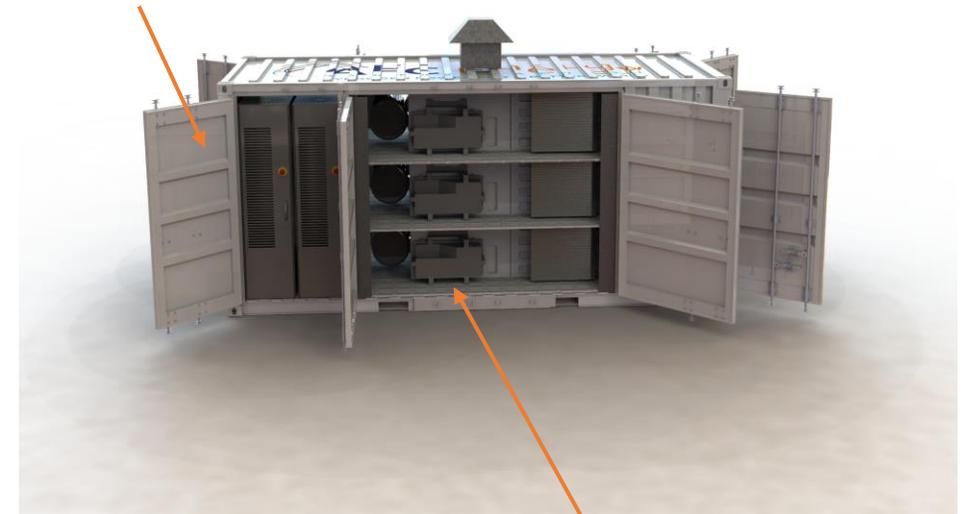
200kW S-Series Fuel Cell System

- Strategic Partnership between AFC Energy & ABB to support the accelerated development of a solid membrane based alkaline fuel cell system
- Incorporating ABB DCDC Power regulation to interface with a High Voltage DC Bus (>1kV)
- Ammonia Fueled with integrated controls & telemetry



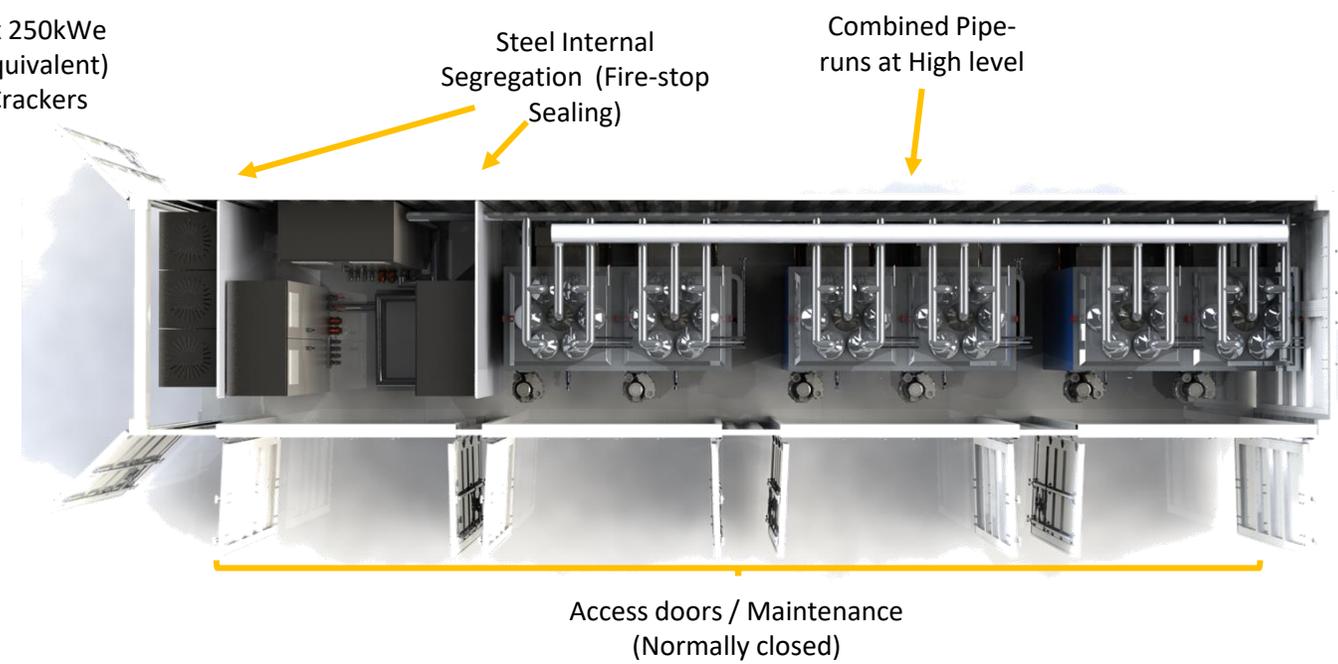
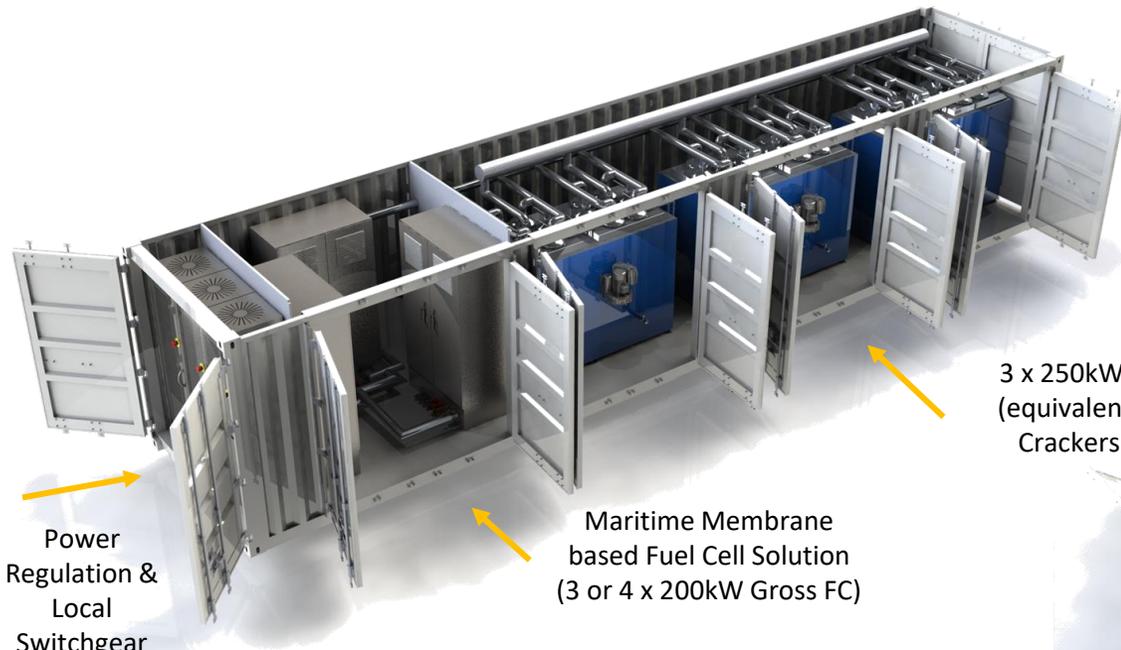
Ammonia Cracker

ABB Power regulation
(DCDC) and
switchgear



200kW Fuel Cell Modules
(Solid Membrane)

Marinised Container Solution





Facilities Upgrades

100% CLEAN
ENERGY

DO NOT OVERSTOW

AFCU2100012
2.9m
9'6"

AFC Energy

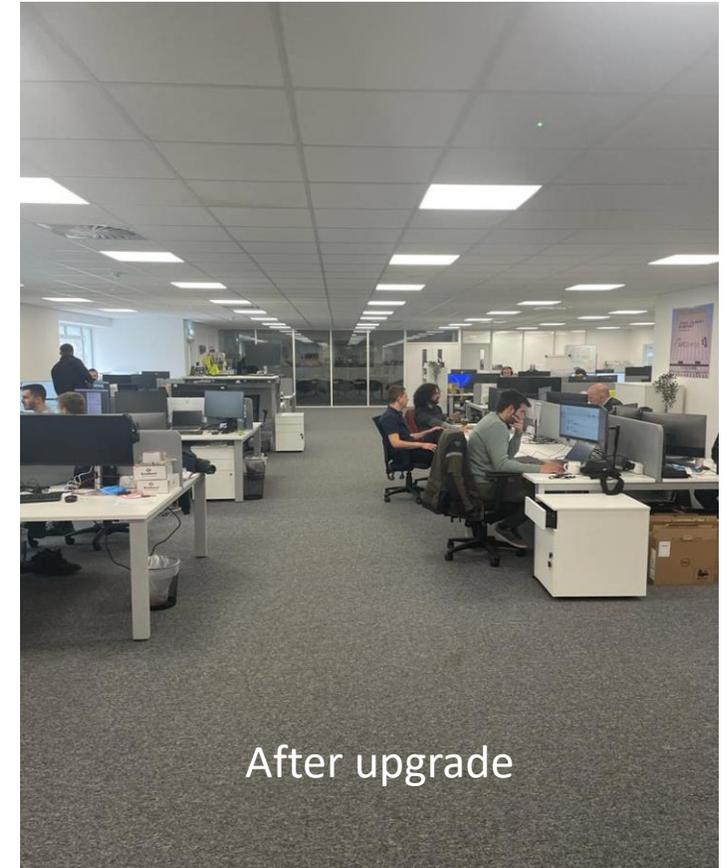
EXTREME.E

Facilities Upgrades

Office Space

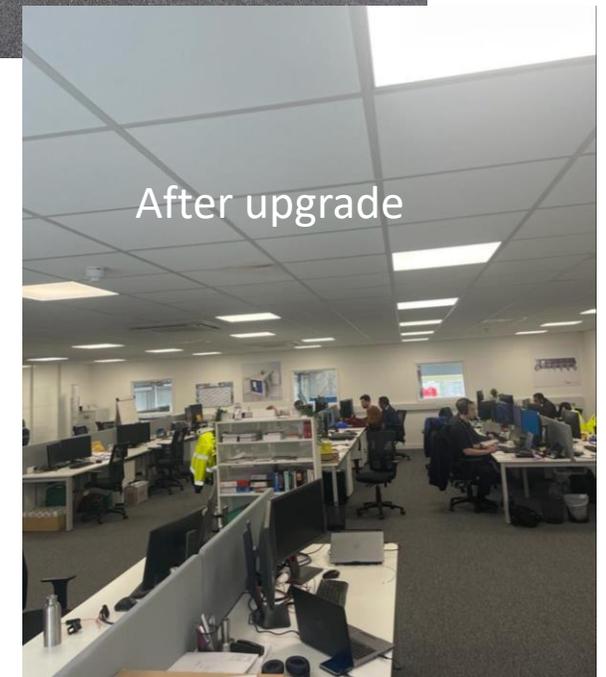
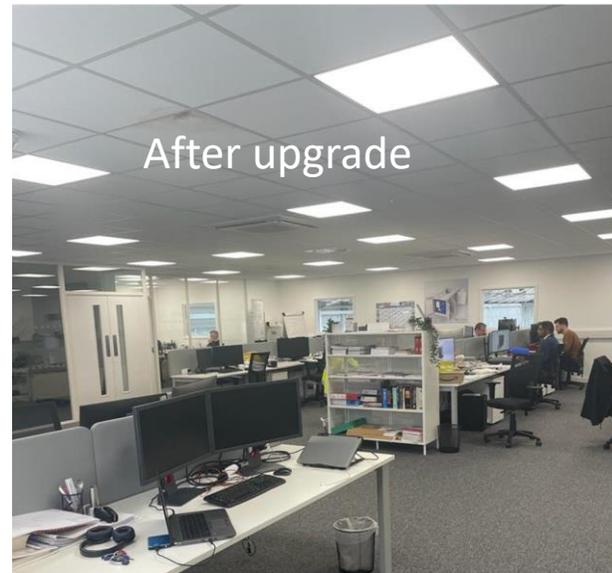
Growing Staff Nos.

Centralisation of function & proximity to manufacturing space



Facilities Upgrades

Office Space



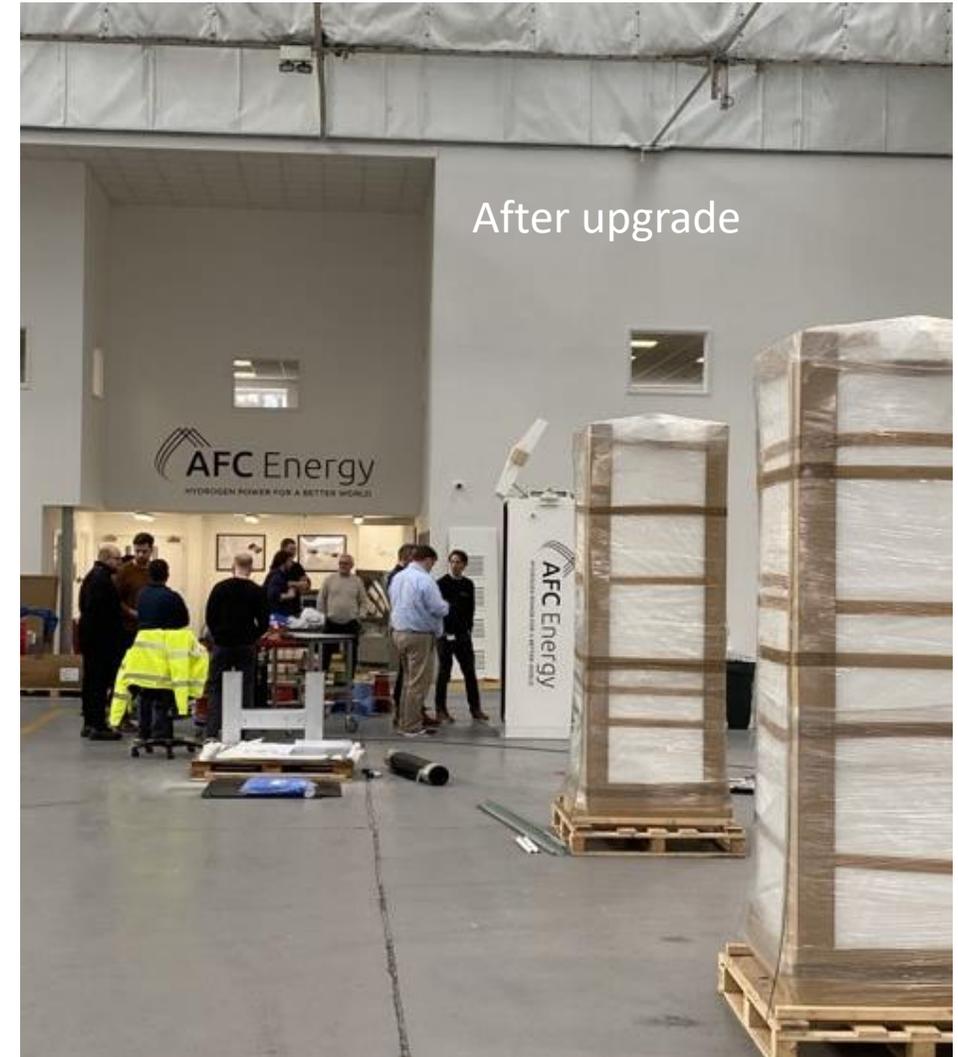
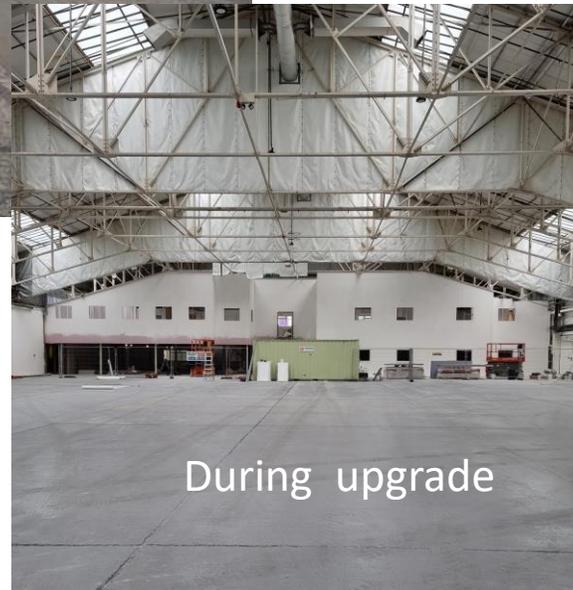
Facilities Upgrades

Electronics Workshop



Facilities Upgrades

Hangar & Manufacturing



Facilities Upgrades

System Testing & Validation Area





Fuel Cell Technology

100% CLEAN
ENERGY
EXTREME.LIVE

DO NOT OVERSTOW

AFCS
U4
210001
2
2.9m
9'6"

AFC Energy

EXTREME.E

Fuel Cell Technology Products

Core Stack Technology



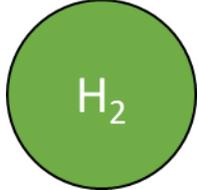
In-House
Core Stack Platforms

Fuel Cell Technology Products

Core Stack Technology

S-Series,
Flex Fueled Electrodes

**“S” Series Electrodes
Flex Fuel Capability**



Upcoming

Upcoming

Fuel Cell Technology Products

Core Stack Technology

S-Series,
Flex Fueled Electrodes

**“Hybrid”
Stack Platforms**
“One Platform, Three Fuels”

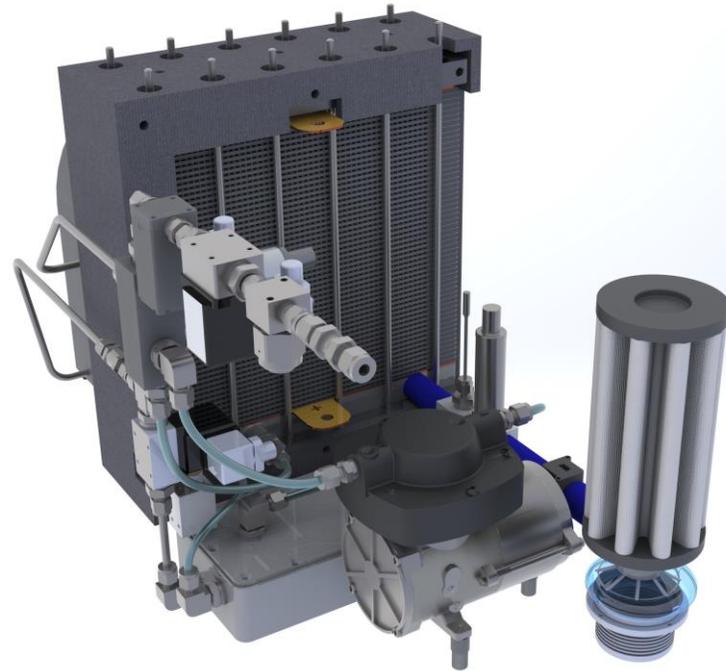


Fuel Cell Technology Products

Core Stack Technology

S-Series,
Flex Fueled Electrodes

Simple, Tightly Packaged
Balance of Plant



**Efficient & Compact
Balance of Plant**

Fuel Cell Technology Products

Core Stack Technology

S-Series,
Flex Fueled Electrodes

Simple, Tightly Packaged
Balance of Plant



Simple Hook-ups
& Control Interface

Fuel Cell Technology Products

Core Stack Technology

S-Series,
Flex Fueled Electrodes

Simple, Tightly Packaged
Balance of Plant

Modular Fuel Cell Units



**Modular Multi-Unit
Configurations**

Fuel Cell Technology Products

Core Stack Technology

S-Series,
Flex Fueled Electrodes

Simple, Tightly Packaged
Balance of Plant

Modular Fuel Cell Units

Scalable Power Units



**Connected, Multi-Units
deliver Scalable Power**

Fuel Cell Technology Products

Core Stack Technology

S-Series,
Flex Fueled Electrodes

Simple, Tightly Packaged
Balance of Plant

Modular Fuel Cell Units

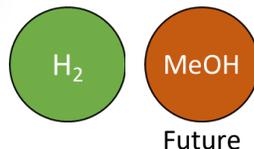
Scalable Power Units



**Compact Footprint
Easy Installation**

Fuel Cell Technology Products

10kW Power Tower



- Outdoor enclosures
 - Compliant with a broad range of outdoor environments
- Single Unit Power up to 10kW
 - Default Configuration: 60V DC (default option)
 - Option : 230V AC (50Hz) *
 - Option : 415V AC 3-Phase *
 - Option : 600-800V DC
 - Option : Type 2 EV AC Charger
- Integrated 6.4kWh Lithium-Ion Battery
 - Larger capacity external battery arrays possible
- Multi-Unit Tower installation for increased power output (>10kW)
- Flex Fuel Capability
 - Hydrogen
 - Methanol Reformer capable (Future Option)

**AC connections are designed as off-grid Island Mode. Grid-Tie / G99/ Synchronisation would require additional supplementary equipment.*



100% CLEAN
ENERGY
EXTREME.LIVE

AFC Energy
Flexible Fuelling

DO NOT OVERSTOW

AFCU 210001

2

2.9m
9'6"

AFC Energy

EXTREME.E

FLEXIBLE FUELLING:

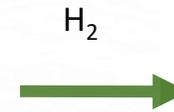
Alternative fuels to Hydrogen

Hydrogen Fuel Cell solution running from compressed Hydrogen is a simple and elegant solution

However, Hydrogen is not necessarily the ideal fuel for all customers



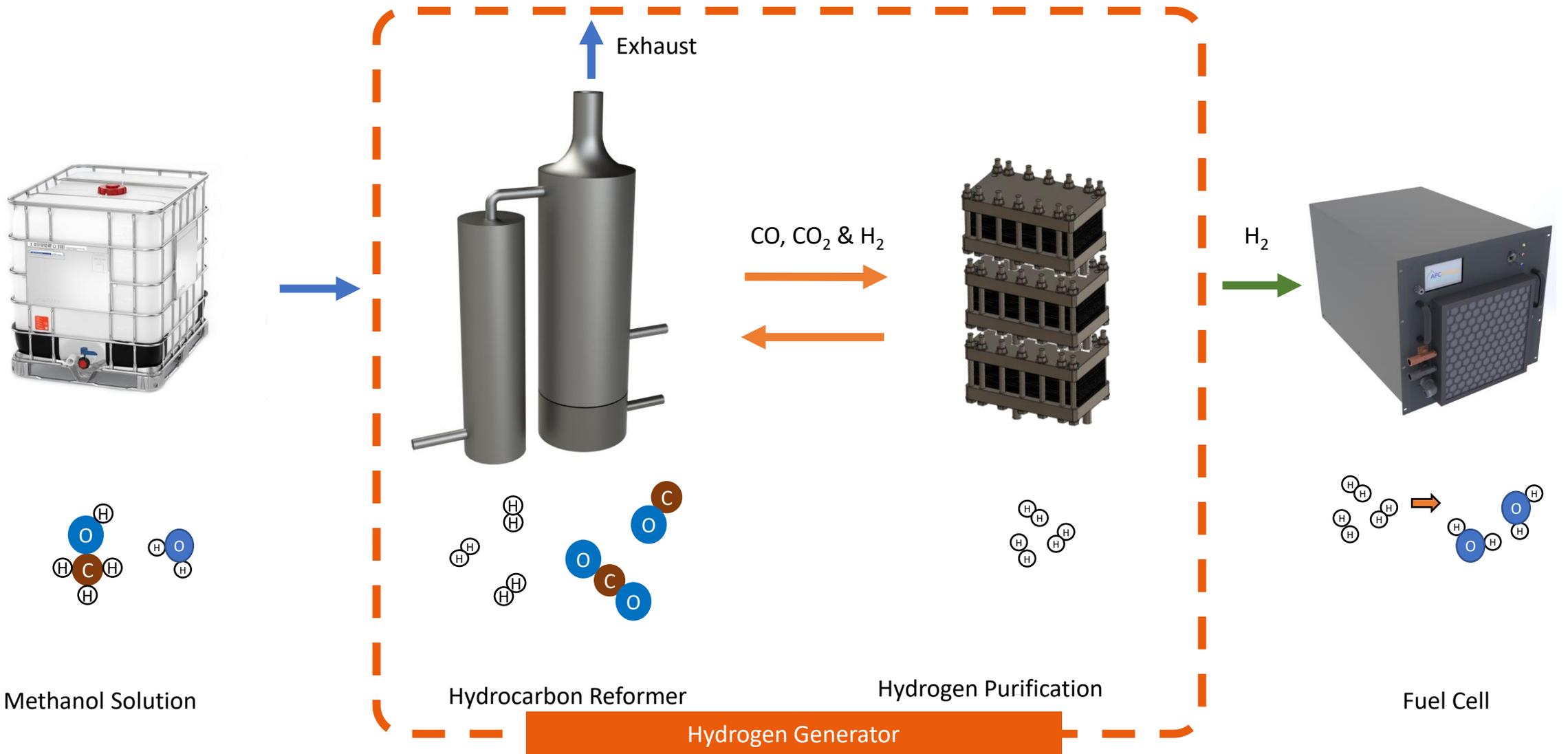
Hydrogen Multi-Cylinder Pallet (MCP)



Fuel Cell

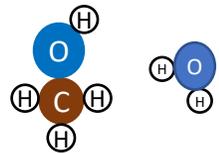
FLEXIBLE FUELLING : METHANOL

Sustainable and Readily Available Hydrocarbon Fuels

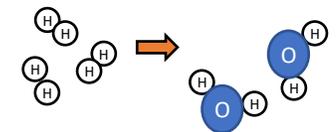


FLEXIBLE FUELLING : METHANOL

Sustainable and Readily Available Hydrocarbon Fuels



Methanol Solution

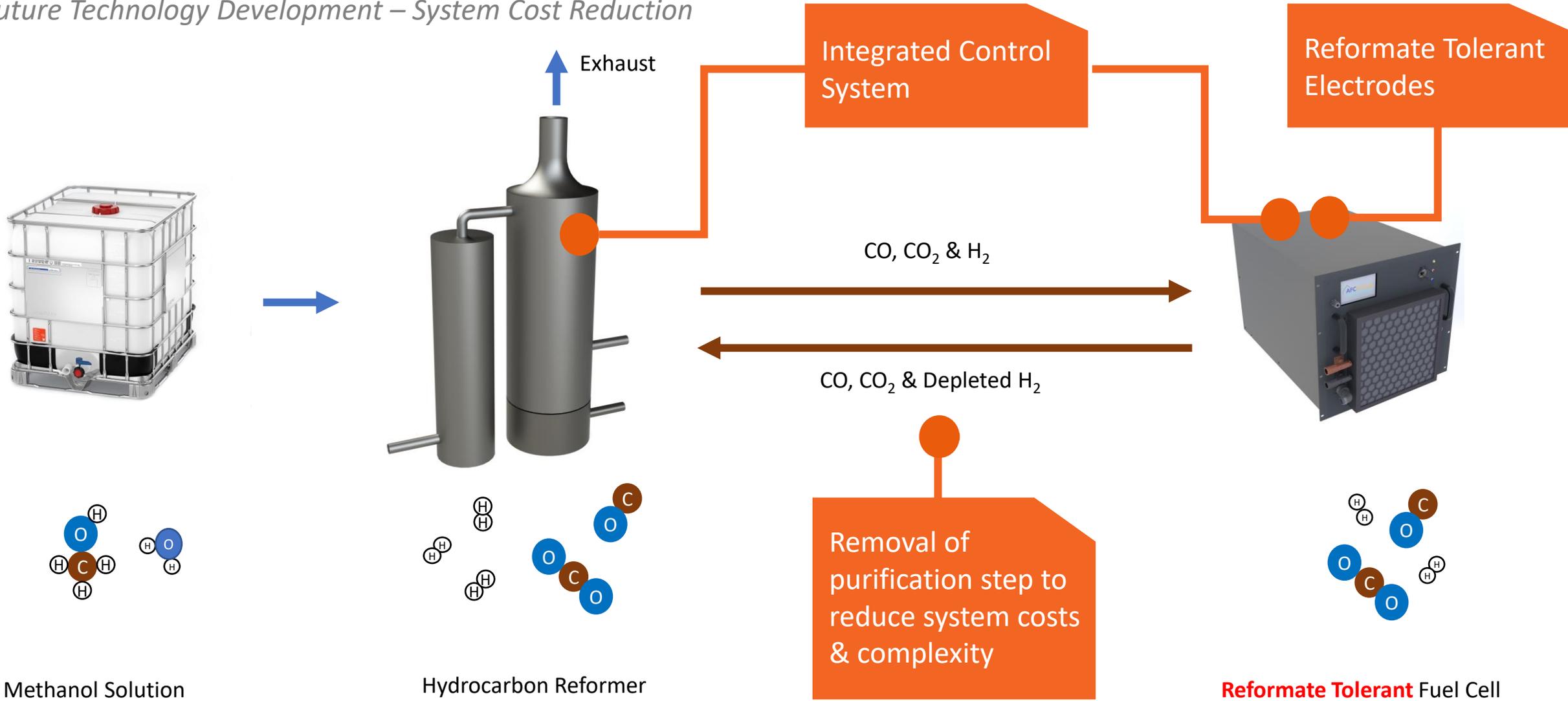


Fuel Cell

Hydrogen Generator

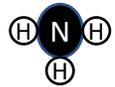
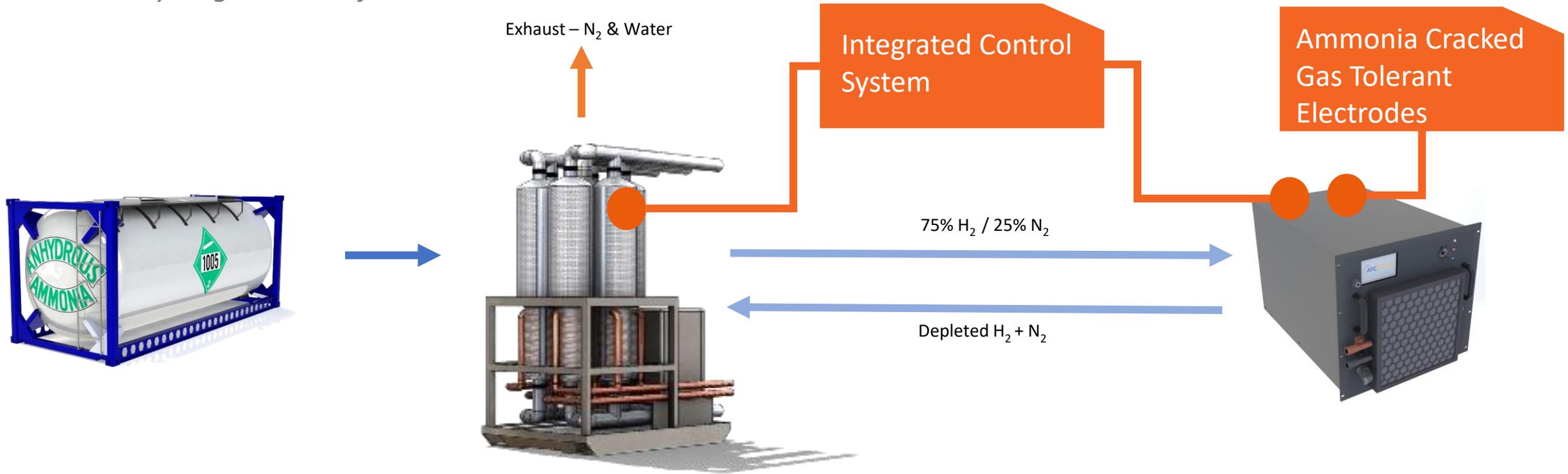
FLEXIBLE FUELLING : METHANOL

Future Technology Development – System Cost Reduction

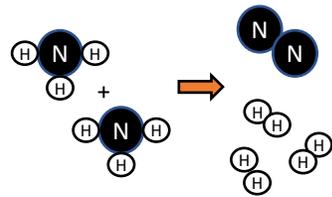


AMMONIA FUELLING:

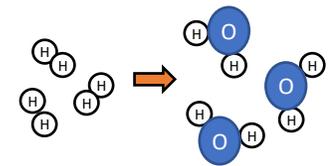
Alternative Hydrogen Carrier fuels



Bulk Liquid Ammonia



Cracker



Fuel Cell

FLEXIBLE FUELLING

AFC Energy Validation of Fuel Processing Technology

Methanol Reforming



Ammonia Cracking





AFC Energy
EXTREME.LIVE

Outlook

100% CLEAN
ENERGY

DO NOT OVERSTOW

AFCU 210001
2
2.9m
9'6"

AFC Energy

EXTREME.E

Outlook

- ❑ Environmental and Geopolitical drivers highlighting need for clean energy diversification:
 - ❑ Hydrogen receiving strong support
- ❑ Regulatory and fiscal support through removal of Red Diesel subsidy in the UK
- ❑ “S” Series Hybrid Fuel Cell systems delivered to customer sites
- ❑ ABB collaboration to deliver first stage High Power EV charger by end of calendar year
- ❑ Upstream Hydrogen fuelling technologies currently under development
- ❑ Well positioned to capitalise in diesel displacement within the next decade





Questions?

www.afcenergy.com

DISCLAIMER

These presentation slides and the accompanying verbal presentation (the “Presentation Materials”) do not constitute or form part of any offer for sale or subscription or any solicitation for any offer to buy or subscribe for any securities. While all reasonable care has been taken to ensure that the facts stated in these Presentation Materials are accurate and that any forecasts, opinions and expectations contained therein are fair and reasonable, nor its subsidiaries nor any of their respective directors, officers, employees, agents or advisers makes any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the Presentation Materials or opinions contained therein. Each recipient of these Presentation Materials must make its own investigation and assessment of the matters contained therein.

Some or all of the information in the Presentation Materials, or the fact that discussions or negotiations are taking place concerning a possible investment in the Company or any of the terms, conditions or other facts relating to a possible investment may constitute inside information relating to the securities of the Company within the meaning of the insider dealing provisions of the Criminal Justice Act 1993 and/or the Market Abuse Regulation (“MAR”). By accepting the Presentation Materials you (i) acknowledge that any inside information disclosed to you in the Presentation Materials is being received in a Market Sounding (as defined in MAR) in accordance with Article 11 of MAR and (ii) agree not to make use of any of this inside information for the purpose of dealing, or of counselling or procuring any other person to deal, in the securities of the Company.

You are prohibited from using, or attempting to use, the inside information: by acquiring or disposing of, for your own account or for the account of a third party, directly or indirectly, financial instruments relating to that information; or by cancelling or amending an order which has already been placed concerning a financial instrument to which the information relates.

No representation or warranty is given, and no responsibility or liability is accepted, as to the achievement or reasonableness of any future projections or the assumptions underlying them, or any forecasts, estimates, or statements as to prospects contained or referred to in these Presentation Materials. No responsibility or liability whatsoever is accepted by the Company for any loss howsoever arising from any use of, or in connection with, these Presentation Materials or their contents or otherwise arising in connection therewith. Nothing herein shall limit the liability of any person for their own fraud. In issuing these presentation materials, the Company does not undertake any obligation to update or to correct any omissions or inaccuracies which may become apparent in these presentation materials.

These Presentation Materials contains forward-looking statements and the Company’s proposed strategy, plans and objectives. Such statements are generally identifiable by the terminology used, such as “may”, “will”, “could”, “should”, “would”, “anticipate”, “believe”, “intend”, “expect”, “plan”, “estimate”, “budget”, “outlook”

or other similar wording. By its very nature, such forward-looking information requires the Company to make assumptions that may not materialise or that may not be accurate. Such forward-looking statements involve known and unknown risks, uncertainties and other important factors beyond the control of the Company that could cause the actual performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. No warranty is provided over the continuity of Government policy in support of the Company’s product range, nor the fact that the Company will indeed confirm system sales in the timeline provided or indeed at all. Such factors include, but are not limited to: general economic, market and business conditions, as well as specific factors including the success of the Company’s research and development and commercialisation strategies, the uncertainties related to regulatory clearance and the acceptance of the Group’s products by customers.

These Presentation Materials are being supplied to you for your own information and may not be distributed, published, reproduced or otherwise made available to any other person, in whole or in part, for any purposes whatsoever. In particular, they should not be distributed to or otherwise made available to persons with addresses in Canada, Australia, Japan, the Republic of Ireland, the Republic of South Africa or the United States, its territories or possessions or in any other country outside the United Kingdom where such distribution or availability may lead to a breach of any law or regulatory requirements.

The distribution of these Presentation Materials in other jurisdictions may be restricted by law, and persons into whose possession these Presentation Materials come should inform themselves about, and observe, any such restrictions. Any failure to comply with these restrictions may constitute a violation of the laws of the relevant jurisdiction. The Company’s securities have not been and will not be registered under the United States Securities Act of 1933, as amended (the “Securities Act”), or the securities laws of any state or other jurisdiction of the United States and may not be offered and sold in the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act. There will be no public offering of Company Securities in the United States.

The content of these Presentation Materials has not been approved by an authorised person within the meaning of the Financial Services and Markets Act 2000 (“FSMA”). Reliance on the Presentation Materials for the purpose of engaging in any investment activity may expose an individual to a significant risk of losing all of the property or other assets invested. Any person who is in any doubt about the subject matter to which this presentation relates should consult a person duly authorised for the purposes of FSMA who specialises in the acquisition of shares and other securities.