

The Markets for De-centralised Ammonia Cracking Solutions

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15th November 2023



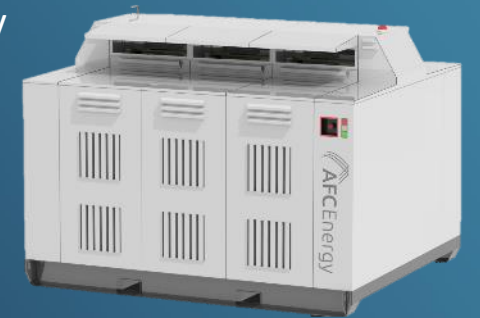
20th
Anniversary
AEA ANNUAL CONFERENCE

Who are we and what's our mission?



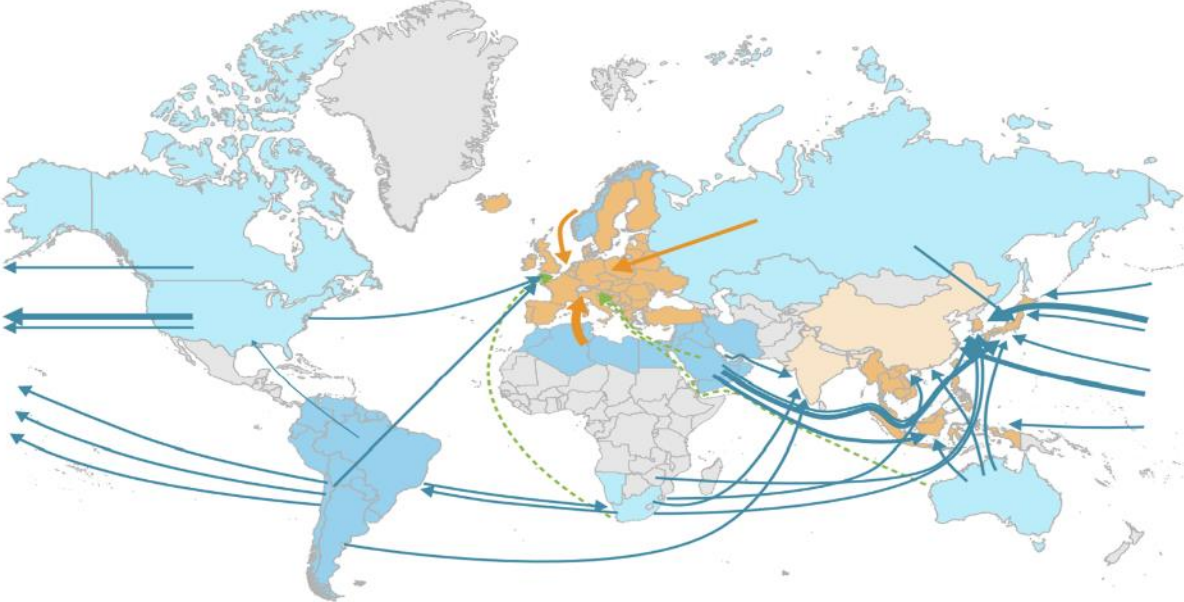
#ditch.diesel.this.decade

- 130+ highly skilled & motivated engineers and technical staff
- Ruggedised Zero Emission Hydrogen Power Generation Products (2 – 200kW)
- Diesel Generator replacements for construction
- Millions invested in facilities & infrastructure
- AIM listed (London Stock Exchange)
- Carrier Fuel Conversion Technology



Predicted Global Hydrogen Movements

Major flows of hydrogen and derivatives, million tons hydrogen equivalent in 2050



Net trade flows, million tons hydrogen per annum

Region consumes more than it produces	> 20	Mostly shipped
Neutral	10-20	Mostly piped
Region produces more than it consumes	5-10	Alternative potential flows if optimal sources constrained
	1-5	

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Germany's Uniper, E.ON to import green ammonia from Canada

Reuters

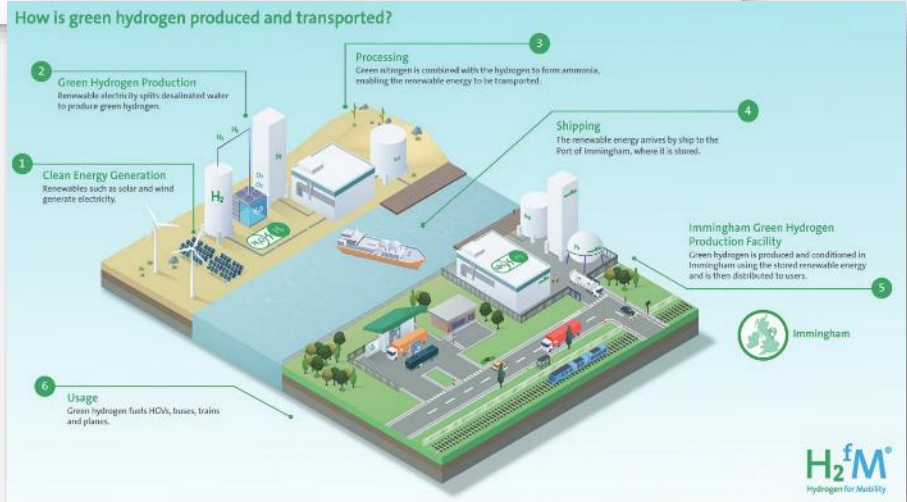
Port of Rotterdam Shipping Doing business Explore the port About us News

Home News Overview OCI expands import terminal for (green) ammonia

Energy transition

OCI expands import terminal for (green) ammonia

15 June 2022



What we do - Hydrogen from Ammonia



Localised Industrial users of Hydrogen

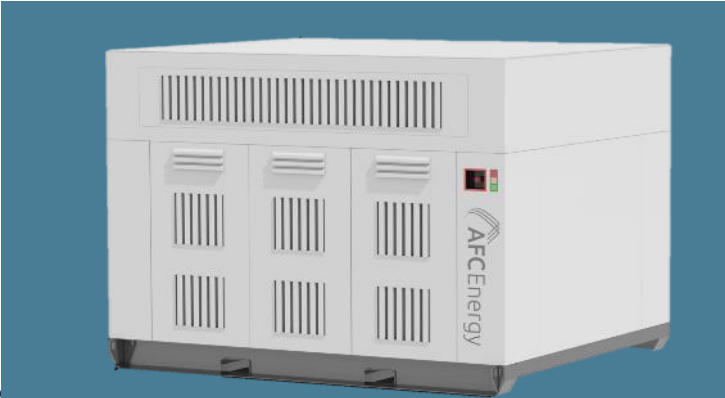
Modular Ammonia Cracker



Scale : 1 - 200Kg / Hr
Ammonia



Rapidly Deployable Hydrogen Truck Refuelling Hubs

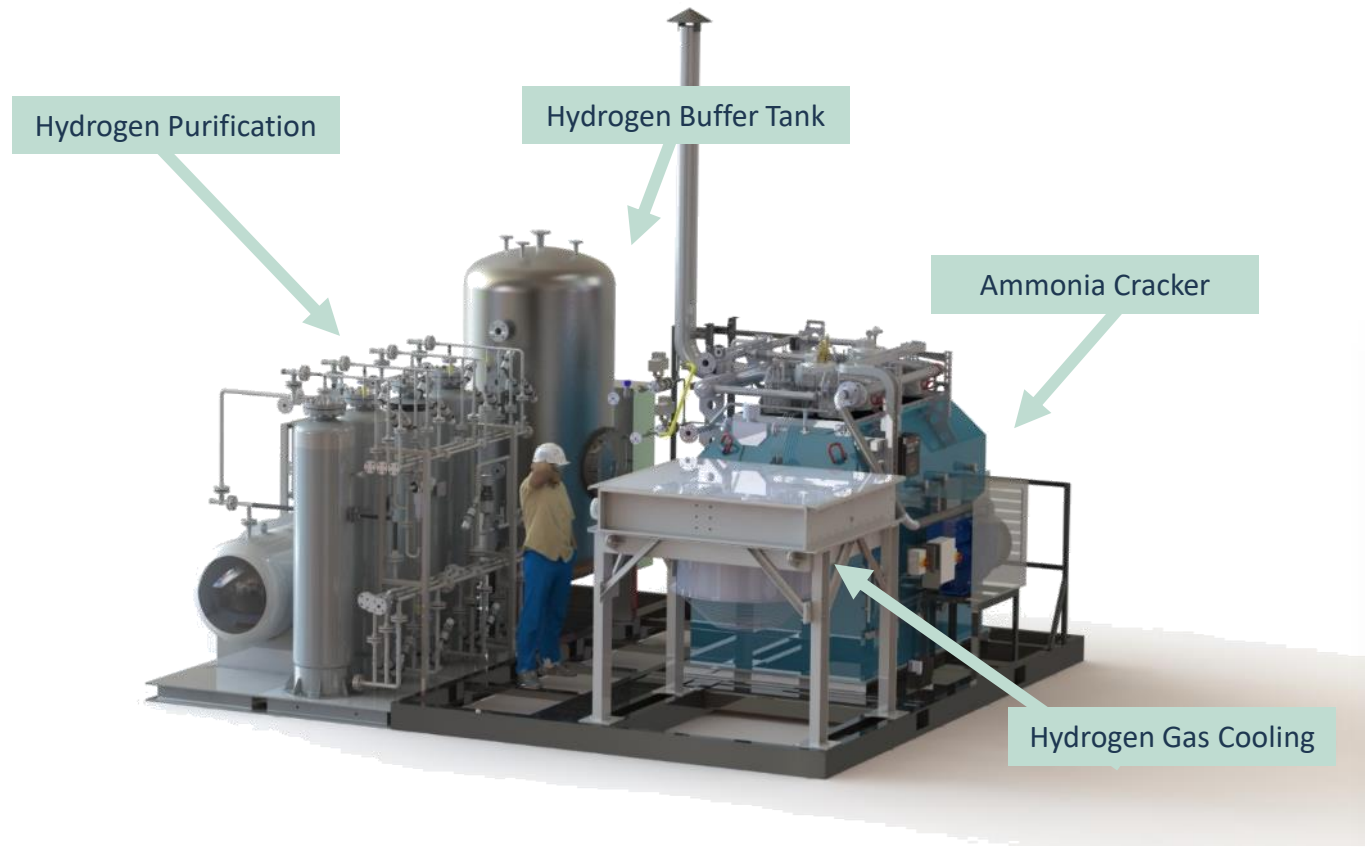


Integrated Ammonia Cracker & Hydrogen Fuel Cell

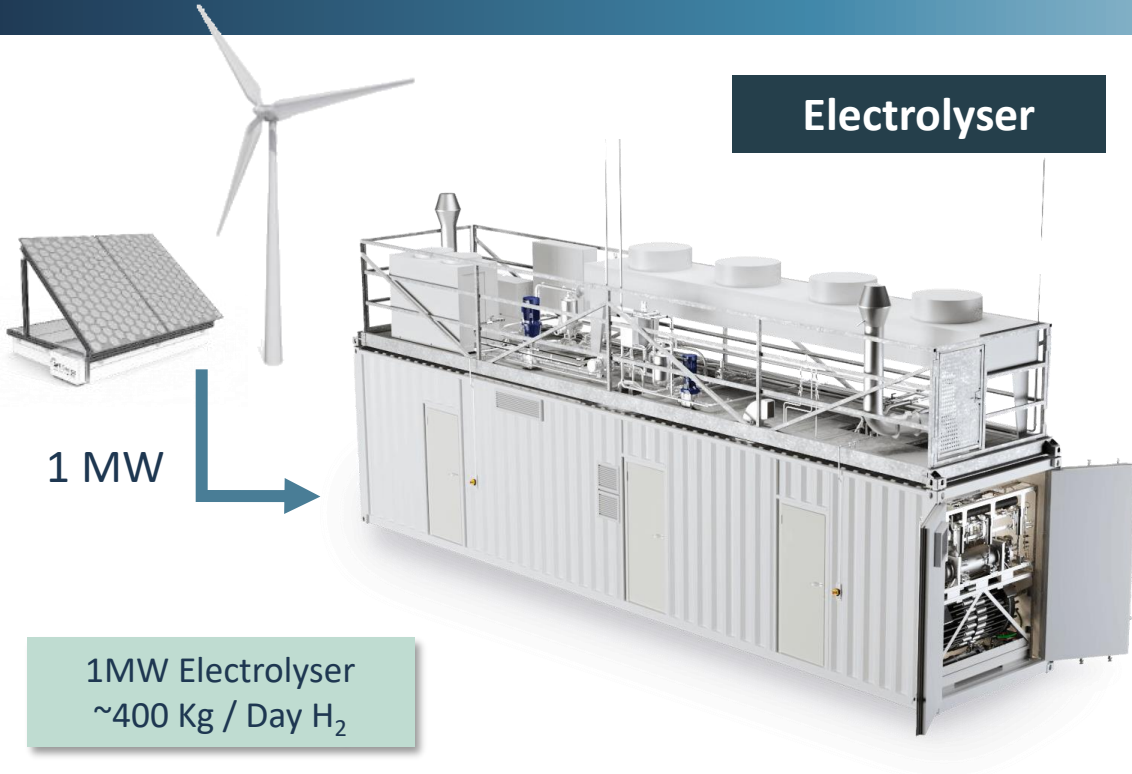


Low Emissions Carbon free Diesel replacement fuel

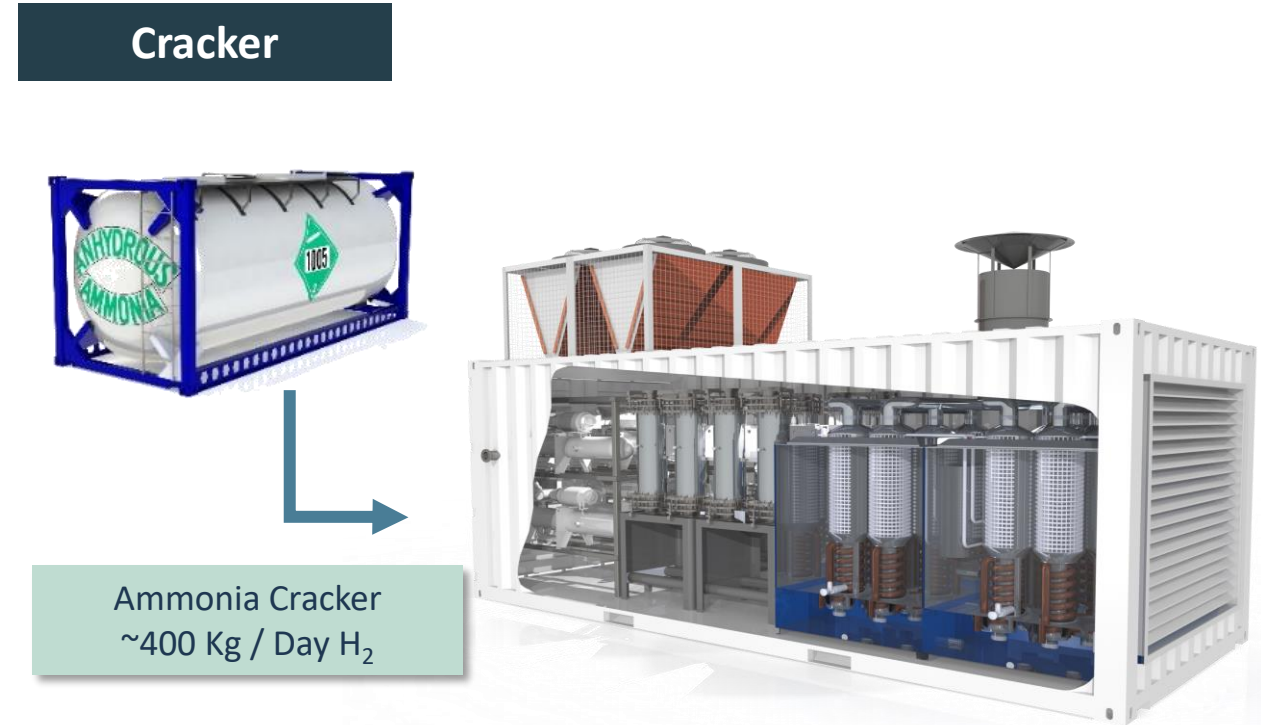
UK Pilot Test Facility (Under Construction)



Decentralised Hydrogen Generation

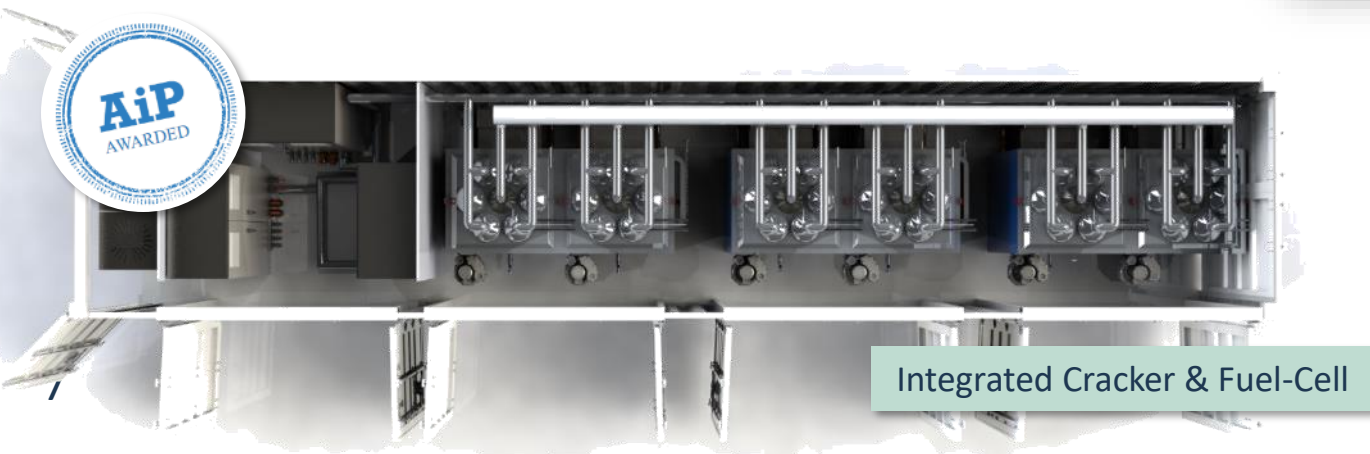
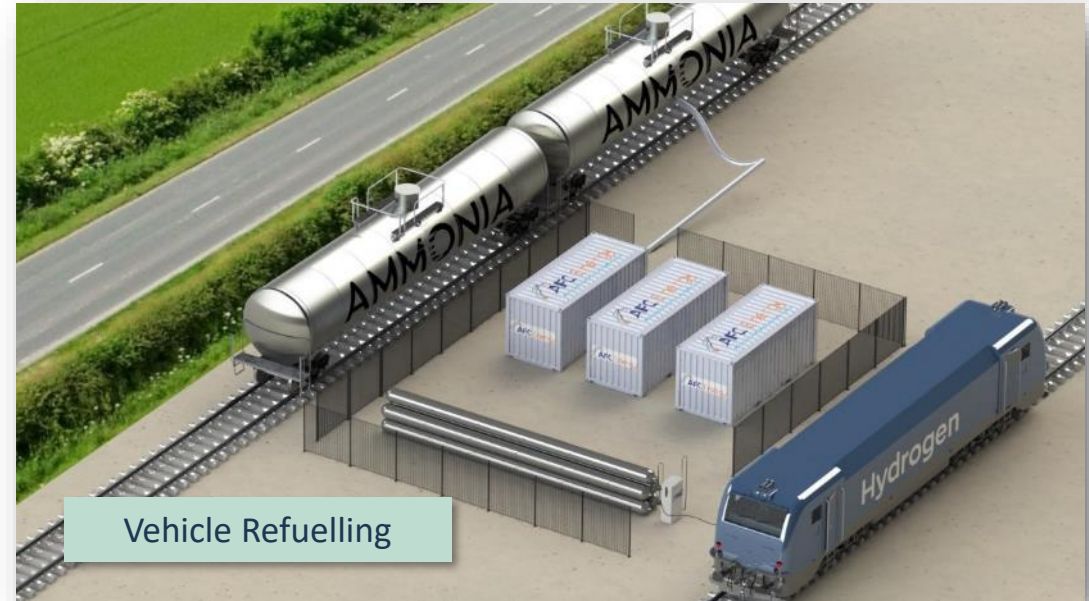


- Requires
 - High Power Grid Connection
 - Water Supply
 - Civils & Permanent Infrastructure



- Low Power demand (< 10%)
- Rapid Deployment (Temporary & Permanent)

Ammonia as a Fuel in the Power Sector



- Easier Logistics & Deployment
- Low levelised cost of Hydrogen
- Lower volumes of ammonia stored
- Well suited to Hub-Spoke Hydrogen distribution



Thank you for your interest

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