

# ITM Power: Investec 'Best Ideas'

Dr Graham Cooley, CEO ITM Power plc



# PRESENTATION CONTENTS

## HYDROGEN ENERGY SYSTEMS

### Strategy and Funding:

- Exec Summary
- Why Hydrogen? | Why Now?
- Compelling Commercial Case
- ITM Power positioning

### Acceleration Plan:

- Technology Acceleration
- Manufacturing Acceleration
- Operations Acceleration
- ITM Motive

### Financial Results:

- Contracts Backlog
- Tender Opportunity Pipeline
- Global Reach

### Summary



Investec 'Best Ideas' | 18<sup>th</sup> Nov 2020

### Rapidly Accelerating Market Dynamics:

- Renewable energy costs are falling alongside volume deployment
- Energy storage and grid balancing will be increasingly important
- Green hydrogen market is being driven by net zero targets

### Transformative EU Green Hydrogen Package:

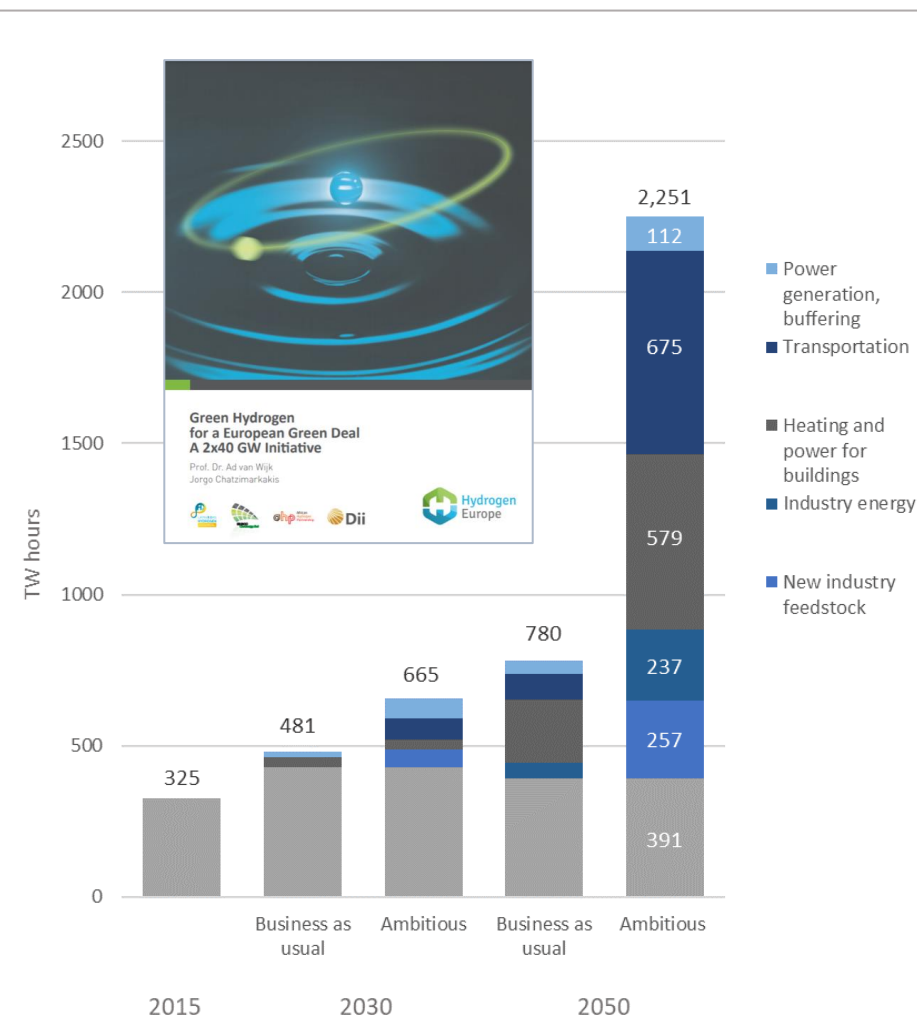
- Target spend of €150bn by 2030
- Electrolyser capacity target of 6GW by 2024 | 40GW by 2030
- Germany (5GW), Holland (4GW) Portugal (2GW), France (6GW), Spain (4GW)

### Why ITM Power:

- Global technology leadership and manufacturing scale
- Strong global partners: Shell, Linde, Snam, Orsted and SPR (Iberdrola)
- Transformation of the backlog and pipeline

“The blending of hydrogen into gas networks has already begun. Without a doubt, we need hydrogen-ready backbones. We are making it happen.”

**Marco Alverà, CEO, SNAM | 9th July 2020 | EU Hydrogen Strategy Launch**



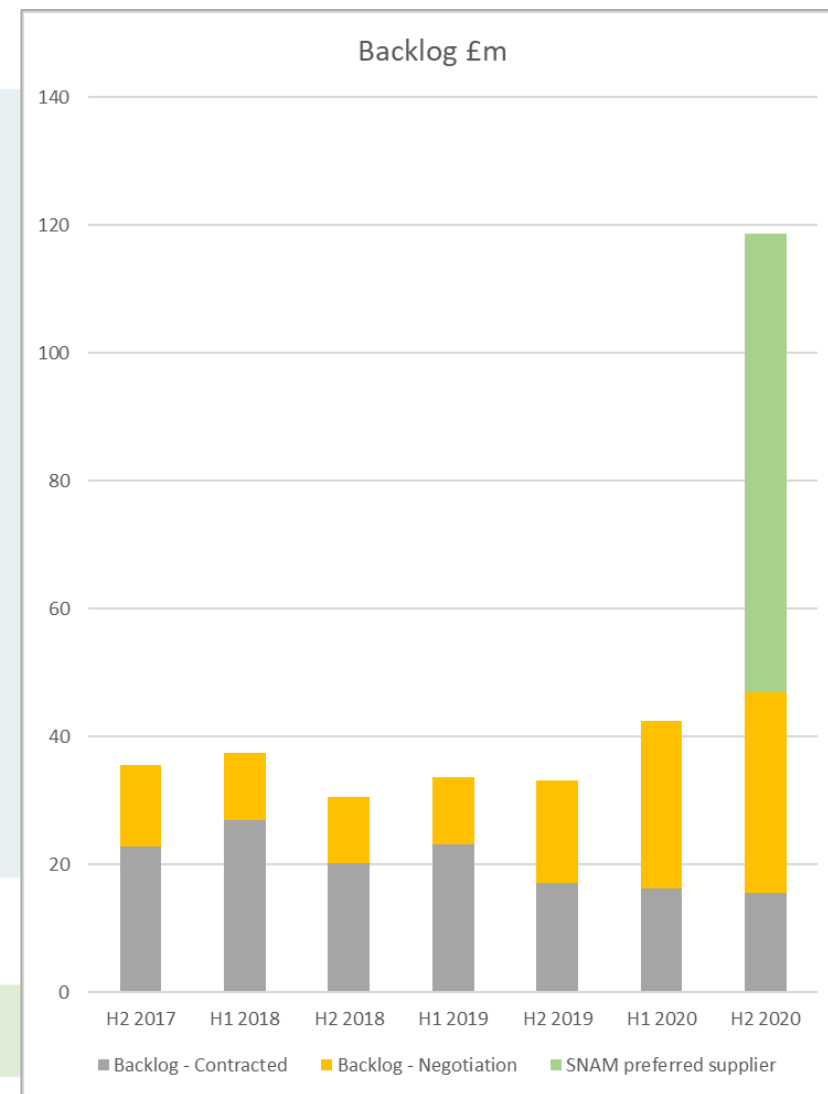
**Roadmap for “BAU” and “ambitious” H<sub>2</sub> deployment 2015 to 2050**  
Source: Fuel Cells & Hydrogen Joint Undertaking (FCH JU) 2019

### Key Achievements in the last 12 months:

- Record Backlog: £118.7m (previous high £52.4m)
- Increasing Tender pipeline of £324.9m
- Occupation of Bessemer Park | Planned capacity to 1GW pa by 2023
- 8MW & 10MW deals announced | 100MW Humber FEED study in process
- Strategy partnership with Scottish Power Renewables
- Formation of ILE the 50/50 JV with Linde Engineering
- Strong momentum with Linde in key strategic markets
- £172m Fundraise including £30m from snam
- Strategic partnership with Snam including 100MW of preferred supplier orders



**A strong platform for rapid future growth**



### Market Drivers:

- Rapid adoption
- Larger energy systems
- Massive commercial activity
- Government stimulus
- Net Zero Target

### ITM Acceleration Objectives:

- To address larger system demand
- Manufacturing capacity
- Technology leadership
- After sales excellence
- Business development

### ITM Power Outcomes:

- Reinforces market leading position
- Global technology leadership
- Drives material increase in volume
- Drives economies of scale
- Establishes strong recurring revenue

**Rapid scale up to meet market demand and maintain leadership**

## Shell Partnership (2015):



- 10MW refinery project
- UK refuelling siting partnership
- Joint first movers
- Site co-branding
- Practical working relationship
- Blueprint for refinery hydrogen
- Collaboration on compliance
- First UK forecourt H<sub>2</sub> refueller
- International cooperation

## Linde Partnership (2019):



- Market presence
- ITM Power equity investor (20%)
- Associated Technologies
- Solutions led approach up to 100MW
- Huge daily engineering support
- Driving engineering discipline
- Massive purchasing power
- Development of a bid structure
- Achieved tender pipeline of £324.9m

## Snam Partnership (2020):



- Recognised leadership in H<sub>2</sub>
- Energy network experience
- Extended global network
- Presence in EU, China and UAE
- Sustainable mobility strategy
- Further global potential projects
- ITM preferred supplier
- Commercial partnership agreement
- ITM Power equity investor

- 20 years experience
- Proprietary PEM stack technology
- Vertical integration

- Modular product offering
- Design for manufacture
- Unique rapid stack exchange

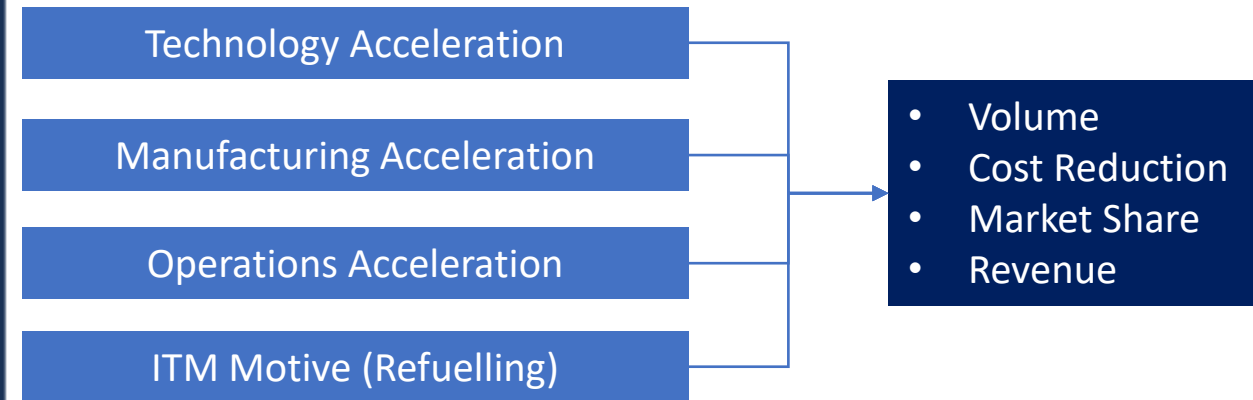
- Remote operating centre
- Ultra-high current density
- One of the market leaders



**ITM Positioning through Technology and Partnerships**

### Targeting Low Cost Green H<sub>2</sub>:

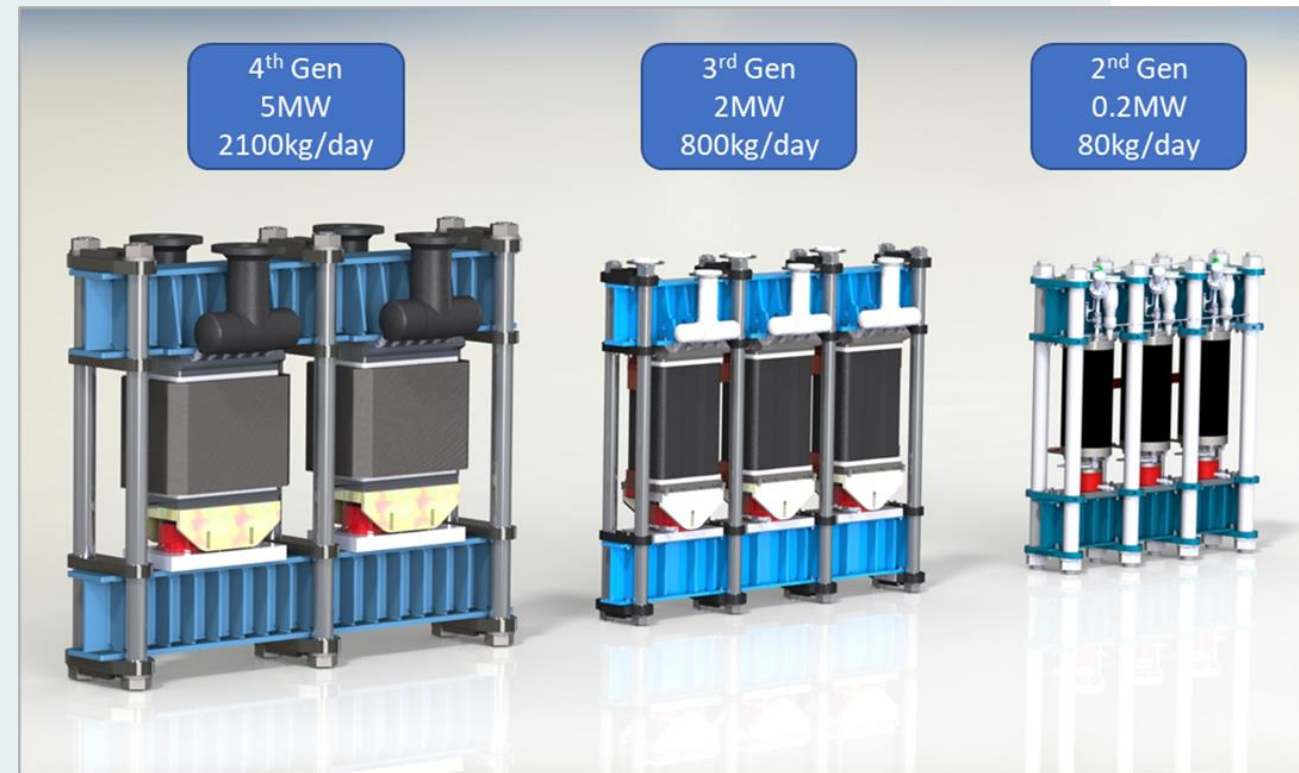
- Technology Acceleration
- Manufacturing Acceleration
- Operations Acceleration
- ITM Motive (Refuelling)



**A strong platform for rapid future growth**

### Superior offering for the XL market:

- Accelerate 5MW stack module by 24 months
- Market leading electrolyser performance
- Responding to the market demand for large scale
- Standardisation and modularity at scale
- Pre-engineer into 20MW packages for rapid deployment
- Exposure to larger projects faster | Minimise on site works



**Best in class | available 2 years earlier**

### Double Capacity | Half Lead Times:

- Maximise 1GW capacity of existing factory through automation
- Use blueprint to set up **new factory** to increase capacity
- New factory in **strategic location** to optimise cost, quality, supply
- Increase minimum stock | Reduce lead times | Project wins
- Market supply capacity to show ability to respond



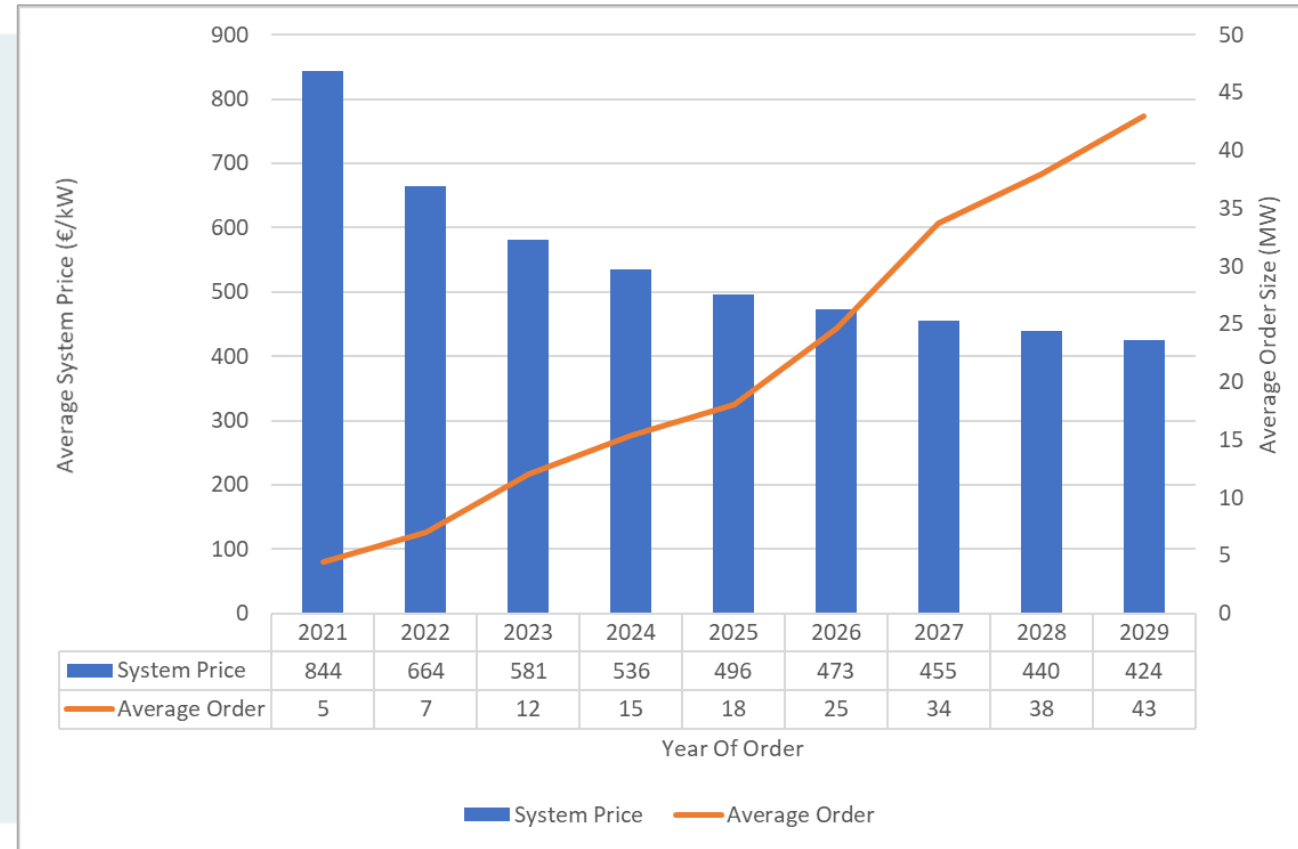
**Double capacity from 1 to 2GW/year | Halve lead times from 14 to <8 months**

### ITM Electrolyser Cost Reduction

- Target **50% electrolyser cost reduction** within 5 years
- Biggest gains available in PEM stack & power conversion
- Based on product **standardisation & modularisation**
- Product control enables improvement in all areas
- Leveraging buying power of partners (Linde)
- Currently **tracking ahead of target**

#### Enablers for cost reduction:

- Manufacturing volume | Semi-automation | Procurement
- Application of technology improvements
- Provision of larger systems



**<€1,000/kW today @ MW scale | <€800/kW @ 10MW | <€500/kW by mid 2020's**

### Developing a New Business, ITM Support, targeting:

- Capacity to install & commission in step with order intake
- **World class after sales support** packages for maximum availability
- Increased holding of critical spares in **strategic locations**
- Partnerships in new territories to remove market entry barriers
- Development of a **recurring revenue stream**

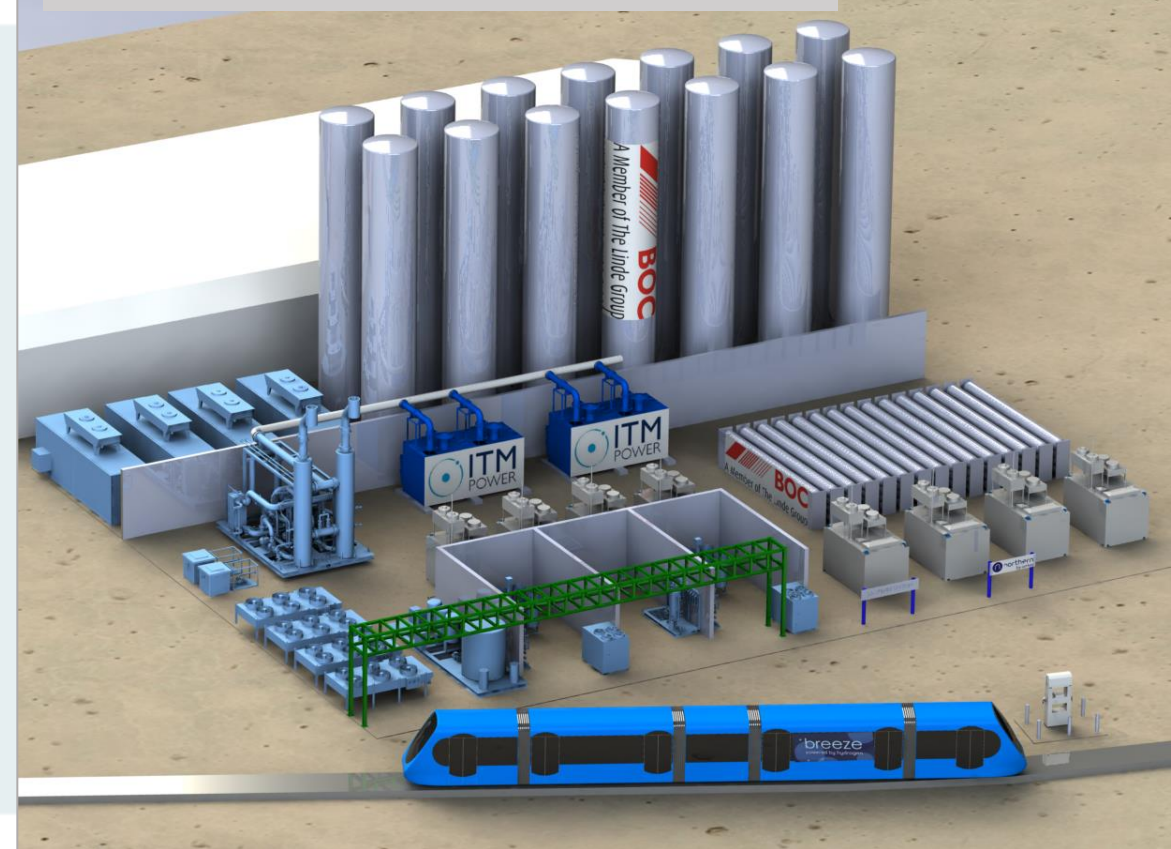
Expanded after sales team | Access recurring revenue



## Development of the Company:

- ITM an early pioneer for refuelling | developed ITM Power's brand
- Partnerships with Shell, Linde, Toyota, Orsted | UK Gov support
- Tested technology in the field | Seeded the after sales capability
- New MD driving strategy for larger scale plant and profitability

An example of a Multi-MW refuelling hub design



Opportunity for significant future value upside as track record established

## Financials:

- Contracts Backlog
- Tender Opportunity Pipeline
- Global Reach
- Summary

Shell 10MW electrolyser, Rhineland Refinery, Germany



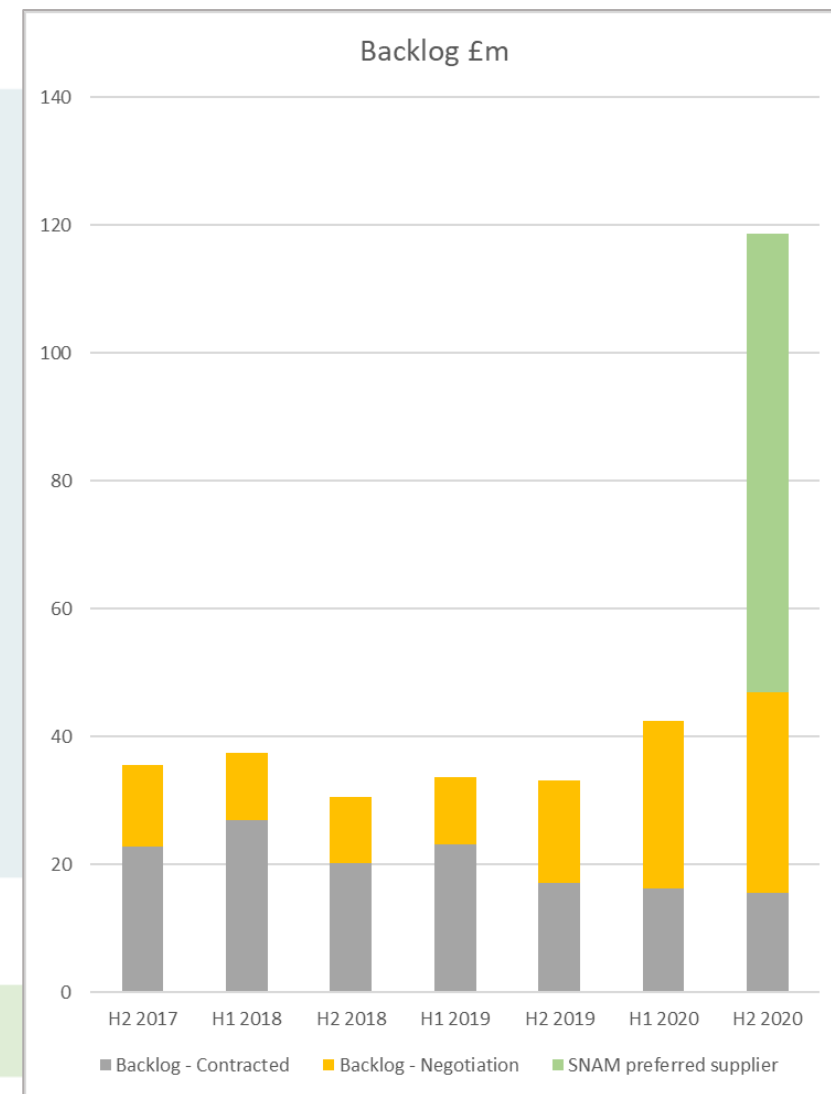
**A strong platform for rapid future growth**

### Record Backlog: £118.7m (previous high £52.4m)

- £15.6m contracted | £103.1m in final stages of negotiation
- A signpost of future revenue
- Includes SNAM preferred PEM electrolyser supplier status c.£70m\*
- Includes Linde Gas £12.5m

\*Snam upside expected to be recognised over 3-5 years

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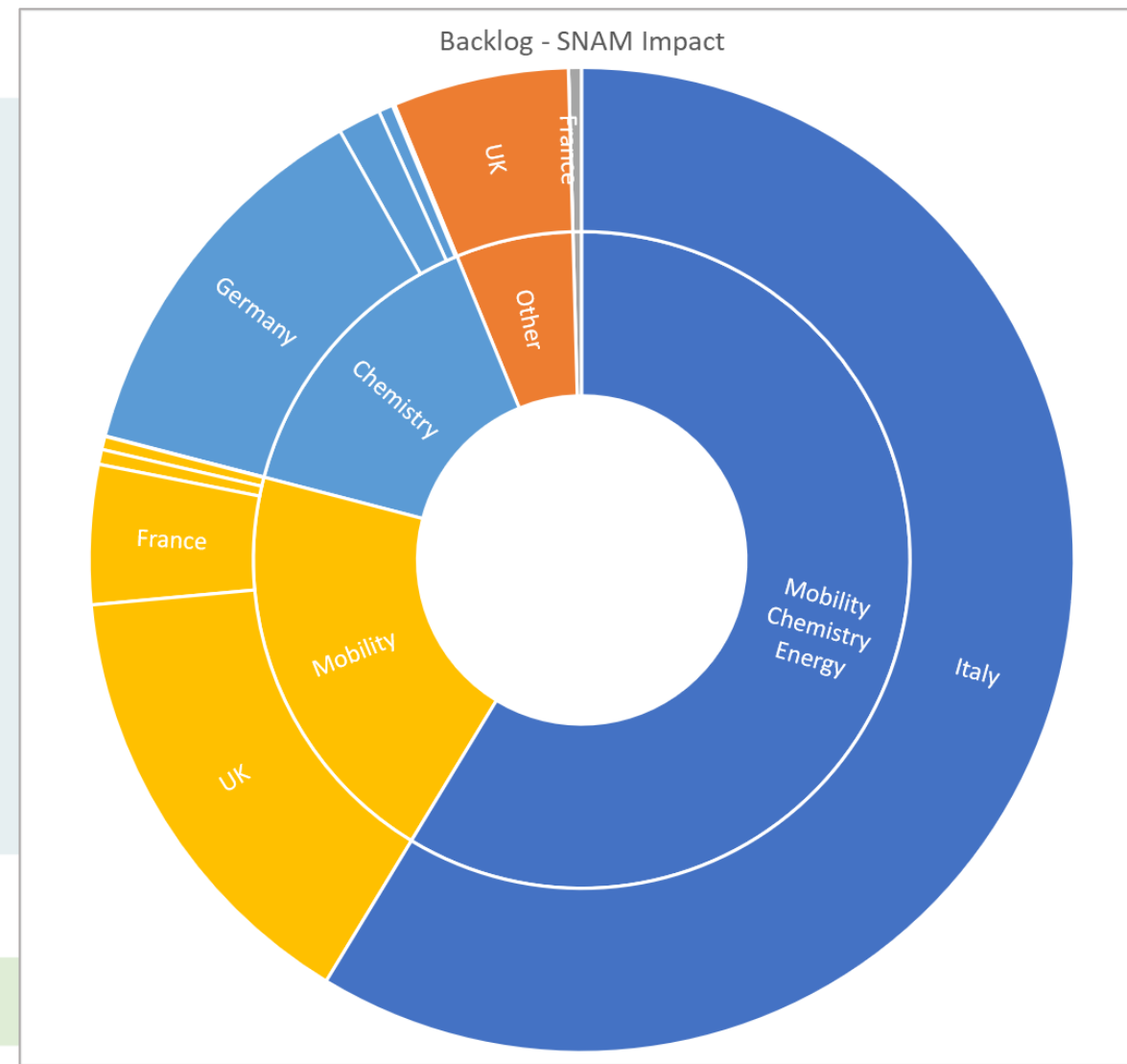


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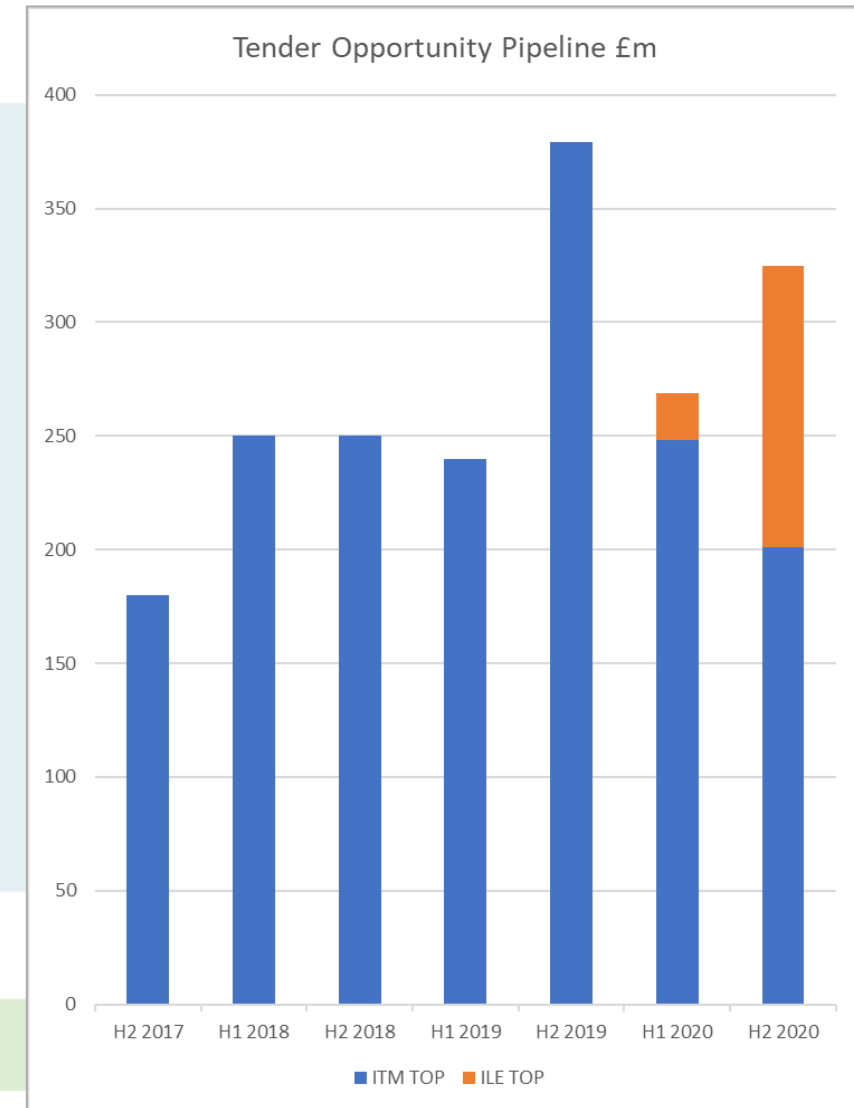
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### ToP Currently at £324.9m:

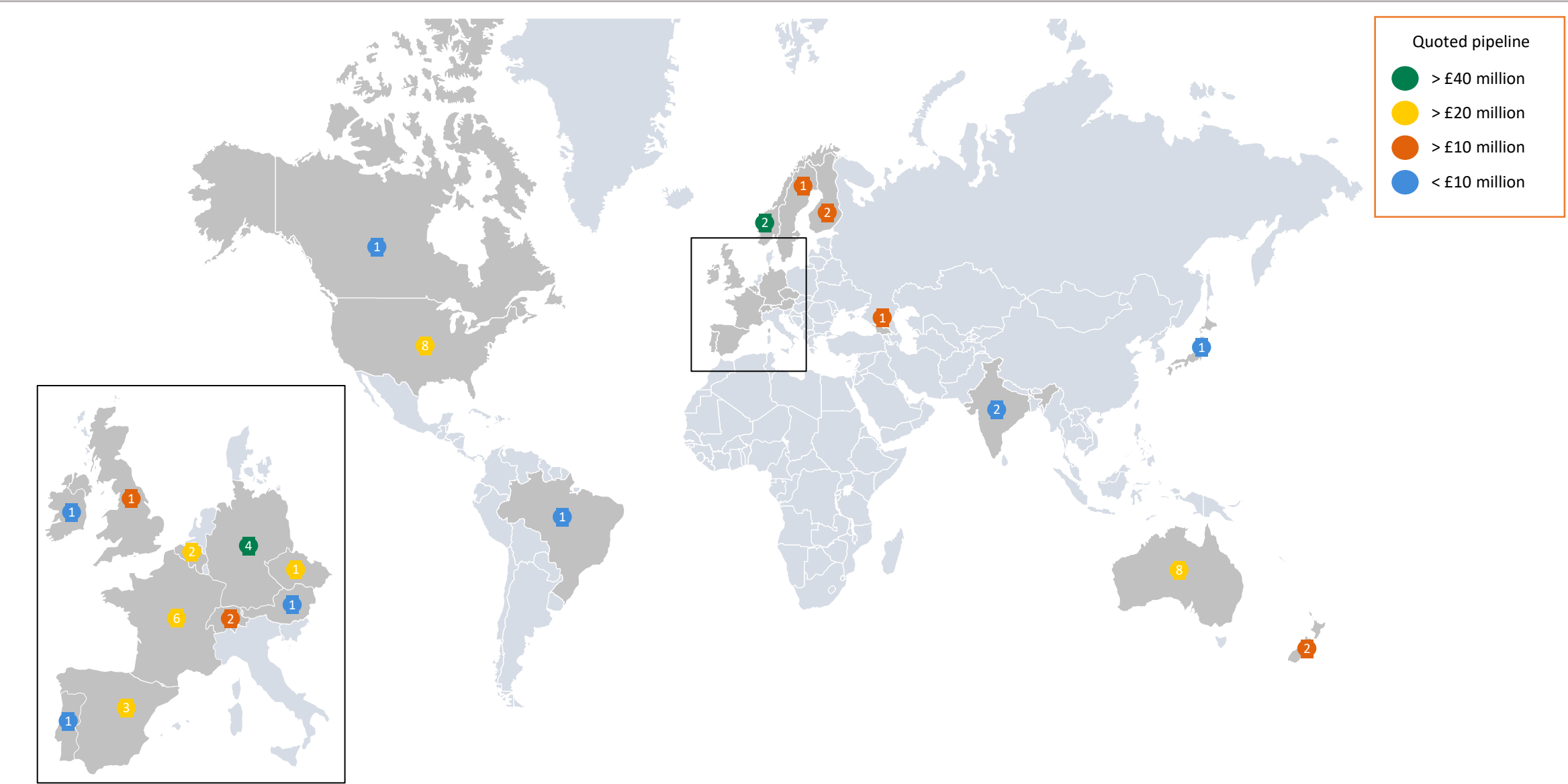
- ITM £201.2m | ILE £123.7m
- Average project size of £6.37m | 6.49MW
- Reflects strong industrial demand for larger systems
- Further SNAM opportunities represent upside
- H2 2019: Included EPC services, turnkey solutions | H2 2020: Product only

**Increase in ILE scope allows ITM to focus on core competencies**



# TENDER OPPORTUNITY PIPELINE (TOP) | IMPACT OF LINDE

HYDROGEN ENERGY SYSTEMS



Number inside the circles represents the number of opportunities in the pipeline for that country

### Why ITM Power:

- Rapid market growth in the GW scale
- Global technology leadership and manufacturing scale
- Global partners: Shell, Linde, Snam, Orsted and SPR (Iberdrola)
- Transformation of the backlog and pipeline
- Fundraise to accelerate ITM Power
- Capturing the global opportunity



**Capturing the global green hydrogen opportunity**

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