

AGM Presentation
October 2018 | London

Dr Graham Cooley | CEO, ITM Power plc



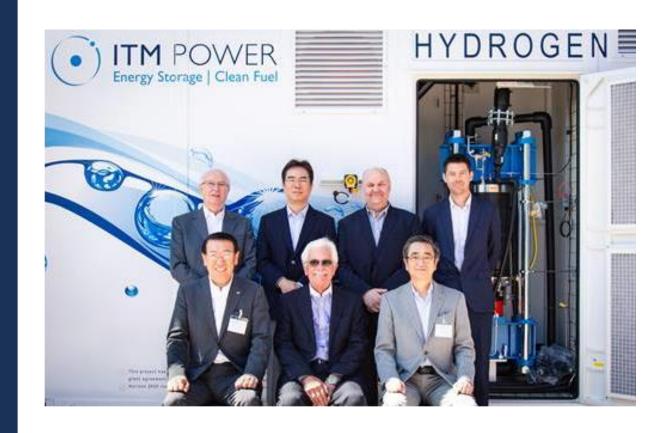


#### PRESENTATION CONTENTS

HYDROGEN ENERGY SYSTEMS



- Financial Snapshot
- Portfolio of Revenue Generating Assets
- Product Standardisation
- Product Offering
- Cost Structure
- Production Capacity
- Business Development
- Marcomms



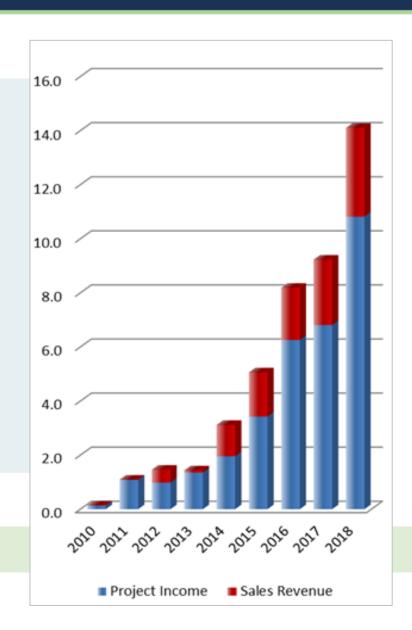
**Sumitomo Corporate visit to ITM Power** 



#### **Strong sustained growth:**

- Revenue: £14.1m up 53% YoY (broker note: £12.8m)
- Ratio of sales | grants moving towards sales in 2019
- **Pipeline:** £27.6m under contract | £6.7m in the final stages of negotiation
- Total pipeline of £34.3m, representing an increase of £3.7m
- Finances: Total of cash and cash receivables of £27.0m
- Constituting £16.9m of cash and £1.7m of cash on guarantee
- Debtors less creditors stand at £8.4m

**Revenue | Pipeline | Financial Assets** 



# FINANCIAL SNAPSHOT HYDROGEN ENERGY SYSTEMS

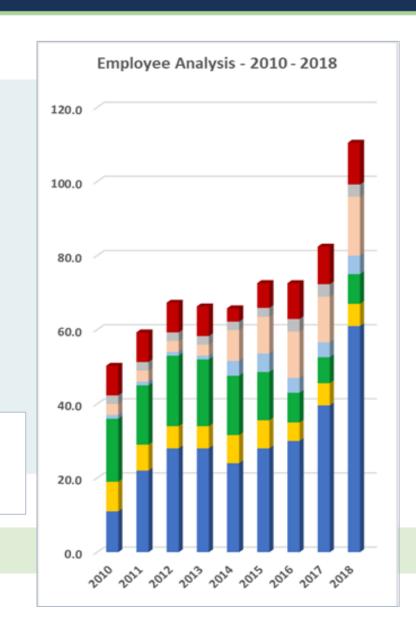


#### **Skills | Training | Expansion:**

- Investing in production skills
- Investing in the BD and sales function
- Transitioning from an R&D organisation



**Skills | Training | Expansion:** 



#### POTENTIAL HYDROGEN SALES

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#### **Strong growth of revenue generating assets:**

- Currently 16 tonnes | £160k of hydrogen sales
- Up 700% YoY
- New fleet of 200 FCEVs are not included
- 3 tonne/day capacity (40 buses and 800 cars)

| Station                  | Status       | Opening | Electrolyser | Dispenser | <b>Potential Sales</b> |
|--------------------------|--------------|---------|--------------|-----------|------------------------|
|                          |              |         | (kg/day)     | (kg/day)  | (pa)                   |
| Riverside USA            | Open         | 2015    | 100          | 200       | £365,000.00            |
| Rotherham                | Open         | 2015    | 100          | 570       | £365,000.00            |
| Teddington               | Open         | 2016    | 200          | 570       | £730,000.00            |
| Rainham                  | Open         | 2016    | 100          | 570       | £365,000.00            |
| Cobham                   | Open         | 2017    | 100          | 570       | £365,000.00            |
| Beaconsfield             | Open         | 2017    | 100          | 570       | £365,000.00            |
| Swindon                  | Open         | 2018    | 100          | 570       | £365,000.00            |
| Kirkwall                 | Open         | 2018    | 400          | 200       | £1,460,000.00          |
| Gatwick                  | Construction | Q4 2018 | 100          | 570       | £365,000.00            |
| Birmingham Bus           | Construction | Q1 2019 | 1400         | 1100      | £3,066,000.00          |
| <b>Brimingham Public</b> | Construction | Q1 2019 |              | 570       |                        |
| Derby                    | Funded       | Q1 2019 | 100          | 570       | £365,000.00            |
| <b>Central London</b>    | Funded       | Q1 2019 | 200          | 570       | £730,000.00            |
| W London                 | Funded       | Q1 2019 | 200          | 570       | £730,000.00            |
| Total:                   |              |         | 3100         | 7770      | £9,271,000.00          |

Potential Hydrogen sales of £9.3m when the existing portfolio is fully utilised.



- Product Standardisation
- Product Offering
- Cost Structure
- Production Capacity



**2MW Standard Module** 



#### **Standardisation | Production | Market Offering**

- Definition of 2MW module & 10MW stack skid
- Enables efficiencies in manufacture & test
- Well defined cost & trajectory
- Modular system provides flexibility of offering
- New projects all specified using known modules
- Minimises design time & cost for each project
- Scalable to 100MW with balance of plant

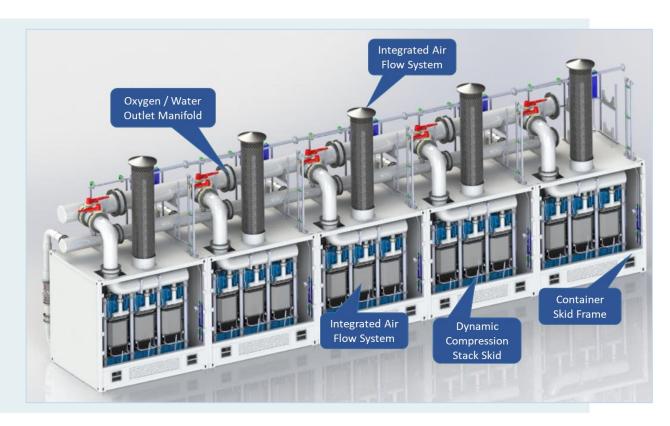






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Standard 10MW Stack Skid of five 2MW Standard Modules

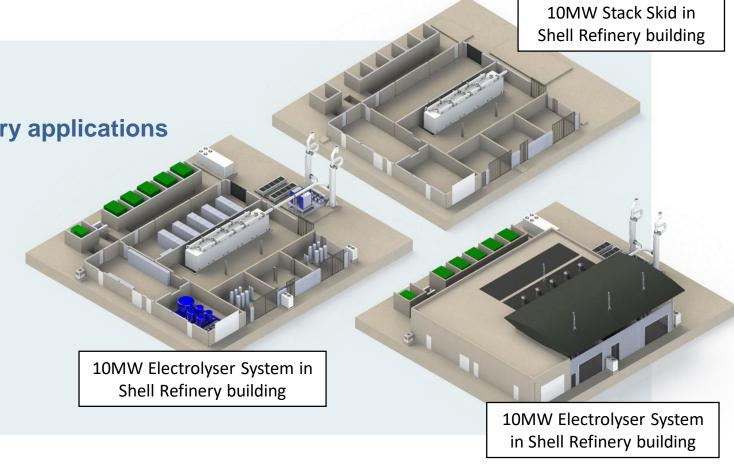
# SHELL 10MW PROJECT | WORLD'S LARGEST

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10MW PEM electrolyser system for refinery applications

- Flagship 10MW project with Shell
- Largest PEM electrolyser in the world
- Largest refinery in Germany
- Benefit of Shell engineering & permitting rigor
- Excellent reference plant & customer
- Strong engagement from refinery hydrogen sector



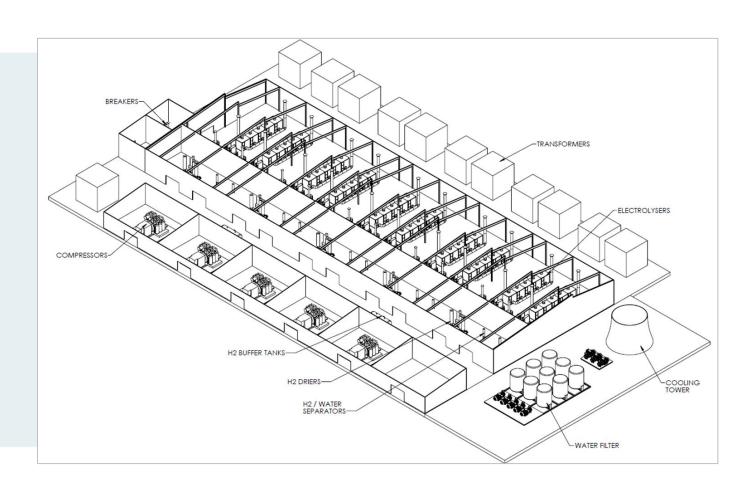


Building the world's largest PEM electrolysis plant at Rhineland refinery, Germany



#### 100MW PEM electrolyser system

- Based on 10MW standard skids
- Increasing industrial interest
- Shell experience:
- Benefit of Shell engineering & permitting rigor
- Excellent reference plant
- Strong engagement from refinery hydrogen sector



Industrial Hydrogen | P2G | Refineries | Ammonia | Steel

### **ELECTROLYSER SYSTEM COST CONSIDERATIONS**

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#### **ITM Electrolyser Cost Projections**

- Expect system sizes to grow over time
- Larger scale enable cost reduction
- Larger volume enable efficiencies
- Continuous technology improvements
- Sensitive to scope of supply



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



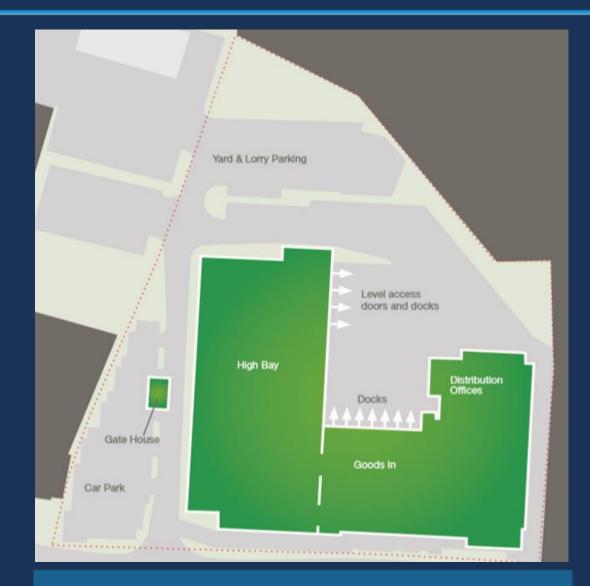


New Factory: Grounds 30,000 m<sup>2</sup>, Floor Space 11,610 m<sup>2</sup>



### Capacity | General

- Grounds 30,000 m2
- Floor Space 11,610 m2
- 125 Car parking spaces
- 7MW power supply
- Product Assembly
- External Product Testing
- Stack Production
- Technology Centre
- Sales, Marketing & Corporate Area
- Offices | Canteen



# PRODUCTION CAPACITY

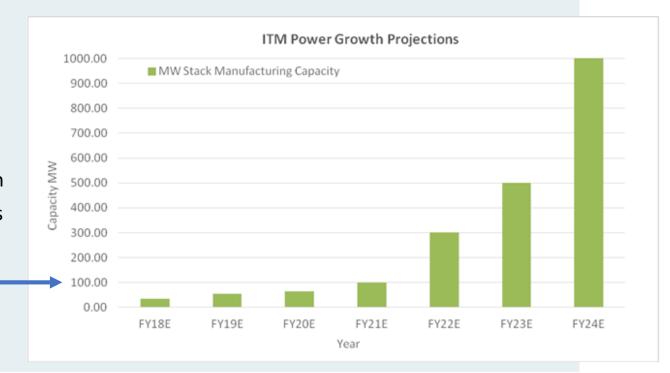
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#### **Production Capacity**

- Colocation into new production facility
- Manufacturing space increased by 5x
- Adoption of semi-automated stack component preparation
- Increase of power on-site to allow testing of larger systems
- Heads of terms agreed
- Costs in-line with expectations

Production capacity in the current S2 facility



Production capacity based on standard 10MW stack skids and 2MW standard modules



- Business Development
- Sales Process
- Communications



**Industrial Hydrogen | P2G | Refineries | Ammonia | Steel** 



#### **ITM Power represented in seven territories**





UK

Charles

Purkess





France











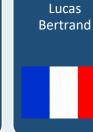




salesforce

































#### BUSINESS DEVELOPMENT PROCESS

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#### **Customer engagement | specification**

- Large scale projects require significant development
- Typical timescales range from one to three years
- Strategy includes early engagement via feasibility studies
- Leveraging the Shell 10MW project
- Four example projects to indicate engagement



| Feasibility Study | Scale | Partner                  | Status    |
|-------------------|-------|--------------------------|-----------|
| UK P2G            | 50MW  | NGN                      | Completed |
| British Columbia  | 300MW | Chyioda, BC Hydro        | Active    |
| Massachusetts     | 20MW  | Holyoke                  | Active    |
| Centurion         | 100MW | INOVYN, Storengy, Cadent | Active    |

**Customer engagement | application requirements | detailed specification** 

## ITM POWER NEWSLETTER & SOCIAL MEDIA

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#### **Newsletter | Social Media**

- 20K distribution list
- SalesForce analytics
- YouTube
- LinkedIn
- Facebook
- **Twitter**





















#### ITM POWER YOUTUBE VIDEOS

#### HYDROGEN ENERGY SYSTEMS





# ITM Power hydrogen refuelling station launch at Johnson Matthey Swindon

Johnson Matthey • 242 views • 3 weeks ago

JM's Chief Strategy Director, Matthew Harwood attends ITM's launch of their hydrogen refuelling station.



#### Refhyne - Clean Refinery Hydrogen for Europe

ITM Power • 525 views • 1 month ago

The REFHYNE project is at the forefront of the effort to supply Clean Refinery Hydrogen for Europe. The project is funded by the ...



#### ITM Power: Hydrogen Station Training Video

ITM Power • 25 views • 4 weeks ago

Hydrogen fuel is the cleanest fuel available. It can be generated using surplus renewable energy and water using an ITM Power ...



#### Shell Beaconsfield Hydrogen Pump Installation Time Lapse Video

Shell 5.7K views • 7 months ago

Shell is installing Hydrogen pumps in London. Shell brings Hydrogen fueling pump to the Beaconsfield station. Time lapse video ...



#### Shell opens hydrogen station in the UK

Shell 6.5K views • 1 year ago

On 22 February 2017 Shell opened its first hydrogen refueling station in the UK, at the Cobham retail site, in partnership with ITM.

Subtitles









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### NEWS FLOW SINCE THE 2017 AGM

HYDROGEN ENERGY SYSTEMS



#### **21 RNS Announcements**

- 6 Trading Updates
- 5 Partnership | Feasibility Study
- 4 HRS Opening | Fuel Sales
- 2 Sales Channel | Sales Office
- 2 Executive Changes
- 2 Funding | Project

| ITM Power plc. (        | ITM.L)   2 | 21 RNS / | Announcements                                     |                                |
|-------------------------|------------|----------|---|--------------------------------|
| 29 October 2018         | 07:00:00   | RNS      | Trading Update                                    | Results and Trading Reports    |
|                         |            |          | • .   |                                |
| 28 September 2018       | 07:00:00   | RNS      | 100MW Power-to-Gas energy storage FS              | Partnership   Feasibiliy Study |
| 26 September 2018       | 07:00:00   | RNS      | ITM Opens Seventh HRS on M4 at Swindon            | HRS Opening                    |
| 13 August 2018          | 07:00:00   | RNS      | Final Results                                     | Results and Trading Reports    |
| 09 July 2018            | 16:31:00   | RNS      | Sumitomo Strategic Partnership Agreement          | Sales Channel                  |
| 14 June 2018            | 07:00:00   | RNS      | Trading and Pipeline Update                       | Results and Trading Reports    |
| 21 May 2018             | 07:00:00   | RNS      | Board Appointment   Andy Allen                    | <b>Executive Changes</b>       |
| 10 May 2018             | 12:14:00   | RNS-R    | BIG HIT Project Update                            | HRS Opening                    |
| 24 April 2018           | 07:00:00   | RNS      | Northern Gas Networks Deployment Study Findings   | Partnership   Feasibiliy Study |
| 10 April 2018           | 07:00:00   | RNS      | Met Police Fuel Contract, Refuelling Update       | Fuel Sales                     |
| 05 April 2018           | 07:15:00   | RNS      | Massachusetts Power-to-Gas Feasibility Study      | Partnership   Feasibiliy Study |
| 29 March 2018           | 07:00:00   | RNS      | British Columbia Study                            | Partnership   Feasibiliy Study |
| 27 March 2018           | 07:00:00   | RNS      | New Shell Fuelling Station Opened at Beaconsfield | HRS Opening                    |
| 26 March 2018           | 09:44:00   | RNS      | Operations Update                                 | Results and Trading Reports    |
| 26 March 2018           | 09:41:00   | RNS      | £8.8m OLEV Funding for Refuelling Infrastructure  | <b>UK Government Funding</b>   |
| 29 January 2018         | 07:00:00   | RNS      | Half-year Report                                  | Results and Trading Reports    |
| 18 January 2018         | 12:22:00   | RNS-R    | Largest Hydrogen Electrolysis in Shell Refinery   | 10MW Project Opening           |
| 28 December 2017        | 07:00:00   | RNS      | New Australian Subsidiary and MD, Contract Update | Sales Office                   |
| <b>30 November 2017</b> | 07:00:00   | RNS      | Trading Update                                    | Results and Trading Reports    |
| 09 November 2017        | 07:00:00   | RNS-R    | Power-to-Gas Storage Study with Northern Gas      | Partnership   Feasibiliy Study |
| 25 October 2017         | 07:00:00   | RNS      | Directorate Change   Peter Hargreaves             | <b>Executive Changes</b>       |

Significant positive news flow since the last AGM



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