



ceres

# Interim results

For the six months ended 30 June 2024

**Ceres Power Holdings plc**

**27 September 2024**

# Summary

- Signed two new stack licences and a system licence this year to date
- Record first half: revenue increased by 144% to £28.5m and gross profit increased by 217% to £22.9m
- Record order intake of £46.9m in the half
- Order intake has grown to £103.3m in the year to 31 August 2024
- Now have four global stack manufacturing licence partners progressing towards scale production
- Technology leadership: Shell 1MW demonstrator being commissioned, and joint development for 10MW pressurised electrolyser modules, to enable scale to 100MW+



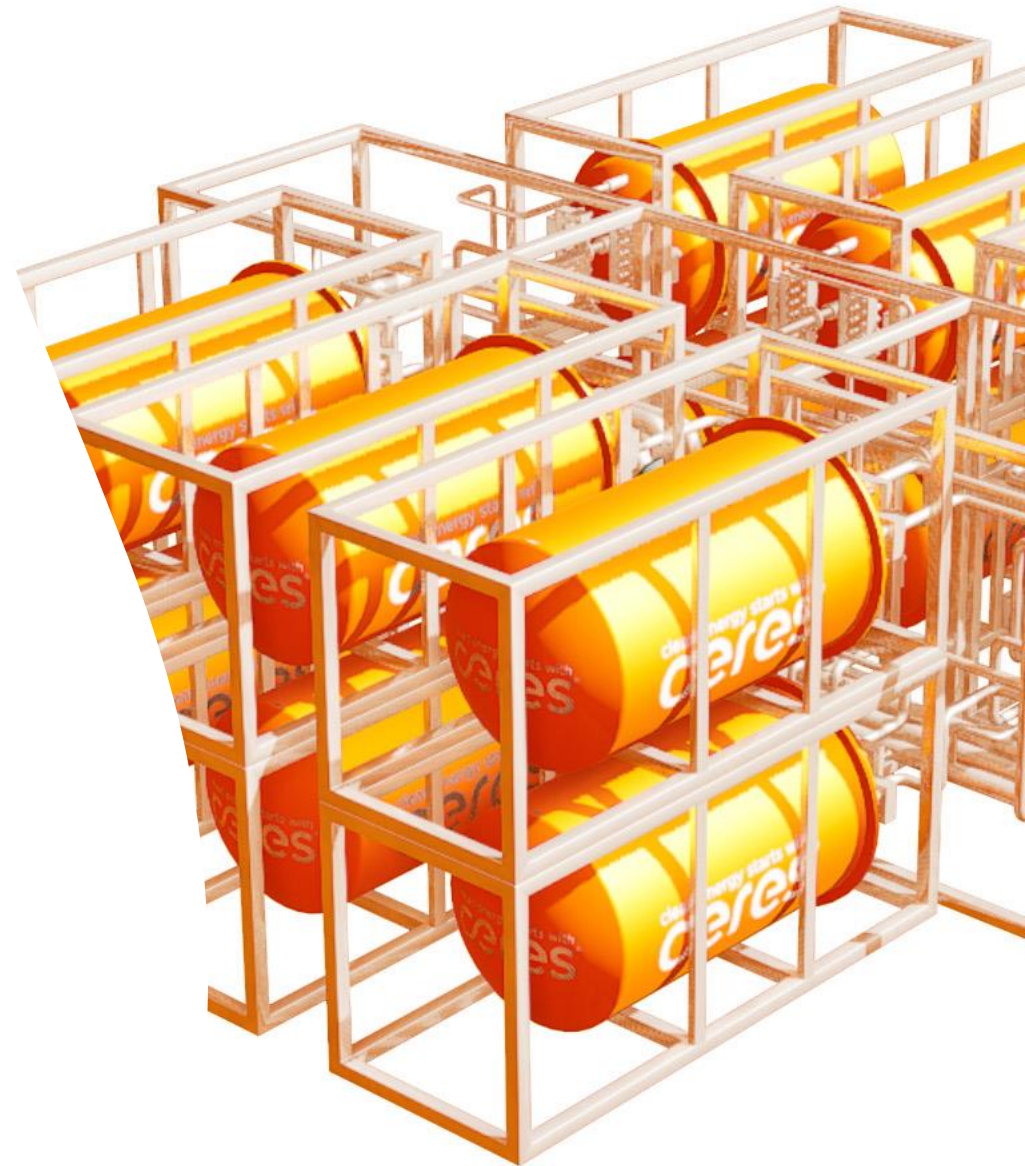
# Commercial acceleration

- Delta Electronics manufacturing collaboration licence for both SOFC and SOEC stack production
- Ceres signed second manufacturing collaboration licence with Denso Corporation for SOEC stack production
- Ceres signed its first SOEC system licence partnership with Thermax Limited, providing entry into the dynamic and high-growth Indian market
- Both Bosch and Doosan continue to implement their initial volume manufacturing capabilities
- Strong business momentum with this year's additional licensing agreements leading to record year for order intake, revenue and gross profit



# Continued technological leadership

- Megawatt scale electrolyser being commissioned at Shell's R&D centre in Bangalore, India and we have signed a follow-on contract to design a 10MW pressurised SOEC module
- Optimal system architecture design for 100MW+ electrolyser system suitable for gigawatt-scale hydrogen plants developed with AtkinsRéalis
- Ceres also sustains leadership in fuel cell technology supporting our four SOFC partners: Bosch, Doosan, Delta and Weichai



# Financial update

Eric Lakin

# Financial overview

For the six months ended 30 June 2024

Revenue

**£28.5m**

up 144% vs H1 2023<sup>1</sup>

Gross margin

**80%**

H1 2023: 62%<sup>1</sup>

Cash and short-term  
investments

**£126.1m**

Dec 2023: £140.0m

Cash outflow

**£13.9m**

June 2023: £21.1m

Gross profit

**£22.9m**

H1 2023: £7.2m<sup>1</sup>

Adjusted EBITDA

**(£9.0m)**

H1 2023: (£23.5m)<sup>1</sup>

Order intake

**£46.9m**

Dec 2023: £15.4m

Full year revenue guidance

**£50–60m**

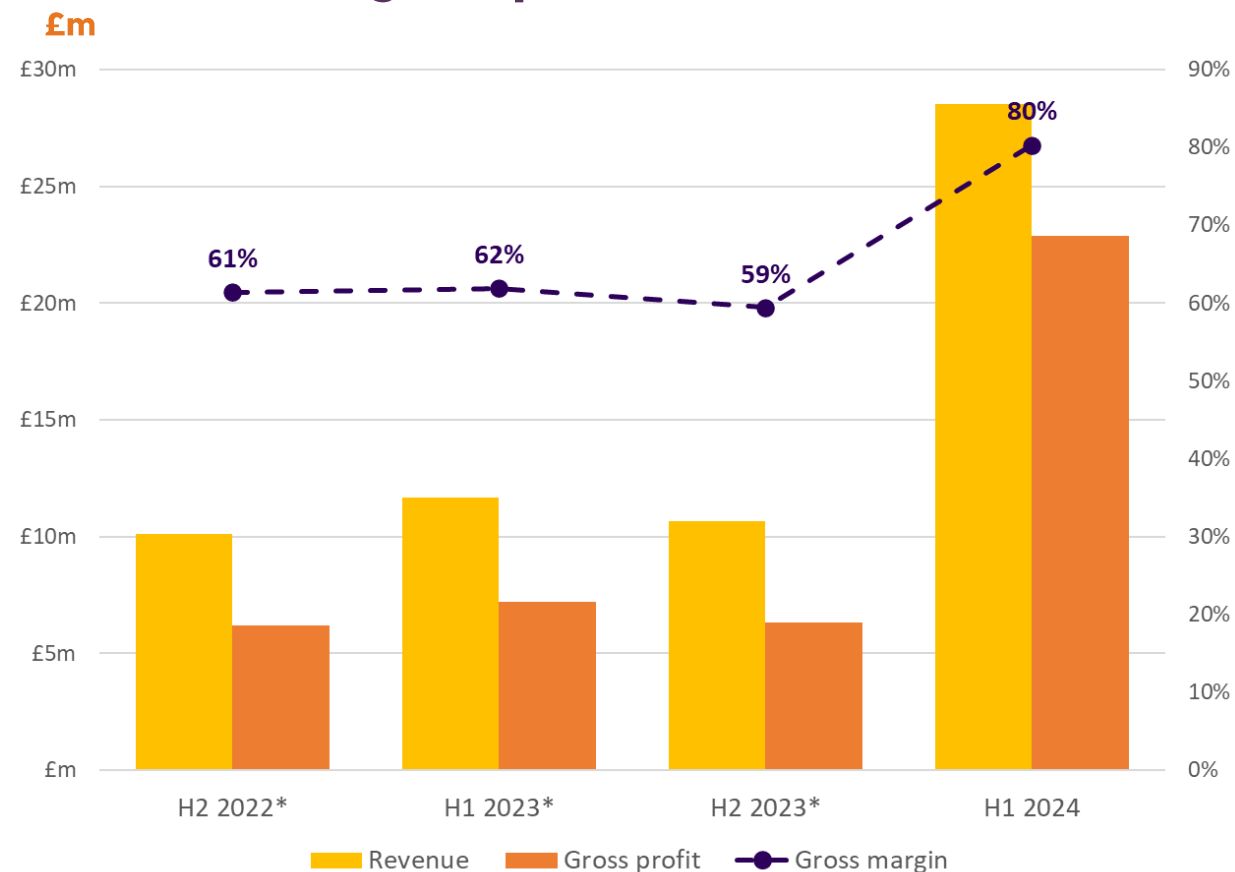
1. H1 2023 results have been restated due to December 2023 annual results audit adjustments. There have been no new prior year adjustments outside those noted in the 2023 audit.
2. Contracted order book (does not include future royalty revenue)

# Record revenue and gross profit

Sector leading gross margin maintained

- Strong growth in H1 2024 revenue and margins strongly influenced by recognition of the new Delta licence technology transfer revenue in the period

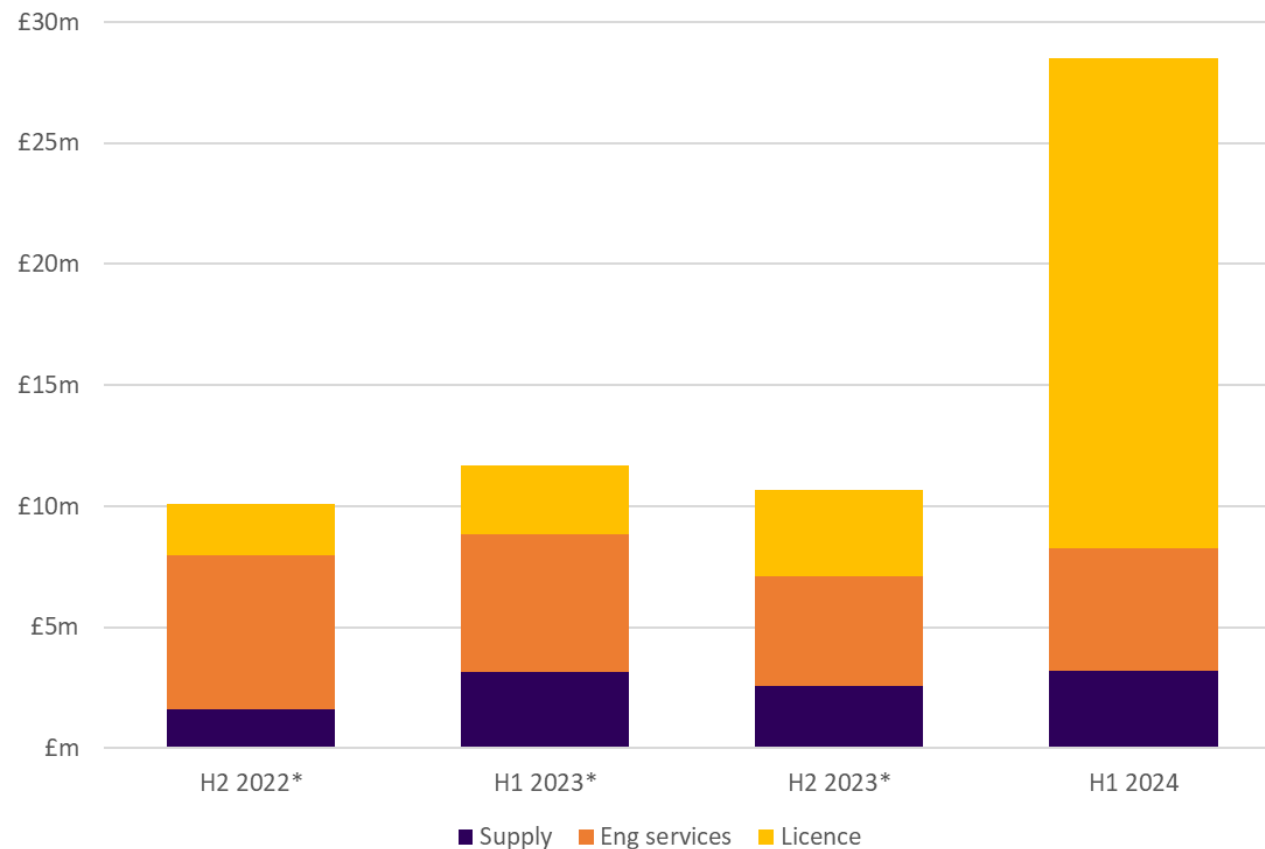
## Revenue and gross profit



# Licence revenue increase driven by Delta partnership

## Revenue mix

£m



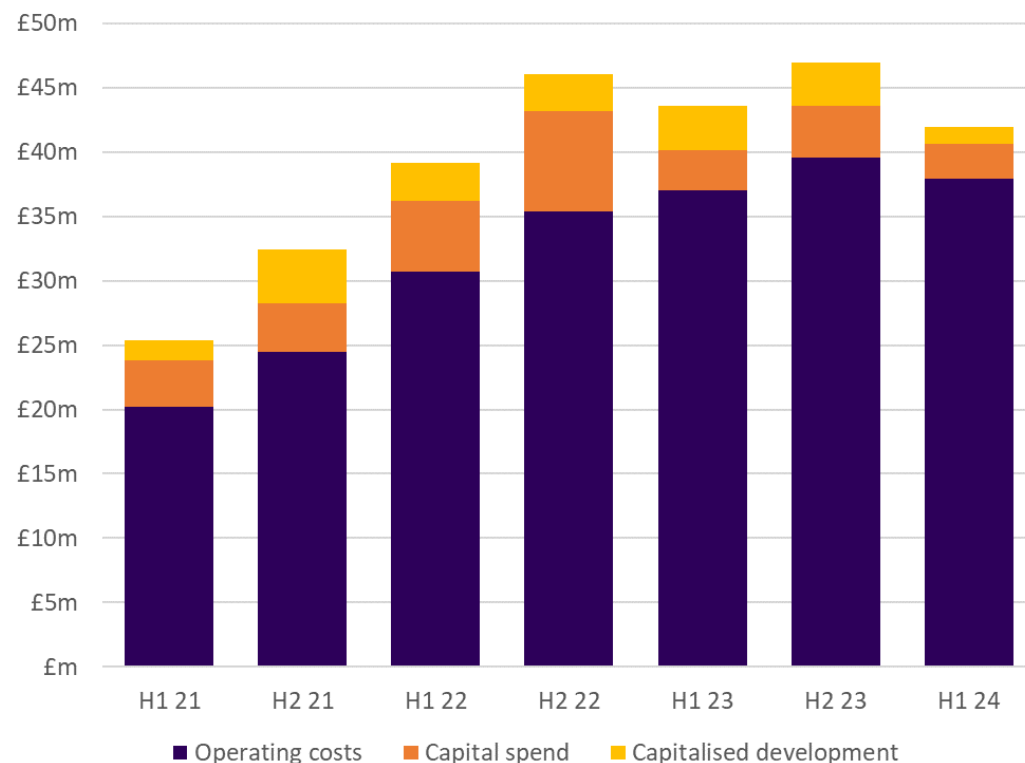
- Licence fee revenue – very high margin that can be recognised up-front or over time
- Supply – represents prototype technology (cells and stacks) to partners for development
- Engineering services – joint development and collaboration with partners across multiple applications
- Royalties – future high margin revenue stream from partners based on partner commercial sales. First royalties expected by end 2025



# Cost base evolution

## Cost base

£m

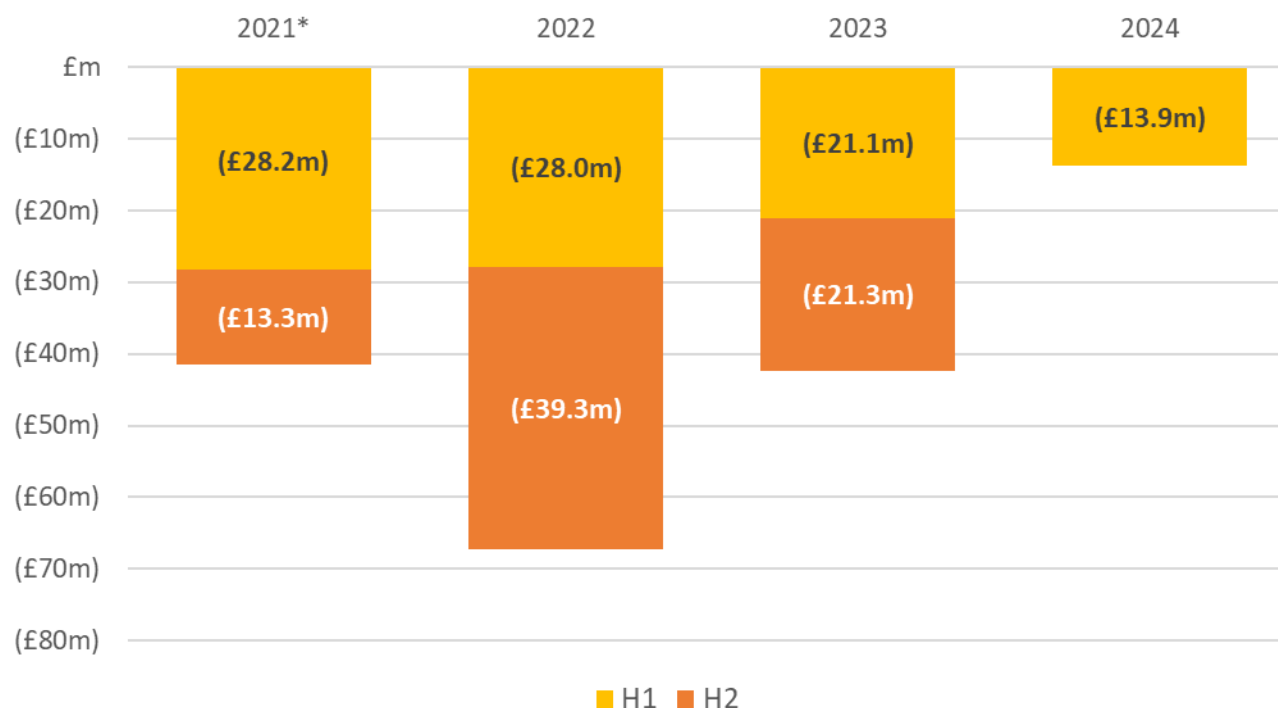


- Significant investment in solid oxide electrolyser and fuel cell technology and development projects
- Investment costs now moderated as we achieve significant R&D and NPI milestones and pass peak investment requirements
- Successful product milestone achievement and non-recurring projects nearing completion enables natural reduction of investment requirements
- Business restructuring programme in Q4 will result in a reduced overall cost base by approximately 15%

# Continued improvement in cash outflow

## Free cash flow (plus cash and investments)

£m



- On track for reduced cash outflows in full-year 2024 compared to 2023
- Increased order intake combined with optimised cost base maintains a strong financial position, with a cash balance of £126.1m as at 30 June 2024

# Business strategy

Phil Caldwell

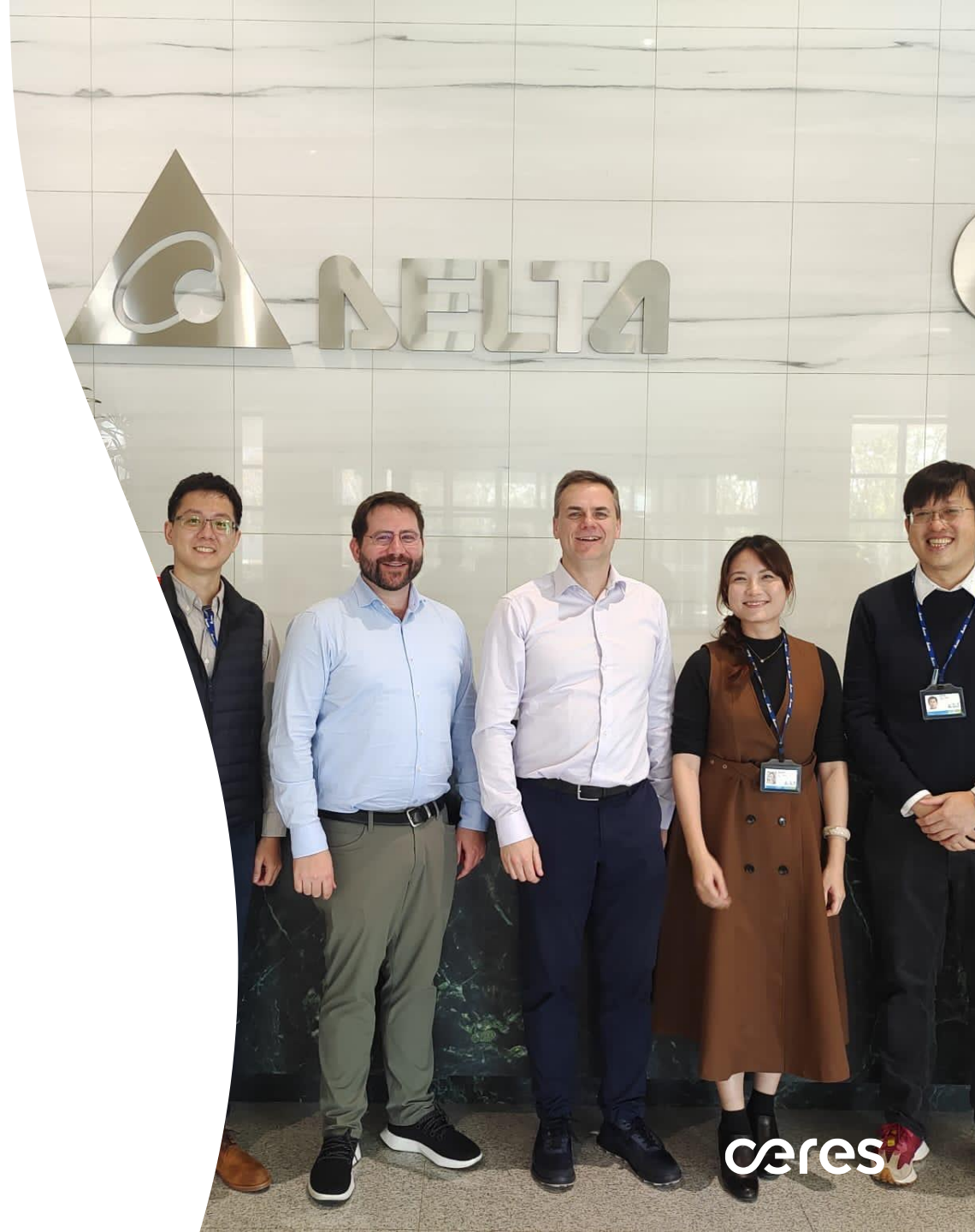
# Acceleration of SOEC built on leadership in SOFC

<b>Commercial acceleration</b>	<ul style="list-style-type: none"><li>• Compelling business case across hydrogen, green steel and green ammonia</li><li>• New licensees for both SOFC and SOEC applications</li></ul>
<b>Technology leadership</b>	<ul style="list-style-type: none"><li>• Megawatt demonstrator being commissioned at Shell's R&amp;D centre in India</li><li>• Designed optimum system architecture for a 100MW+ electrolyser system</li></ul>
<b>Execution at scale &amp; pace</b>	<ul style="list-style-type: none"><li>• Three new licence partners in three new regions: Delta in Taiwan, Denso in Japan and Thermax in India</li><li>• Compelling license of technology and factory blueprint enables localisation of production and supply chains</li></ul>



# Delta takes dual licence for power and hydrogen

- Ceres' first licence partner for cell and stack manufacturing for both SOEC and SOFC technology
- Headquartered in Taiwan, Delta employs over 80,000 people across approximately 200 facilities worldwide with strong ambitions to diversify into turnkey decarbonisation solutions for energy infrastructure, grid balancing and energy storage
- Agreement includes staged revenues of £43 million through technology transfer and manufacturing, targeting initial production by the end of 2026



# Denso signs SOEC manufacturing licence

- Non-exclusive global licence agreement for cell and stack production that includes licence fees, engineering services and hardware over multiple years similar to previous OEM partnerships
- A Fortune 500 company employing over 160,000 people, Denso is a Japanese original equipment manufacturer building expertise of system control and thermal management to address the growing green hydrogen sector
- Japan is committed to mobilise ¥15 trillion, equivalent to approximately \$98 billion, of public-private investment in the next 15 years, targeting installed electrolyser capacity of 15GW by 2030



# Thermax signs SOEC system licence

- Non-exclusive global licence agreement to manufacture, sell and service Stack Array Modules (SAM), which includes licence fees and product royalties in the future
- Thermax already has a well-established market presence as one of India's largest process equipment manufacturers with extensive experience in heat integration in hard-to-abate sectors
- Partnership is strategically important to stimulate market demand pull for our manufacturing licensees in a rapidly developing market while accelerating system development ready for commercial use





# Manufacturing licence and a system licence

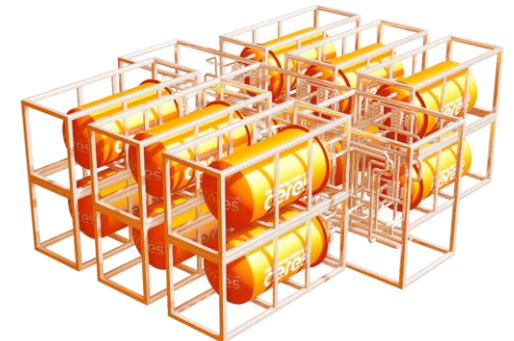
## Manufacturing licence

- Ceres provides cell and stack IP for manufacturing
- Cells are integrated into stacks
- Stacks are integrated into systems
- Stack royalties £/kW sold
- Manufacturing partners:



## System licence

- Ceres provides the system IP for manufacturing
- Systems integrated into industrial processes such as steel and ammonia plants
- System royalties £/kW sold
- System partners:





# Modular SOFC technology scales for various power applications



10-60kW

**DOOSAN**

scaling to 600kW



20kW

 **BOSCH**

scaling to 100kW



30-75kW

**WEICHAI**

scaling to 1MW



# Shell demonstrator being commissioned

- Megawatt scale SOEC demonstrator is on site in Bangalore, India at Shell's R&D centre and is going through final commissioning
- Demonstrator scheduled to come online by the end of the year
- Signed a follow-on contract to design a 10MW pressurised SOEC module, which can be scaled to 100s of megawatts and integrated into industrial plants to provide green hydrogen





# AtkinsRéalis collaboration for GW-scale hydrogen plant design

- Front-end engineering design for a commercial multi-megawatt modularised hydrogen production system based on Ceres' technology
- Designed optimum system architecture for a 100MW+ electrolyser system, as a building block for gigawatt-scale green hydrogen plants
- Hydrogen production at essential in achieving large scale reductions in industrial emissions





# Engagement across the hydrogen value chain



ceres

Stack  
manufacturer

Module  
manufacturer

System  
integrator

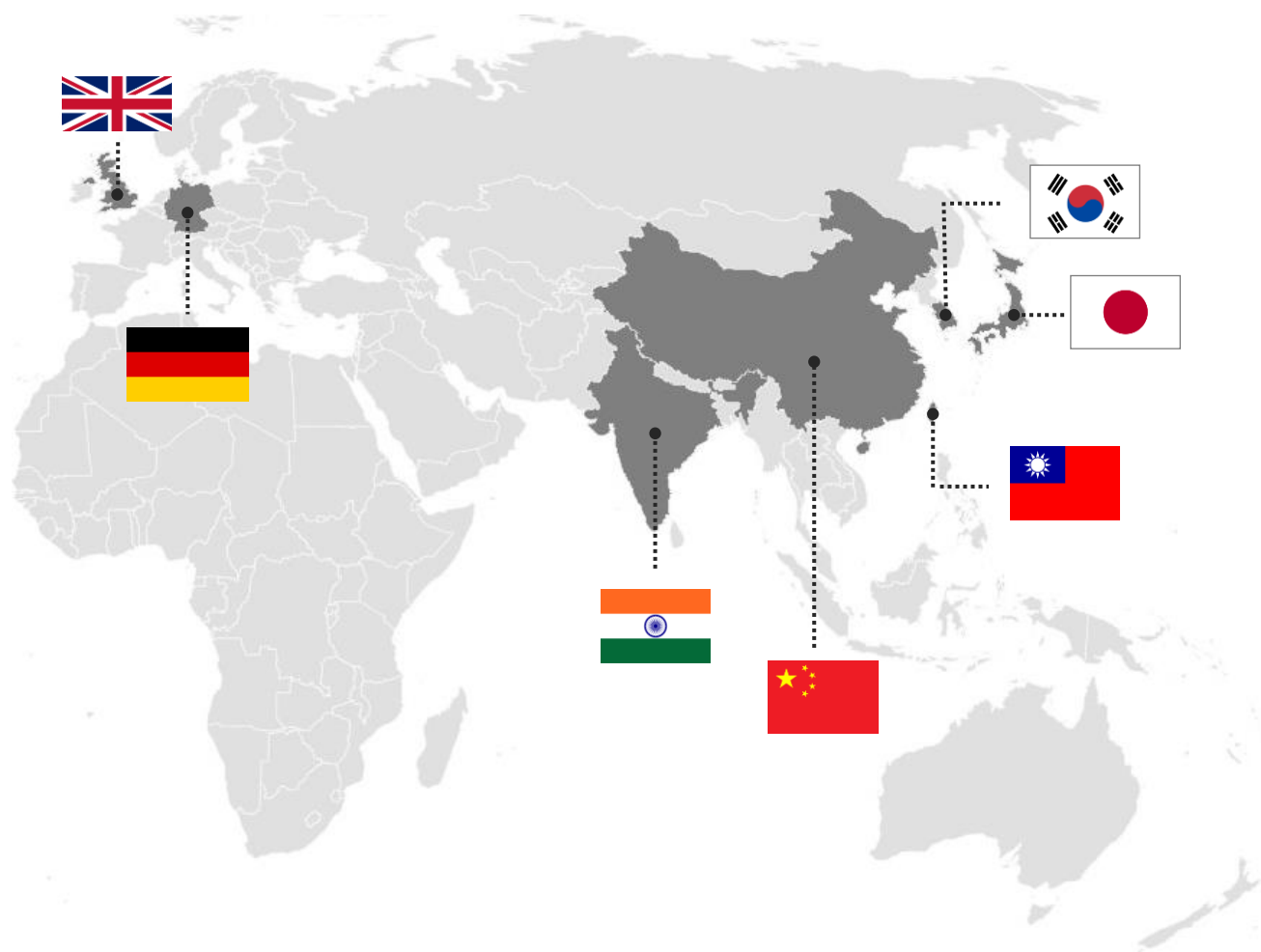
EPC

End user



# Building out our market presence

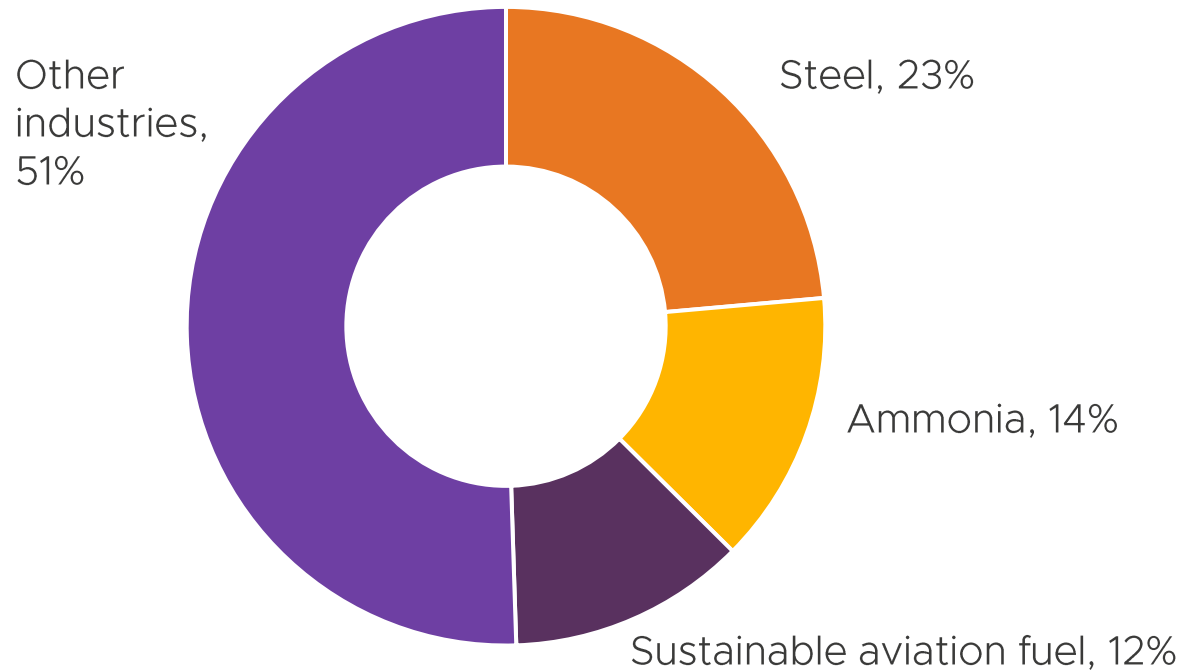
- Strategic collaboration with global partners to achieve scaled deployment of Ceres' technology
- Factories being built concurrently across key geographies
- Accelerated market entry for our partners by leveraging the continuous innovation and development of our world-leading solid oxide technology
- Growing interest in green hydrogen market for industrial applications
- BNEF estimates global production of green hydrogen will be 390 million metric tonnes by 2050<sup>1</sup>, with an estimated market value of \$1.4tr<sup>2</sup>



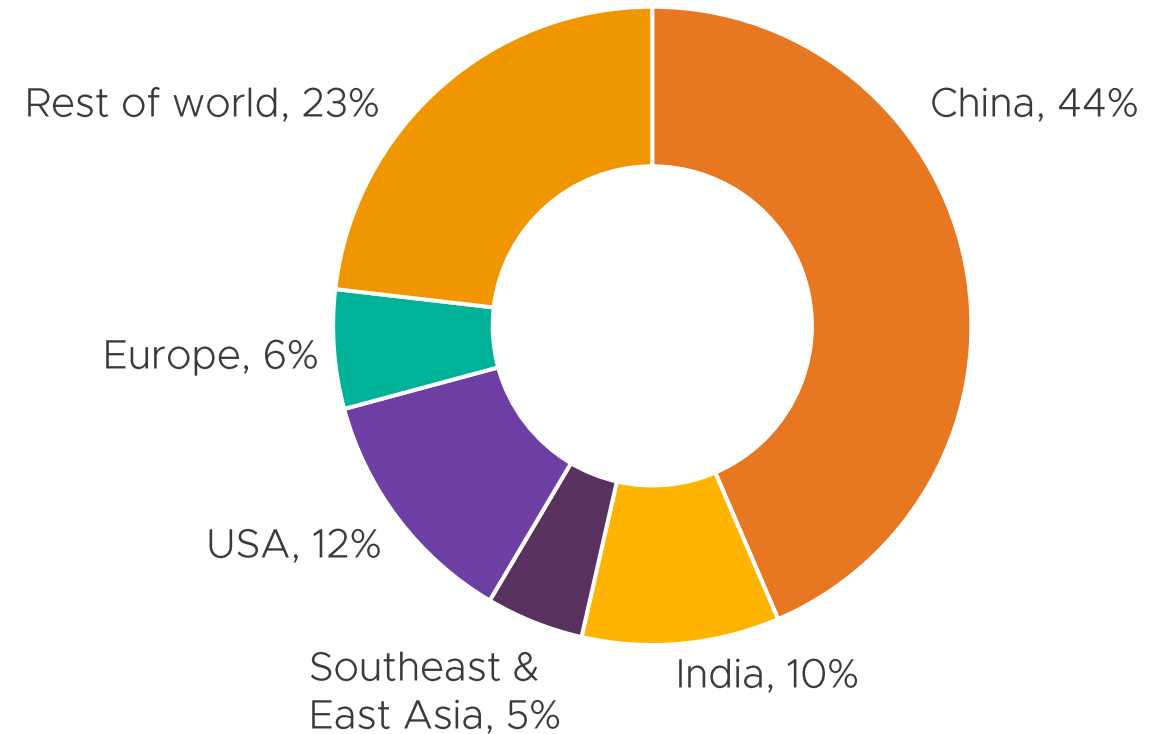
# SOEC compelling advantage in 50% of this target market

Global electrolyser capacity estimated to be 3,796GW in 2050

Ceres technology advantage



Ceres business model advantage



# Outlook and focus for remainder of the year

- Three new licences this year: two manufacturing licences with Delta and Denso, and a system licence with Thermax
- Bosch, Doosan, Delta and Denso progressing towards scaled production
- Continue to grow our relationship with Weichai in China for stationary power systems
- Demonstrator programmes for green hydrogen on track with Shell, and Bosch/ Linde
- Confirming recently upgraded full-year guidance for 2024 of £50–60m revenue, supported by existing contracts and order intake, which has grown to £103.3m as of 31 August 2024
- Strong financial position driven by increased order intake and optimised cost base

# Questions

## **Investor Relations**

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