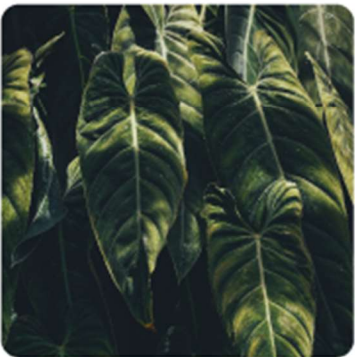


FUSION-FUEL™



1Q 2024 PRESENTATION

Disclaimer

This presentation includes statements of future events, conditions, expectations, and projections of Fusion Fuel Green plc (the “Company,” “we,” “us” or “our”). Such statements are “forward looking statements” within the meaning of the “safe harbor” provisions of the United States Private Securities Litigation Reform Act of 1995. The Company’s actual results may differ from its expectations, estimates and projections and, consequently, you should not rely on these forward-looking statements as predictions of future events. Words such as “expect,” “estimate,” “project,” “budget,” “forecast,” “anticipate,” “intend,” “plan,” “may,” “will,” “could,” “should,” “believe,” “predict,” “potential,” and similar expressions are intended to identify such forward-looking statements. These forward-looking statements include, without limitation, estimates and projections of future performance, which are based on numerous assumptions about sales, margins, competitive factors, industry performance and other factors which cannot be predicted. Such assumptions involve a number of known and unknown risks, uncertainties, and other factors, many of which are outside of the Company’s control, including, among other things: the failure to obtain required regulatory approvals; changes in Portuguese, Spanish, Moroccan, or European green energy plans; the ability to maintain listing of the Company’s securities on the Nasdaq Stock Market; the ability to obtain additional capital; field conditions and the ability to increase production capacity; supply chain competition; changes adversely affecting the businesses in which the Company is engaged; management of growth; general economic conditions, including changes in the credit, debit, securities, financial or capital markets; and the impact of any adverse public health developments on the Company’s business and operations. Should one or more of these material risks occur or should the underlying assumptions change or prove incorrect, the actual results of operations are likely to vary from the projections and the variations may be material and adverse.

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Financial Update Presentation

The Company’s consolidated financial data is prepared in accordance with International Financial Reporting Standards as adopted by the International Accounting Standards Board (“IFRS”) and is denominated in Euros (“EUR” or “€”). The numbers shown in this presentation have not been audited and therefore may vary to the final financial results disclosed by the company as part of the annual report. The unaudited consolidated financial data reflects, in the opinion of management, all adjustments, consisting of normal recurring adjustments, considered necessary for a fair statement of the Company’s financial data for the periods indicated. The unaudited consolidated financial data should be read in conjunction with the audited consolidated financial statements and notes thereto for the year ended December 31, 2023 included in the Company’s Annual Report on Form 20-F for the year ended December 31, 2023.

Use of Social Media as a Source of Material News

The Company uses, and will continue to use, its LinkedIn profile, website, press releases, and various social media channels, as additional means of disclosing information to investors, the media, and others interested in the Company. It is possible that certain information that the Company posts on social media or its website, or disseminates in press releases, could be deemed to be material information, and the Company encourages investors, the media and others interested in the Company to review the business and financial information that the Company posts on its social media channels, website, and disseminates in press releases, as such information could be deemed to be material information.

AGENDA

FUSIONFUEL™

- Focus on Fusion
- Industry Perspectives
- Q1 Highlights
- Commercial Update
- 2024 Milestones and Priorities

FUSION-FUEL™

01 —
FOCUS
ON FUSION



LEADING PURE PLAY HYDROGEN SOLUTIONS COMPANY

Unlocking the energy transition through the design and development of innovative green hydrogen solutions

Differentiated, modular design based on proprietary miniaturized PEM electrolyzer

Decentralized, building-block architecture unlocks unprecedented scalability and reliability



End-to-end service proposition; complementary offerings of tech sales, engineering, and project development unlock trusted partner status

De-risked 3rd party commercial pipeline supported by 650+ MW project portfolio and €60+ million in grant funding approved

Next-gen electrolyzer production facility located in Portugal, dimensioned for 500 MW of annual throughput

Competitive advantage in small-to-midscale segment, closely aligned with current market demand profile

The green hydrogen sector is at a crossroads characterized by asymmetrical supply and demand dynamics...

- Supply no longer a bottleneck; underutilized production capacity awaiting clarity on demand
- Large and ongoing gap between planned production and offtake; perception of green premium continues to hamper long-term contracted offtake
- Global project pipeline remains in neutral; project financing landscape is challenging, making bankable projects with government funding highly attractive assets
- Slow rollout of subsidy mechanisms continues to be roadblock, but funding beginning to shake loose
- Growth in demand increasingly fueled by smaller-scale, emerging use-cases (e.g., commercial mobility, steel, cement and other industrial uses, power)
- Balance sheet strength continues to be an area of focus for investors
- Execution of capital management and product retooling strategies beginning to take effect

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02 —
Q1 FINANCIALS &
HIGHLIGHTS



02 – Q1 2024 HIGHLIGHTS

Key Developments in Q1 2024

- Received notification of IPCEI approval from European Commission for 630 MW HEVO-Portugal Project
- Raised ~€6 million from at-the-market program to strengthen capital position
- Awarded €1.015 million grant from European Commission as part of H2tALENT consortium
- Received provisional grant approval for 25 MW HEVO-Aveiro green hydrogen project
- Convened EGM to secure shareholder approval allowing the Company to allot securities above 20% annual cap

Subsequent Events

- Drew down on the first tranche (\$1.15 million) of the Macquarie convertible note facility
- Completed installation of 300 kW HEVO-Chain system for global cement major
- Signed tech sale contract for 100 kW HEVO-Chain system for hospital client in Iberia
- Implemented portfolio approach with strategic commercial relationships with opportunity for multi-project follow-on

02 – FINANCIAL DATA (UNAUDITED)

| Key Financial Results / Metrics (€'000) | 1Q 2024 | 4Q 2023 |
|---|---------|----------|
| Profit/loss | | |
| Revenues | - | 1,637 |
| Cost of goods sold | (54) | (9,394) |
| SG&A | (4,260) | (3,201) |
| Pre-tax loss | (5,139) | (11,381) |
| Balance sheet | | |
| Non-current assets | 32,411 | 32,662 |
| Cash balance | 1,503 | 1,147 |
| Inventory | 4,371 | 3,672 |
| Trade payables | 10,498 | 11,015 |
| Equity | 5,010 | 3,715 |
| Employees | | |
| Headcount at end of period (FTE) | 117 | 124 |
| Production Staff : Non-Production Staff | 51 : 66 | 53 : 71 |
| Grants | | |
| Grants Approved | 54,800 | 61,015 |
| Grant Payments Received to date | 11,353 | 11,353 |

Key developments in Q1 2024

Inflows

No revenues or grant inflows during Q1 2024.

Inflows from impaired inventory sales of €0.24 million.

Outflows

Increase in SG&A of €1.1 million. 4Q 2023 included credits of €1.6 million (grant income) and forfeiture of share-based compensation (€1.4 million). On a grossed-up basis, SG&A decreased by €1.53 million.

Decrease in payables of €1.38 million.

Capital

Over 5 trading days in February 2024, we sold 2,345,452 class A ordinary shares for net proceeds of \$6,398,264 at an average sales price of \$2.73 per share through our ATM facility. We paid \$165,878 in commissions to agents as part of these trades.

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03 —
COMMERCIAL
UPDATE



03 – INAUGURAL HEVO-CHAIN COMMISSIONING

- 300 kW turn-key facility in commissioning process for global cement manufacturer. Acceptance testing underway with handover expected in early June.
- The cement industry is a priority commercial focus area:
 - Commercially viable without grants
 - Typically, smaller-scale projects (<3 MW)
 - Low pressure application, no incremental compression required
 - Cement kilns need 3-4 days to preheat, making continuity and availability of supply of critical importance
- Client has requested proposals for four follow-on projects ranging from 300 kW to 1.7 MWs, reflecting the competitiveness of our technology and the value of our end-to-end service proposition.

The HEVO-Chain is particularly well-suited to address the demands of the cement industry thanks to several unique design and operating advantages



Efficiency



Market-leading system efficiency and cost-effective low-amperage power equipment. Reduces costs of green hydrogen production

Availability



Building-block design enables production to closely match variable power input (3-100% nominal load), ensuring continuity of operation

HC-CONTAINER



HEVO™

HC-CUBE



Performance



Decentralized architecture eliminates contagion effect and significantly reduces the cost and complexity of service & replacement

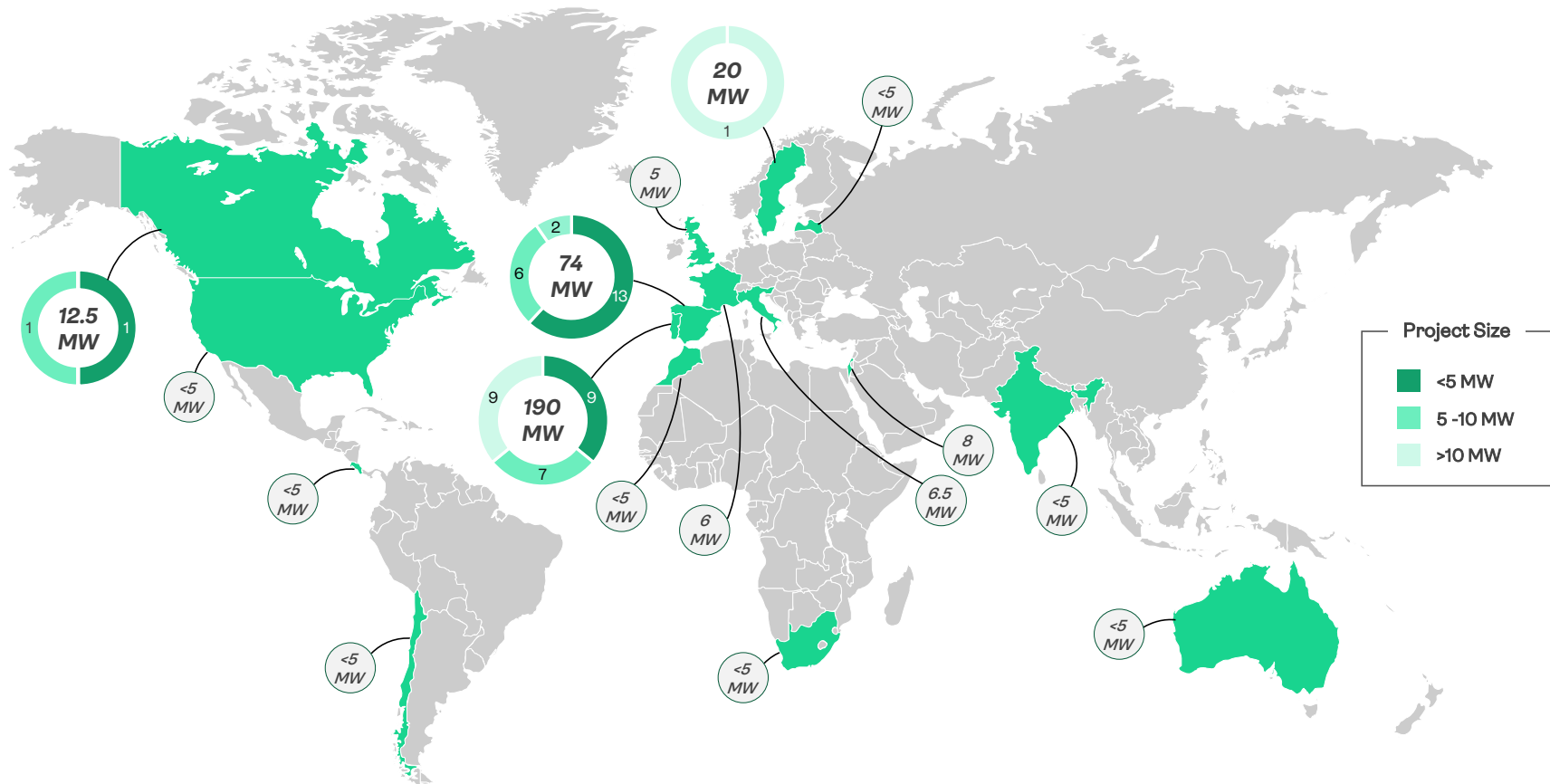
Scalability



Plug-and-play modules as small as 20kW unlock customizable, small-scale deployment and flexibility in system design

03 – COMMERCIAL OFFERS MARKET MAP

Over the last six months we have significantly expanded our commercial efforts outside the Iberian market



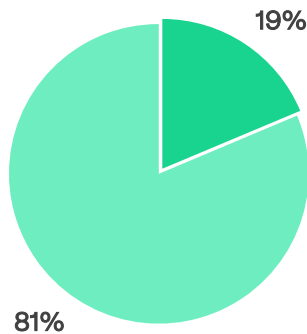
Note: market map excludes Fusion Fuel's company-owned project portfolio and includes only third-party offers made.

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03 – COMMERCIAL PIPELINE DEVELOPMENT

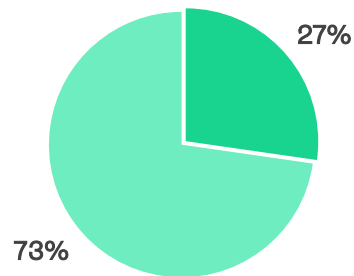
- Focus on new markets and expanded service offerings to capture higher share of wallet.
- Nearly 50% of offers are from outside Iberia and over 80% of offers include electrolyzer supply as well as engineering and balance of plant procurement services.
- Offers are focused on smaller-scale opportunities where the HEVO-Chain solution has a meaningful competitive advantage. 73% of the offers made to date are for projects below 5 MW.

Offers by scope



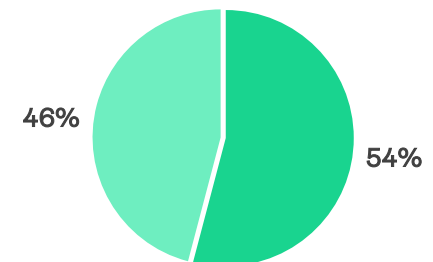
- Electrolyzer only
- Electrolyzer, Balance of Plant & Engineering

Offers split by size



- Over 5 MW
- Under 5 MW

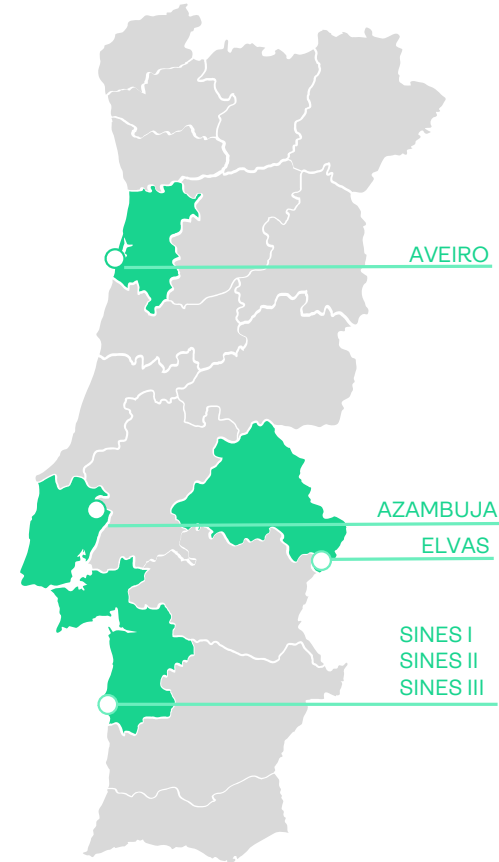
Offers per region



- Iberia
- Rest of World

Fusion Fuel Own Projects

| Project | Electrolyzer Capacity (MW) | H ₂ Production (tpa) | Grants Secured (€ million) | Update |
|-------------------|----------------------------|---------------------------------|----------------------------|--|
| Sines I, II & III | 630 | 62,463 | ✓ (32.5 + IPCEI) | In discussions with potential project investor / off-takers |
| Elvas | 4 | 186 | ✓ (3.6) | MoU signed and currently undergoing due diligence with off-takers |
| Azambuja | 4 | 300 | ✓ (3.9) | In discussions with several offtake partners and project investors |
| Aveiro | 25 | 2,100 | ✓ (5.0) | Grant awarded in Mar 2024, awaiting grant contract signature; In discussions with offtake partners and project investors |

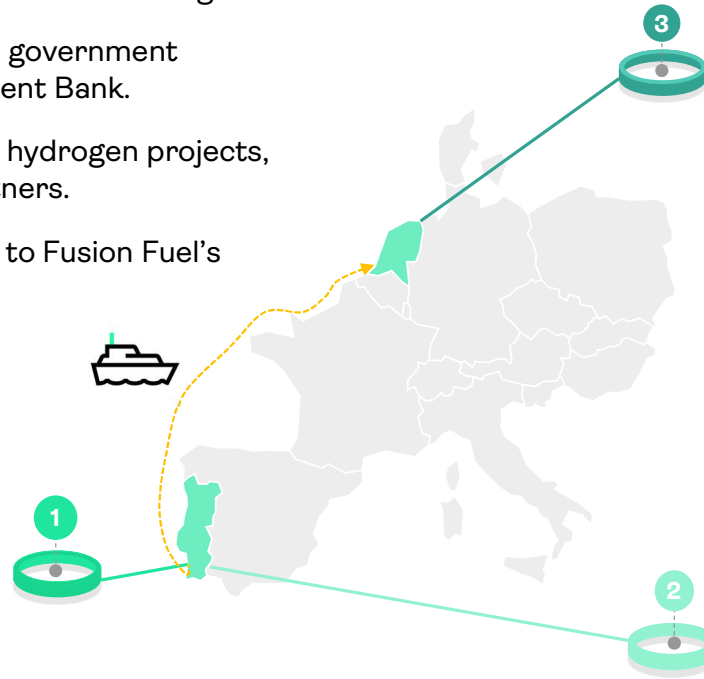


WHAT IPCEI DESIGNATION MEANS

- “Important Project of Common European Interest” (IPCEI). One of 33 projects selected as part of the H2Infra Program.
- Funding negotiations can now start with government stakeholders and the European Investment Bank.
- One of Portugal’s most ambitious green hydrogen projects, led by Fusion Fuel with multiple key partners.
- Expected to be a significant contributor to Fusion Fuel’s revenue line over its three phases.

1. GREEN HYDROGEN PRODUCTION

- Supply of 62,000 tons p.a. of green hydrogen via the Sines H₂ pipe ring
- 630 MW of electrolyzer capacity
- ~650,000 tons of CO₂ p.a. avoided



3. EXPORTATION ROUTE

- Establishing a route to Northern Europe through the off-taker
- Supporting Europe’s energy transition and decarbonization efforts



2. OFF-TAKE

- 62,000 tons of green hydrogen can produce up to 332,565 tons of green ammonia
- Project partner is a major player in European green ammonia space



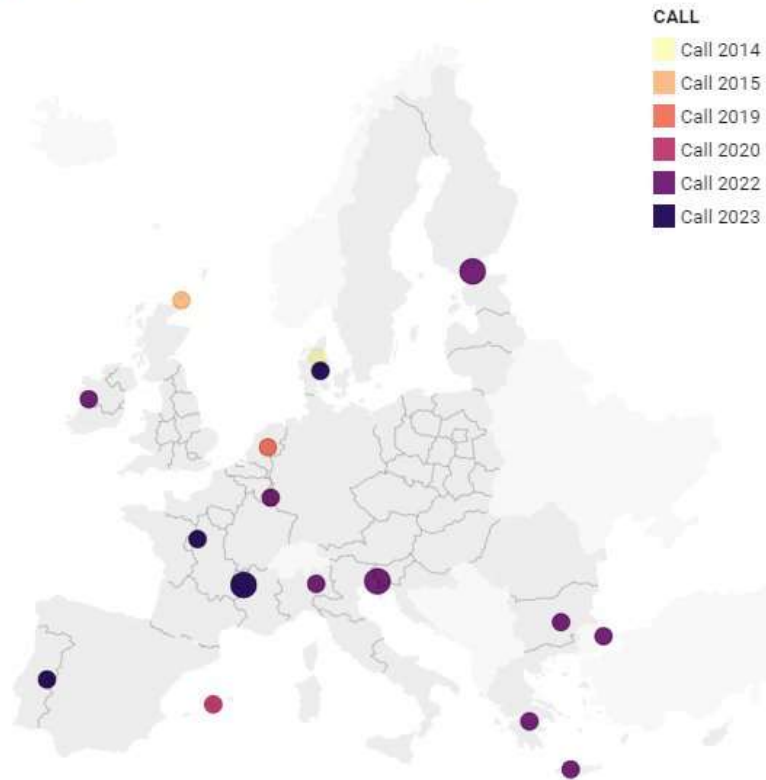


Fusion Fuel has joined a network of 16 Hydrogen Valleys across Europe

Operating as a 28-partner consortium, Fusion Fuel, as Work Package Leader will lead the development of the Hydrogen Production Infrastructure and its integration into the Sines backbone

Tightly tied to our Sines Portfolio, serving as the perfect testing ground

Hydrogen Valleys in the Clean Hydrogen JU



Consortium Grant Approved of €9m, of which €1m applies to the Fusion Fuel component.

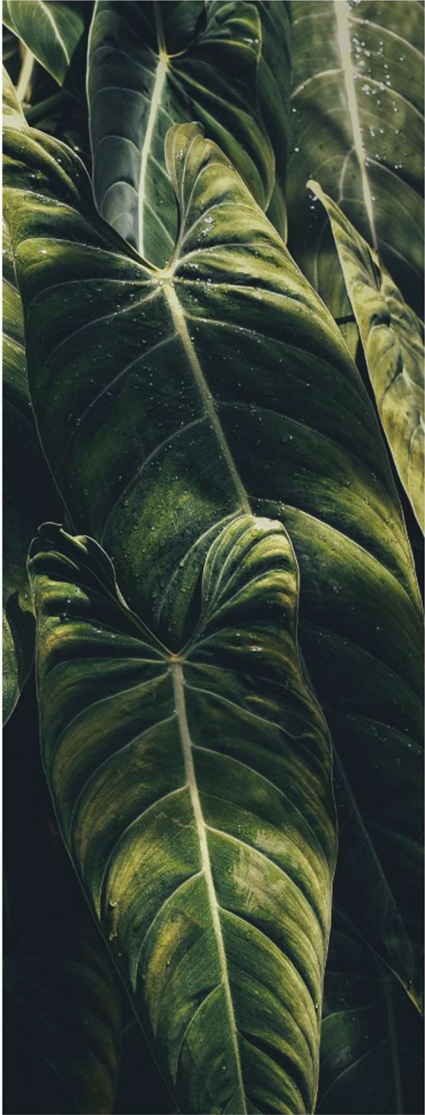
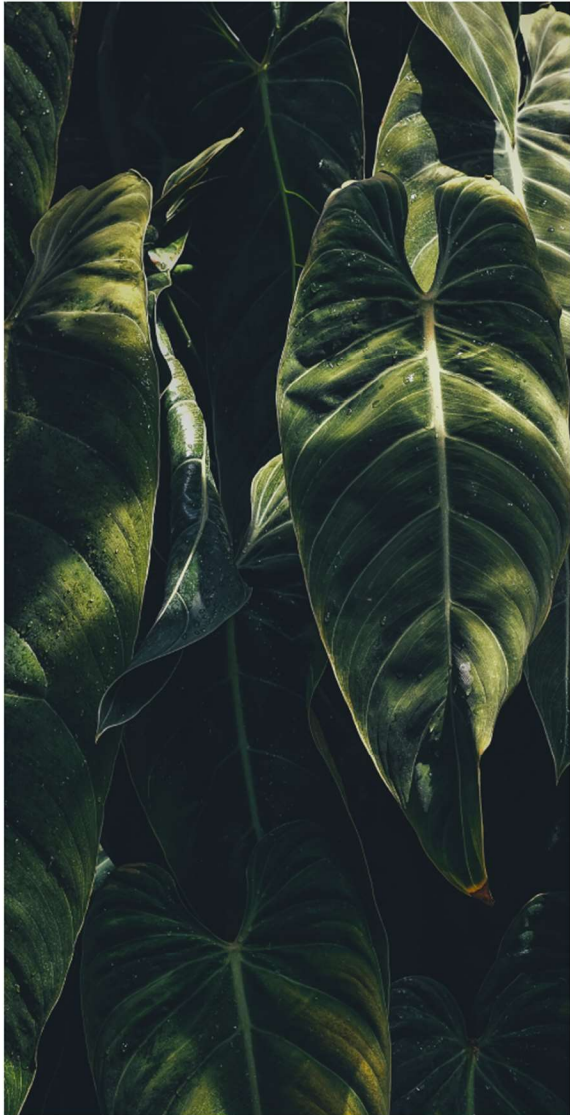
Enables the completion of FEL I & FEL II studies, and delivery of equipment to projects in Portugal.

Strengthens strategic partnerships with the 27 consortium partners that work across the hydrogen value chain over 6 countries.



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04 —
2024
MILESTONES



04 – 2024 PRIORITIES & VALUE DRIVERS

1. Deliver and install several HEVO-Chain systems and plant related engineering services

- Delivered first HEVO-Chain system to global cement client
- Successfully deliver six to seven full HEVO-Chain systems to European clients, including five full project deliveries

2. Strengthen balance sheet and capital position

- Operationalized first tranche of the \$20 million Macquarie facility
- Further strengthen capital position with complementary and strategic sources of capital

3. Broaden the target market for HEVO-Chain

- Broadened our commercial reach to have live commercial offers in 16 markets across multiple industries
- Certify HEVO-Chain solution for the North American and Australian markets

4. Continue to reduce operational costs and ensure effective resource allocation

- Reduced HEVO product transformation costs by ~70% and a personnel reduction of ~30% year on year
- Continue to right-size company structure and costs, and make strategic resource allocation changes

5. Pursue strategic commercial and production partnerships

- Developed relationships with multi-project developers – around €100 million in offers with 3 core partners
- Pursue strategic partnerships across the hydrogen value chain and within key geographies

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www.fusion-fuel.eu