

An aerial photograph of turbulent, teal-colored water with white foam, likely from a boat's wake. The water is dark teal in the center and lighter, more foamy teal towards the edges. The text '4Q 2021 UPDATE' is overlaid in white, sans-serif font on the left side of the image.

4Q 2021 UPDATE

Disclaimer

This presentation includes statements of future events, conditions, expectations, and projections of Fusion Fuel Green plc (the "Company"). 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 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 COVID-19 or other 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.

The forward-looking statements and projections herein should not be regarded as a representation or prediction that the Company will achieve or is likely to achieve any particular results.

The Company cautions readers not to place undue reliance upon any forward-looking statements and projections, which speak only as of the date made. The Company does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements to reflect any change in its expectations or any change in events, conditions, or circumstances on which any such statement is based.

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.

Financial Statement 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, 2020 included in the Company's Annual Report on Form 20-F for the year ended December 31, 2020.



01—

LETTER

EXECUTIVE

COMMITTEE



Dear Shareholders,

The fourth quarter of 2021 saw the continued development of the global green hydrogen ecosystem in the face of extreme volatility in the energy markets, the implementation of several funding programs in our core markets of Portugal and Spain, and the sooner-than-expected emergence of the hydrogen mobility opportunity as a significant growth vector. It is in that context that Fusion Fuel continued to build out its leadership team and make meaningful progress against key commercial and operational objectives.

While there is no shortage of excitement and momentum behind the hydrogen revolution, the number of companies that are producing green hydrogen today are few and far between. With the successful completion of our H2Evora facility, we can now proudly say that Fusion Fuel is producing the first solar to green hydrogen in Iberia, and, upon final commissioning of the facility, we will begin to generate the initial cash flows from the asset. We have seen an acceleration of interest in our technology, as evidenced by several commercial agreements we executed during the fourth quarter of 2021 and into the early months of 2022.

But why is our technology so interesting, particularly in this market environment? Aside from the increasing focus on green hydrogen as a key decarbonization vector—a rising tide that is lifting all ships—there are several external factors that are contributing to our unique source of differentiation and competitive positioning. In our most recent letter, we discussed the downstream implications of the global energy crunch, a dynamic that accelerated throughout the fourth quarter of 2021 and has continued unabated in 2022. Natural gas prices set the market, both for gray hydrogen and indirectly for green, so we are watching energy markets closely, particularly amidst the conflict in Ukraine and geopolitical tensions roiling the European continent. This inflationary backdrop has impacted electricity markets as well, as wholesale electricity prices reached nearly four hundred euros / MWh in the Iberian market in December, further challenging the economics of on-grid hydrogen production. By contrast, our HEVO-Solar technology, by virtue of it being an off-grid solution, offers certainty of price and the unique ability to mitigate exposure to volatility of natural gas and grid prices.

Despite capital market headwinds to end the year, we believe Fusion Fuel is well-positioned entering 2022 to be a significant and credible player in the hydrogen space, and we remain extremely confident in our ability to become a leader in the green hydrogen sector in the coming years.

Financial Update

As reported in the first, second and third quarters of 2021, the majority of expenses that were incurred related to the contingent consideration from the Fusion Fuel and HL Acquisitions merger. The share-based payment expense for the contingent consideration was to accrue monthly at a rate of €1.6m until the end of June 2022, unless the contingent consideration was earned before that date. On December 31, 2021, three of the four shareholders that were party to the contingent consideration forfeited all rights under the original agreement. This resulted in a fourth quarter reversal of previously booked share-based payment expense in the amount of €19.6 million.ⁱ

During the third quarter of 2021, we announced the adoption of the Company's Equity Incentive Plan (EIP). The purpose of the EIP is to provide the Company with the flexibility to issue share-based awards as part of an overall compensation package to attract and retain qualified personnel. We recorded share-based payment expenses of €0.1 million in the fourth quarter of 2021 related to the issuance of Restricted Share-Units (RSUs) to our employees. The RSUs are estimated and measured at grant-date fair value and expensed through the income statement over their vesting period. The fair-value treatment of the warrant obligations and the relative decrease in the value of the warrants at the end of the fourth quarter compared to the third quarter end had a positive impact on pre-tax income of €13.1 million.

It is important to note that bookings related to the contingent consideration, EIP and warrants are not actual cash expenses nor earnings for the company but rather a reflection of the valuation of these instruments at a specific point in time.

Our cash and cash equivalents decreased by approximately €7.2 million for the fourth quarter to €35 million, largely due to investments of €5 million in raw materials, inventory and pre-payments associated with the placement of purchase orders to lock-in the delivery of critical components. Additionally, costs were incurred for ongoing renovation work at our Benavente facility, increased salary compensation due to increased headcount, and development of the Evora plants.

We continue to explore financing options for the Benavente factory with the expectation that we will move forward with a financing facility once the renovation work has been completed.

Business Update

The fourth quarter of 2021 represented the successful culmination of our commercial efforts through the first three quarters of the year, highlighted by two achievements in particular: the completion of our H2Evora demonstrator facility, and the signing of our first tech sale contract with Exolum. These are small, yet significant, commercial milestones which have provided considerable momentum heading into 2022, a tailwind that we believe has positioned Fusion Fuel to advance existing projects and execute on some larger scale agreements early in the new year.

Even as we await formal commissioning of the facility, H2Evora continues to create value for the company. Two of the fifteen HEVO-Solar generators have been producing continuously since the beginning of the fourth quarter, establishing our track record for technology performance and bankability. We continue to host

client visits to Evora, and most recently we welcomed our partners from Ampol in advance of the development of our Brisbane demonstrator facility later this year. With one final permit left to secure, we are optimistic that we will be in position to go-live at Evora with all fifteen units in the very near future, though the timeline to formal commissioning remains inexact.

Our contract with Exolum – to develop a turnkey 0.42 MW hydrogen plant and co-located refueling station – is progressing steadily, with the installation of the first HEVO-Solar generators expected in May 2022. While that agreement was described in some detail in our third quarter letter, the partnership is illustrative of the broader momentum behind the mobility space, a market in which we believe we are uniquely positioned to play given the modularity of our solution and our ability to deploy small-scale, co-located hydrogen production economically. Across much of Europe, the price of hydrogen “at the pump” is above €12/kg, well in excess of what industrial consumers of grey hydrogen are today willing to pay for green. Mobility represents an opportunity to sell green hydrogen at materially higher margins and still enable fleets to operate in a cost-efficient manner while decarbonizing key industrial routes. We have seen a major acceleration of interest in hydrogen refueling projects, and we expect to establish a meaningful footprint as the demand environment continues to develop. Over time, as the cost of emitting carbon increases, and as companies begin to follow through on their pledges to diminish their carbon footprint, we expect industrial consumers of grey hydrogen to increasingly shift to green.

More recently, following the H2Evora and Exolum announcements, we formally signed a technology sale agreement with KEME Energy for a 1.2MW green hydrogen facility, which had earlier received approval for €2.4 million in funding from Portugal’s POSEUR programme. Development of the KEME project is expected to commence in the second quarter of 2022. We also signed a significant framework agreement with Hive Energy, a prominent UK-based developer of renewable energy assets to develop large-scale green hydrogen projects in Spain. These are highly credible and established players in the clean energy space, and we view them – along with Exolum – as strategic partners for Fusion Fuel in the Iberian market. We recognize the importance of aligning Fusion Fuel with strategic partners across the value chain, and as with Ampol in Australia, we expect that to be a key element of our strategy going forward.

Overall, we feel very confident in our commercial positioning and the strength of our project pipeline. Looking ahead through 2026, we have 36 projects in our pipeline representing 2.4 gigawatts of electrolysis capacity, or 110,000 metric tons of solar-to-green hydrogen production. Ten of the 36 are already in various stages of the licensing process, and we have already secured over 3000 hectares of land on which to develop them. As we ramp up our commercial activities in the Australian and North American markets, we expect these numbers to increase markedly given the competitiveness of our solution in those regions.

In our last letter we described some of the challenges we encountered and overcame, particularly in the context of global supply chain tightness. By contrast, the fourth quarter of 2021 saw a dramatic easing of those bottlenecks, enabled in part by a concerted effort to diversify our approved suppliers and ensure resilience across the supply chain. One example of this involves the membrane electrode assembly (MEA), a key component of our HEVO microelectrolyzer and a significant

driver of operational headwinds earlier in 2021. In the fourth quarter, we certified the MEAs produced by a new supplier that produces MEAs that are not only superior in quality and performance to our previous suppliers, but are materially cheaper with sufficient capacity to produce the volumes we will require as we scale up our production. Moving forward, we will look to continue to strengthen our ecosystem of certified suppliers, but we are confident that we are entering 2022 with a robust and resilient supply chain.

We continue to make steady progress on our state-of-the-art electrolyzer factory in Benavente, Portugal. Refurbishment of the facility was completed late in the fourth quarter, and we expect go-live of the first production line in the second quarter of 2022, with full launch scheduled for the second half of 2022. We will continue to build out the production capacity over the coming years and target producing 500 MW of electrolyzer capacity per annum from Benavente in 2025. We are also pleased to announce that Benavente was recently deemed a project of merit by AICEP, Portugal's Trade & Investment Agency, due to its special and strategic interest for the Portuguese economy. As a result, we have secured approximately €10 million in grants from AICEP, or approximately 25% of the total capital that we will invest in building out the plant over the next three years. The funding is split across two components in roughly equal proportions: direct financial support for eligible expenses, and tax offsets that Fusion Fuel Portugal will be able to take advantage of over the next eight years.

Finally, we also continued to strengthen our leadership team, highlighted by a number of key appointments during the quarter. In November, we announced the appointment of Theresa Jester to Fusion Fuel Green PLC's Board of Directors. Ms. Jester brings with her over forty years of experience in the solar and electronics manufacturing industries, with particular focus on commercializing new technologies, a skillset that will prove invaluable as we scale our production capacity and establish a global operational footprint. We also brought on the senior executives who will be charged with spearheading our expansion into new geographies. David Lovell joined us as CEO of Fusion Fuel Australia, an appointment that was highlighted in our third quarter letter. Earlier this year we announced that Zachary Steele and Jason Baran had joined the company as Co-Presidents of Fusion Fuel Americas. Zach and Jason join us fresh from having advanced the \$2B Cedar LNG project in British Columbia, culminating in a highly successful monetization for the investors of the largest majority-owned indigenous project in Canadian history.

In addition to these executive appointments, we continue to strengthen our team, particularly in the Research & Development department. Continuous innovation is a fundamental pillar of our business, so having a world class R&D function is critical to sustaining our competitive advantage and cost leadership. Fusion Fuel has grown considerably in headcount over the course of 2021, and we will continue to invest in our people to enable the significant growth we expect in 2022.

We cannot in good conscience end this letter without noting with sadness the loss of life and destruction taking place in Ukraine. First and foremost, our hearts go out to the people of Ukraine—we pray that somehow peace will soon “breakout.” As stewards of the company, we appreciate the uncertainty which Russia's invasion has caused. At this point there is simply no telling what the immediate spillover effects may be on European or global economic activity. However, we remain

optimistic that the threat of climate change will not take a backseat. We expect the world will continue in its efforts to transition away from fossil fuels and we firmly believe green hydrogen will be one of the solutions. Fusion Fuel is positioning itself to be among the leading players in what we are confident will be a significant market for green hydrogen in the years ahead.



Your Executive Committee,

André Antunes

Chief Production Officer

Frederico Figueira de Chaves

Chief Financial Officer

Jason Baran

Co-President of Americas

Mario Garma

Head Of EMEA

David Lovell

Head of Australasia

Jaime Silva

Chief Technology Officer

João Teixeira Wahnnon

Chief of Business Development

Zachary Steele

Co-President of Americas

ⁱ Under International Financial Reporting Standards (“IFRS”), the contingent consideration was accounted for as a share-based payment in accordance with IFRS 2 and the terms that needed to be achieved as part of the arrangement were considered to be “non-market” vesting conditions. Non-market vesting conditions are not considered when estimating the fair value of the shares or share options at the grant date. Instead, these vesting conditions are considered by adjusting the number of equity instruments included in the measurement of the transaction amount to reflect the number of awards that are expected to vest. Management assessed the number of awards that are expected to vest before the end of June 2022 considering the forfeiture of rights of certain parties as well as the probability of achieving the vesting conditions and determined that a reversal of previous costs booked was required.

The background features a financial chart with green candlesticks and a bar chart. The candlesticks are arranged in a sequence, with some showing upward and some downward movement. The bar chart consists of several vertical bars of varying heights, with numerical values labeled on top of each bar. The overall color scheme is green and white, with a grid pattern in the background.

02 —

Q4 HIGHLIGHTS & FINANCIAL REVIEW

Highlights of the quarter

- Entered into an EPC agreement with Exolum to deliver a turnkey 0.42 MW Green Hydrogen Plant and a Hydrogen Refueling Station
- Appointed Theresa Jester to the Company's Board of Directors
- Appointed David Lovell as Head of Australian Operations and member of the Executive Committee
- Presented Sines Green Hydrogen Valley Alliance to develop 91 MW Solar-to-Hydrogen Facility in Sines

First Quarter 2022 Subsequent Events

- Appointed Zachary Steele and Jason Baran as Co-Presidents of Fusion Fuel Americas and members of the Executive Committee
- Entered into a strategic collaboration agreement with Asesoria Energetica SA ("AESA") to target the decarbonization of Spanish industry
- Entered into an agreement with HIVE Energy to develop 7,500 tons of green hydrogen production capacity in Spain
- Entered into technology sale agreement with KEME Energy for 1.2 MW green hydrogen facility in the Sines Industrial and Logistics Zone
- Secured grants of approximately €10 million for the development of the Benavente production facility

Key Figures

KEY FINANCIALS & FIGURES (€000'S) (Unaudited)	Q4 2021	Q3 2021
TOTAL OPERATING EXPENSES	11,111	(6,969)
o/w share-based payment (non-cash) expenses ¹	14,765	(5,007)
o/w operating expenses ²	(3,654)	(1,962)
OPERATING INCOME (LOSS)	11,111	(6,969)
PRE-TAX PROFIT (LOSS)	24,060	1,603
o/w fair value movement – warrants ³	13,089	7,496
o/w foreign exchange gains/(losses)	(140)	1,076
CASH & CASH EQUIVALENTS	35,135	42,279

¹ As part of the merger in December 2020, the Company agreed to a potential additional equity payment to certain former shareholders of Fusion Fuel who became employees of and service providers to the Company. As these awards are dependent on future service being provided to the Company, the Company considers them to be service awards under IFRS 2 and classifies both the expected share and warrant awards in equity with a corresponding compensation expense in the income statement. The shares and warrants expected to be awarded are estimated and measured at grant-date fair value and attributed to the income statement on a straight-line basis from the period from grant to expiration on June 30, 2022. During Q4, we recorded a reversal of the previous IFRS 2 charges amounting to €19.6m. In addition, we recorded and IFRS 2 charge of €0.1m relating to the 2021 Equity Incentive Plan (the EIP Plan). See further details of the EIP Plan on slide 11. These are non-cash expenses.

² These expenses are related with the operational activity by the Group. Our personnel costs increased in Q4 due to our inflated headcount and the level of senior hires as compared to Q3. In addition, we saw increases to professional & consulting fees and IFRS 16 related lease costs. Some of these are non-recurring expenses that we do not expect to incur in future quarters.

³ Derivatives are initially recognized at their fair value on the date the derivative contract and transaction costs are expensed to profit or loss. Warrants are subsequently re-measured at fair value at each reporting date with changes in fair value recognized in profit or loss. The fair value of the tradeable warrants is determined with reference to the prevailing market price for warrants that are trading on the NASDAQ under the ticker HTOOW. The fair value of non-tradeable warrants is determined with reference to the market value of the traded warrants, adjusted for an illiquidity discount of 5%. No warrants were exercised during Q2, Q3 and Q4 2021. These fair value movements represent non-cash items.

SHARES, WARRANTS AND RSUs AT PERIOD END	Q4 2021	Q3 2021
ORDINARY SHARES		
Class A	10,998,722	10,998,722
Class B	2,125,000	2,125,000
TOTAL SHARES OUTSTANDING	13,123,722	13,123,722
WARRANTS OUTSTANDING	8,869,633	8,869,633
RSUs OUTSTANDING¹	57,896	32,695

¹On August 5, 2021, the Company's Board of Directors adopted and approved the 2021 Equity Incentive Plan (the 2021 Plan), which authorized the Company to grant up to 1,000,000 ordinary shares in the form of incentive share options, non-qualified share options, share appreciation rights, restricted awards, performance share awards, cash awards and other share awards. The purpose of the 2021 Plan is to provide the Company with the flexibility to issue share-based awards as part of an overall compensation package to attract and retain qualified personnel. 57,896 Restricted-share Units (RSUs) were granted to 33 employees during the six months ended December 31, 2021. The Company considers the RSUs to be service awards under IFRS 2 and classifies the expected share awards in equity with a corresponding compensation expense in the income statement. The RSUs are estimated and measured at grant-date fair value and attributed to the income statement over their vesting period (over three years on a graded basis). This is a non-cash expense.

FUSION-FUEL™

Executive Offices

Fusion Fuel Green Plc.
The Victorians
15 - 18 Earlsfort Terrace
Saint Kevin's - Dublin 2
Ireland
contact@fusion-fuel.eu

Portugal
FUSION-FUEL Green Plc.
Rua da Fábrica, S/N, Sabugo
2715-376 Almargem do Bispo
Portugal
contact@fusion-fuel.eu

Shareholder Inquiries

Information about the firm, including all quarterly earnings releases and financial filings with the U.S. Securities and Exchange Commission, can be accessed via our Web site at www.fusion-fuel.eu

Shareholder inquiries can also be directed to Investor Relations via email at ir@fusion-fuel.eu

Transfer Agent and Registrar for Common Stock

Questions from registered shareholders of FUSION-FUEL Green Plc. regarding lost or stolen stock certificates, dividends, changes of address, and other issues related to registered share ownership should be addressed to:

Mark Zimkind
1 State Street
New York, NY 10004