



## Disclosure

THIS PRESENTATION HAS BEEN PREPARED FOR USE BY HL ACQUISITIONS CORP. ("HL") AND FUSION WELCOME – FUEL, S.A. ("FUSION FUEL") IN CONNECTION WITH THEIR PROPOSED BUSINESS COMBINATION. SUCH PRESENTATION MAY BE PRESENTED TO CERTAIN OF HL'S SHAREHOLDERS, AS WELL AS OTHER PERSONS WHO MIGHT BE INTERESTED IN PURCHASING HL SECURITIES, IN CONNECTION WITH THE BUSINESS COMBINATION.

HL, FUSION FUEL, THEIR AFFILIATES AND THEIR RESPECTIVE DIRECTORS AND EXECUTIVE OFFICERS, UNDER SEC RULES, MAY BE DEEMED TO BE PARTICIPANTS IN THE SOLICITATION OF PROXIES OF HL'S SHAREHOLDERS IN CONNECTION WITH THE PROPOSED TRANSACTION. INFORMATION REGARDING THE PERSONS WHO MAY, UNDER SEC RULES, BE DEEMED PARTICIPANTS IN THE SOLICITATION OF PROXIES TO HL'S SHAREHOLDERS IN CONNECTION WITH THE PROPOSED BUSINESS COMBINATION WILL BE SET FORTH IN THE REGISTRATION STATEMENT FOR THE PROPOSED BUSINESS COMBINATION TO BE FILED BY HL AND FUSION FUEL, WHICH WILL INCLUDE A PRELIMINARY PROXY STATEMENT/PROSPECTUS OF HL THAT WILL BE USED TO SOLICIT SHAREHOLDER APPROVAL OF THE TRANSACTION. INVESTORS AND SECURITY HOLDERS MAY ALSO OBTAIN INFORMATION REGARDING THE NAMES AND INTERESTS IN THE PROPOSED TRANSACTION OF HL'S DIRECTORS AND OFFICERS IN HL'S FILINGS WITH THE SEC, INCLUDING HL'S ANNUAL REPORT ON FORM 10-K FOR THE FISCAL YEAR ENDED JUNE 30, 2019, WHICH WAS FILED WITH THE SEC ON SEPTEMBER 10, 2019.

**INVESTORS AND SECURITY HOLDERS OF HL AND FUSION FUEL ARE URGED TO READ THE PRELIMINARY PROXY STATEMENT/PROSPECTUS, AND THE DEFINITIVE PROXY STATEMENT/PROSPECTUS AND OTHER RELEVANT DOCUMENTS THAT WILL BE FILED WITH THE SEC CAREFULLY AND IN THEIR ENTIRETY WHEN THEY BECOME AVAILABLE BECAUSE THEY WILL CONTAIN IMPORTANT INFORMATION ABOUT THE PROPOSED TRANSACTION.** INVESTORS AND SECURITY HOLDERS WILL BE ABLE TO OBTAIN FREE COPIES OF THE PROXY STATEMENT/PROSPECTUS AND OTHER DOCUMENTS CONTAINING IMPORTANT INFORMATION ABOUT HL AND FUSION FUEL THROUGH THE WEBSITE MAINTAINED BY THE SEC AT [WWW.SEC.GOV](http://WWW.SEC.GOV).

SOME OF THE FINANCIAL INFORMATION AND DATA CONTAINED HEREIN DOES NOT CONFORM TO SEC REGULATION S-X IN THAT IT INCLUDES CERTAIN FINANCIAL INFORMATION NOT DERIVED IN ACCORDANCE WITH UNITED STATES GENERALLY ACCEPTED ACCOUNTING PRINCIPLES ("GAAP"). ACCORDINGLY SUCH INFORMATION AND DATA HAS BEEN AND WILL BE ADJUSTED AND PRESENTED DIFFERENTLY IN PROXY STATEMENT/PROSPECTUS. HL AND FUSION FUEL BELIEVE THAT THE PRESENTATION OF NON-GAAP MEASURES PROVIDES INFORMATION THAT IS USEFUL TO INVESTORS.

THIS PRESENTATION CONTAINS FORWARD-LOOKING STATEMENTS. TERMS SUCH AS "ANTICIPATE," "BELIEVE," "CONTINUE," "COULD," "ESTIMATE," "EXPECT," "INTEND," "MAY," "MIGHT," "PLAN," "POSSIBLE," "POTENTIAL," "PREDICT," "PROJECT," "SHOULD," "WOULD" AS WELL AS SIMILAR COMMENTS, ARE FORWARD-LOOKING IN NATURE. THE FORWARD-LOOKING STATEMENTS CONTAINED IN THIS DISCUSSION ARE BASED ON CURRENT EXPECTATIONS AND BELIEFS CONCERNING FUTURE DEVELOPMENTS AND THEIR POTENTIAL EFFECTS. THERE CAN BE NO ASSURANCE THAT FUTURE DEVELOPMENTS AFFECTING HL OR FUSION FUEL WILL BE THOSE THAT ARE ANTICIPATED. THESE FORWARD-LOOKING STATEMENTS INVOLVE A NUMBER OF RISKS, UNCERTAINTIES (SOME OF WHICH ARE BEYOND THE CONTROL OF HL AND FUSION FUEL) OR OTHER ASSUMPTIONS THAT MAY CAUSE ACTUAL RESULTS OR PERFORMANCE TO BE MATERIALLY DIFFERENT FROM THOSE EXPRESSED OR IMPLIED BY THESE FORWARD-LOOKING STATEMENTS.

THE FINANCIAL PROJECTIONS INCLUDED IN THIS PRESENTATION ARE ALSO FORWARD-LOOKING STATEMENTS THAT ARE BASED ON ASSUMPTIONS THAT ARE INHERENTLY SUBJECT TO SIGNIFICANT UNCERTAINTIES AND CONTINGENCIES, MANY OF WHICH ARE BEYOND HL'S AND FUSION FUEL'S CONTROL. WHILE ALL PROJECTIONS ARE NECESSARILY SPECULATIVE, HL AND FUSION FUEL BELIEVE THAT THE PROSPECTIVE FINANCIAL INFORMATION COVERING PERIODS BEYOND TWELVE MONTHS FROM ITS DATE OF PREPARATION CARRIES INCREASINGLY HIGHER LEVELS OF UNCERTAINTY AND SHOULD BE READ IN THAT CONTEXT. THERE WILL BE DIFFERENCES BETWEEN ACTUAL AND PROJECTED RESULTS, AND ACTUAL RESULTS MAY BE MATERIALLY GREATER OR MATERIALLY LESS THAN THOSE CONTAINED IN THE PROJECTIONS. THE INCLUSION OF PROJECTIONS IN THIS PRESENTATION SHOULD NOT BE REGARDED AS AN INDICATION THAT HL AND FUSION FUEL, OR THEIR REPRESENTATIVES, CONSIDERED OR CONSIDER THE PROJECTIONS TO BE A RELIABLE PREDICTION OF FUTURE EVENTS.

NEITHER HL NOR FUSION FUEL UNDERTAKE ANY OBLIGATION TO UPDATE OR REVISE ANY FORWARD-LOOKING STATEMENTS, WHETHER AS A RESULT OF NEW INFORMATION, FUTURE EVENTS OR OTHERWISE, EXCEPT AS REQUIRED BY LAW. IMPORTANT FACTORS, AMONG OTHERS, THAT MAY AFFECT ACTUAL RESULTS INCLUDE FUSION FUEL'S ABILITY TO EXECUTE ON ITS BUSINESS PLAN, THE DEMAND AND MARKET FOR ALTERNATIVE ENERGY AND FUSION FUEL'S ESTIMATES OF EXPENSES AND FUTURE REVENUES AND PROFITABILITY. OTHER FACTORS INCLUDE THE POSSIBILITY THAT THE PROPOSED TRANSACTION DOES NOT CLOSE, INCLUDING DUE TO THE FAILURE TO RECEIVE REQUIRED SECURITY HOLDER APPROVALS, OR THE FAILURE OF OTHER CLOSING CONDITIONS.

NEITHER HL NOR FUSION FUEL MAKES ANY REPRESENTATION OR WARRANTY AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED IN THIS PRESENTATION. THIS PRESENTATION IS NOT INTENDED TO BE ALL-INCLUSIVE OR TO CONTAIN ALL THE INFORMATION THAT A PERSON MAY DESIRE IN CONSIDERING AN INVESTMENT IN HL OR FUSION FUEL AND IS NOT INTENDED TO FORM THE BASIS OF ANY INVESTMENT DECISION IN HL OR FUSION FUEL.

THIS PRESENTATION SHALL NEITHER CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY ANY SECURITIES, NOR SHALL THERE BE ANY SALE OF SECURITIES IN ANY JURISDICTION IN WHICH THE OFFER, SOLICITATION OR SALE WOULD BE UNLAWFUL PRIOR TO THE REGISTRATION OR QUALIFICATION UNDER THE SECURITIES LAWS OF ANY SUCH JURISDICTION.

## Executive Summary & Deal Overview

---

---

## Business Combination: HL Acquisitions & Fusion Fuel



### HL Acquisitions Corp (HCCH)

- Nasdaq-listed SPAC raised \$55mm in June 2018
- \$54mm currently held in trust as of June 2, 2020
- Experienced Board & Management team
  - Four decades of experience
  - Deep energy backgrounds across multiple verticals
  - Broad Capital Markets experience
- Extensive network of commercial & financial relationships
- Proven investment track record



### Fusion Welcome – Fuel S.A. (Fusion Fuel)

- An Emerging Leader in the **Green Hydrogen** Space
- Unique & innovative hydrogen technology solutions, efficiently tailored for industrial applications
  - Proprietary electrolyzer technology, with multiple points of 3<sup>rd</sup> party validation
  - Existing CPV manufacturing capabilities, expertise, & track record
  - Robust project pipeline
  - Local content advantage
- Management team with decades of combined experience in the clean energy sector



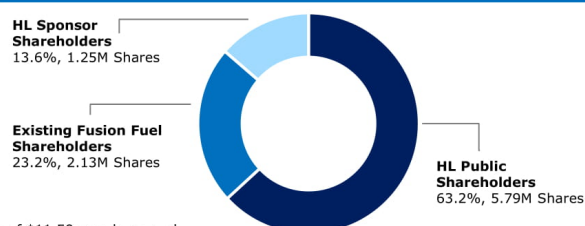
## HL Acquisitions & Fusion Fuel: Transaction Overview (in millions)<sup>1</sup>

Sources	
Parent Securities to Fusion Fuel at Closing <sup>3</sup>	\$26
Estimated Cash Held in Trust	\$54
Estimated Cash Contributed from Balance Sheet	\$0
<b>Total Sources</b>	<b>\$80</b>

Uses	
Equity Consideration to Existing Fusion Investors <sup>3</sup>	\$26
Cash to Existing Fusion Investors	\$0
Cash for Growth & Corporate Purposes	\$47.5
Estimated Transaction Costs	\$6.5 <sup>5</sup>
<b>Total Uses</b>	<b>\$80</b>

Pro-Forma Valuation <sup>2</sup>	
Current Redemption Price <sup>4</sup>	\$10.56
PF Shares Outstanding	9.2
<b>Implied Equity Value</b>	<b>\$97</b>
Plus: Net Debt	\$0
<b>Enterprise Value</b>	<b>\$97</b>

## Illustrative Pro-Forma Ownership<sup>2</sup>



1. Assuming no shareholders exercise redemption rights
2. Based on primary shares outstanding; excludes 9,875,000 outstanding HL warrants with a strike price of \$11.50 per share, and 1,137,000 Class A ordinary shares and 1,137,000 warrants in potential earnout consideration to be issued to current Fusion Fuel shareholders contingent upon execution of HPAs and other related milestones
3. Assuming the combined value of one Class B ordinary share and one warrant to purchase Class A ordinary shares to be issued to Fusion Fuel shareholders is equal to €10.73 and a Euro/US\$ exchange rate of \$1.13/1 €
4. Based on the current redemption
5. Includes \$1.7m of sponsor credit to be repaid upon transaction close

## Recent Highlights

### Recent Developments: Fusion Fuel

- **Designation From Portugal's National Innovation Agency**
  - The Portuguese National Innovation Agency recognized Fusion Fuel as a *Company of Competence in Research & Development*.
  - Specific designation opens access to Portugal's R&D tax credit program (SIFIDE), among others.
- **Strategic Partnership with Climate Change Ventures**
  - Fusion Fuel announced a strategic partnership with Climate Change Ventures (CCV) to develop Green Hydrogen projects in Southern Europe & North Africa.
  - CCV advises & finances disruptive climate change solutions. Projects under consideration include utility-scale Green H2 facilities in **Morocco, Greece & Croatia**.
- **Participation in Portugal's IPCEI Program**
  - In July 2020, **Fusion Fuel was shortlisted** within Portugal's Hydrogen IPCEI<sup>1</sup> program for EU submission.
  - Submission included **Evora & Sines projects**, additional manufacturing capacity, and next-gen DC-PEHG technology for production during *off-peak* solar irradiation.

### Recent Developments: Global Hydrogen

- **The European Commission** unveiled its Hydrogen strategy, announcing that it targets the installation of 40 GW of electrolyzer capacity and 10mm tons by 2030.<sup>2</sup>
- **Spain** introduced its Hydrogen roadmap, outlining 57 measures to support Green Hydrogen development, including 4 GW of electrolyzer capacity by 2030.<sup>3</sup>
- **Portugal** received 74 expressions of interest in its IPCEI hydrogen program, selecting 37 projects representing ~€9bn of total investment
- **The UK** launched a Hydrogen Advisory Council, co-chaired by Shell's UK country chair, among others to accelerate its decarbonization efforts.
- **Hyundai** announced it will ship the first 50 units of its XCIENT fuel cell heavy-duty truck to Europe in 2020 and plans to roll out a total of 1,600 trucks by 2025.

1. IPCEI: Important Projects of Common European Interest  
2. "A hydrogen strategy for a climate-neutral Europe" July 2020  
3. "Hoja de Ruta del Hidrógeno" July 2020

### Executive Summary: HL Acquisitions & Fusion Fuel



Fusion Fuel has an **early mover advantage** within the emerging Green Hydrogen market, with a clear and visible commercial ramp – grounded in existing industrial dynamics.



The potential capital from HL's merger with Fusion Fuel would accelerate its **speed to market**, helping to quickly establish its footprint in the rapidly expanding European market.



Green Hydrogen continues to gain momentum, as **active government support** and decarbonizing trends are creating significant tailwinds, particularly for hydrogen and natural gas mixing.



Fusion Fuel's **proprietary technology** potentially enables *ultra-competitive* Green Hydrogen production – creating a truly unique and streamlined value proposition for its customers and investors alike.



Fusion Fuel's focus on European markets, with **locally sourced production** and significant institutional knowledge, creates meaningful competitive advantages and the potential for outsized returns.



The merger's earnout incentive **reinforces alignment** and helps manage risk by tethering commercial progress to deal economics, while also supporting long-term growth.

## Market Overview

---

---

## A Massive Addressable Market

### Hydrogen Demand Is At An Inflection Point

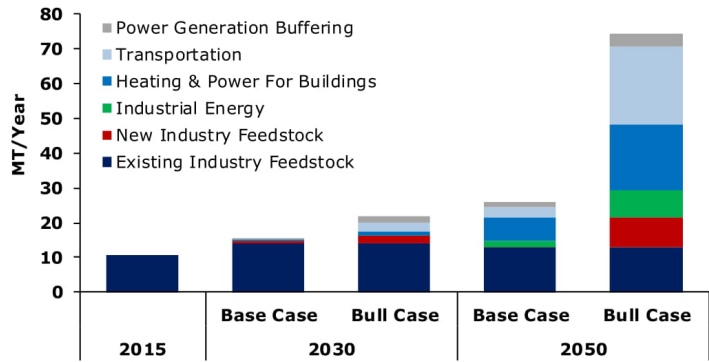
The Global Hydrogen market has grown to nearly €150bn per year<sup>1</sup>

**Problem:** Nearly all hydrogen is produced from hydrocarbons, accounting for ~6% of *total* natural gas consumption...

...which has positioned legacy hydrogen production among the world's largest sources of CO<sub>2</sub> emissions at ~830mt/year<sup>1</sup>

**Solution:** Green Hydrogen – made from renewables with virtually no CO<sub>2</sub> – is the key for unlocking Hydrogen's long-term potential, and a significant driver toward meeting CO<sub>2</sub> reduction targets

### Roadmap For EU Hydrogen Deployment<sup>2</sup>



**EU Hydrogen Consumption Expected To Grow by 2-7x... Only 2% Of Production Currently Comes From Electrolysis<sup>2</sup>**

1. The Future of Hydrogen, IEA, June 2019 – 70mt per annum.  
 2. Hydrogen Roadmap Europe: A Sustainable Pathway for the European Energy Transition; FCH JU, 2019

## Why Green Hydrogen?

Hydrogen Supply	Blue vs. Green	Decarbonization Holy Grail	Emerging Policy Focus
<ul style="list-style-type: none"> <li>Demand for hydrogen is substantial. However, there is virtually no naturally occurring elemental hydrogen</li> <li>Nearly all hydrogen consumed today is <b>Brown Hydrogen</b> — produced from fossil fuels that produce significant CO<sub>2</sub> emissions (i.e. 9 tons of CO<sub>2</sub> /ton of hydrogen<sup>1</sup>)</li> <li>Nearly all of the world’s hydrogen today is consumed by two industries, oil refining and ammonia production</li> </ul>	<ul style="list-style-type: none"> <li>Recent innovations allow for hydrogen to be produced as Blue or Green Hydrogen</li> <li><b>Blue Hydrogen</b> is obtained through carbon capture &amp; storage, which can reduce up to 90% of carbon emissions, but at costs 30-40% higher than brown hydrogen<sup>2</sup></li> <li><b>Green Hydrogen</b> is produced through water electrolysis powered by renewable electricity, which reduces ~100% of direct carbon emissions, but at costs that have historically been uncompetitive</li> </ul>	<ul style="list-style-type: none"> <li>Hydrogen is increasingly viewed as a key pillar in emissions reduction strategies, and is a focus point as major economies drive green investments</li> <li>Hydrogen has the potential to supplement or displace hydrocarbons in transportation, heavy industry, and other applications that have proven to be notoriously difficult to decarbonize</li> </ul>	<ul style="list-style-type: none"> <li>Green hydrogen has been earmarked by the European Commission as a priority area</li> <li>Over the past year, several governments, including Germany, Britain, Australia, Portugal and Japan, have announced hydrogen strategies</li> <li>Green Hydrogen is also poised to play a critical role in programs aimed at stimulating the economy following the global health crisis (e.g. the European Green Deal)</li> </ul>

1. Hydrogen Production via Steam Reforming with CO<sub>2</sub> Capture; International Conference on Safety and Environment in the Process Industry  
 2. The Future of Hydrogen, IEA, June 2019



**Government Support For Green Hydrogen**

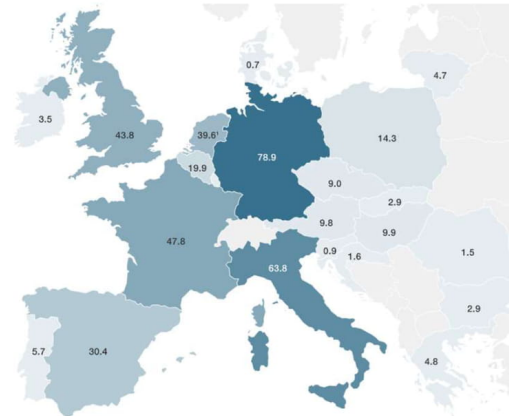
**European Potential: Hydrogen & Nat Gas Mixing**

Europe imports 400-500bcm of natural gas each year. **Mixing Green Hydrogen** into those gas networks is an increasingly viable tool to meet decarbonization goals and represents a significant source of long-term hydrogen demand.<sup>1</sup>

**Current Hydrogen plans and Natural Gas Mixing Targets:**

- **Portugal:** 10-15% mix by 2030 & 350k tons/year of Green Hydrogen production by 2030<sup>2</sup>
- **UK:** 3-20% parliamentary recommended mix<sup>3</sup>
- **France:** 10% mix by 2030<sup>4</sup>
- **Germany:** +10% mix, ~420k tons/year of Green Hydrogen production by 2030<sup>5</sup>
- **European Commission:** 1.0m ton clean hydrogen production target, €30B earmarked tech development<sup>6</sup>

**Natural Gas – Imports Overview (bcm)<sup>1</sup>**



**Adding A 10% Green Hydrogen Mix To Europe’s Imported Natural Gas Represents An €11B/year opportunity<sup>7</sup>**

1. 2018 Natural Gas Imports bcm, 2018; McKinsey & Company, Energy Insights EU Pipeflow  
 2. Portugal’s National Hydrogen Strategy (EN-H2), May 2020  
 3. Decarbonising the Gas Network; Parliamentary Office of Science & Technology  
 4. Hydrogen Roadmap and Industrial Development in France, June 2019

5. Germany’s National Strategy for Hydrogen, June 2020 – refers to 14TWh of Green H<sub>2</sub>  
 6. European Green Deal Recovery Package, European Commission, May 2020  
 7. Using a €3 p/kg price for Green Hydrogen and 0.082 kg per m<sup>3</sup> of H<sub>2</sub> for 450bcm

Immediate Opportunities & Long-Term Growth



Fusion Fuel's Local Market Should Drive *Substantial* Growth, With Scalable Opportunities Across Southern Europe & MENA

Note: Addressable Market calculation includes current H<sub>2</sub> consumption (refineries, ammonia producers, etc.) + the goal of mixing 10% of natural gas consumption with Green Hydrogen. The 10% natural gas was calculated using 10% of natural gas volumes as hydrogen and converted into kgs at 0.082kg per m<sup>3</sup>, and using a value of €3 per H<sub>2</sub>.  
Source: Fusion Fuel Management estimates

**Significant Local Content Advantages**

**Portugal’s Hydrogen Strategy**

Green hydrogen is a key pillar of Portugal’s decarbonization strategy, and the new *economic ecosystem* it plans to build the green hydrogen value chain.

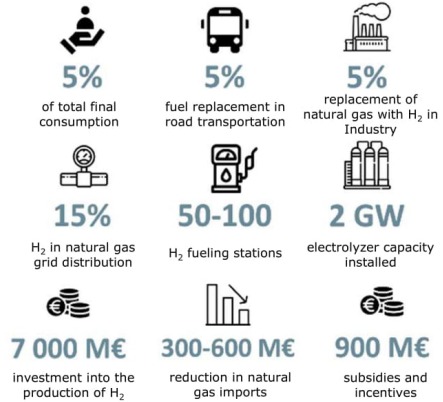
Strategy calls for a gradual green hydrogen production ramp to 350ktons/year by 2030.

Fusion Fuel’s production targets represent **less than 10%** of the national objective – providing significant room for further growth.

Fusion Fuel seeks to be a leader in this new, local industrial sector – expanding local production capacity to meet Portugal’s strategic vision, while potentially participating in one of Europe’s flagship Hydrogen projects, **Green Flamingo**.

Several of Fusion Fuel’s projects are referenced explicitly within the government’s strategic roadmap.

**Portugal’s 2030 Hydrogen Targets<sup>1</sup>**



**Fusion Fuel Has Already Been Named In Portugal’s National Hydrogen Strategy As A Strategic Technology Provider**

1. Portugal’s National Hydrogen Strategy (EN-H2), May 2020

## Fusions Fuel: Company Details

---



**Fusion Fuel's Business & Strategy**

**Vision**

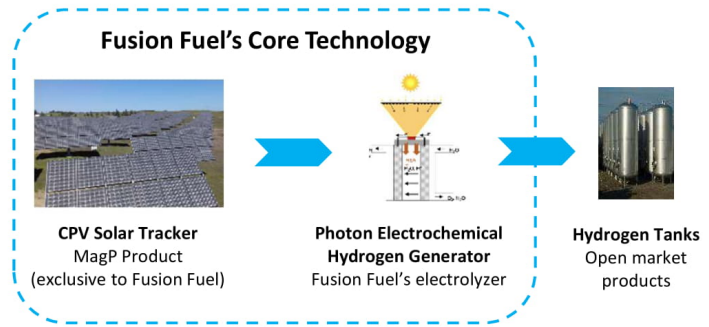
**Emerging Leader:** Become a major player in the global hydrogen economy over the next 10 years  
**Mission:** To enable meaningful emissions reductions through viable economic means

**Strategy**

**Phase I:** Develop a technology & project pipeline in Southern Europe and MENA  
**Phase II:** Methodically expand to high solar irradiation locations, e.g. USA, Australia, Middle East, etc.

**Business Lines**

**Technology:** Produce & sell Green Hydrogen generators  
**Project Development:** Deliver & operate Hydrogen facilities, utilizing our existing experience & footprint



**Fusion Fuel Has Redesigned The Initial Stages Of The Hydrogen Value Chain To Efficiently Utilize CPV Waste Heat...**

**Fusion Fuel Strategy & Business Lines**

***Business & Strategy***

Fusion Fuel will sell its proprietary technology via hydrogen generators, while also developing its own Green Hydrogen projects underwritten by long-term Hydrogen Purchase Agreements (HPAs) with high-quality counterparties

**Phase I: Focus on Southern Europe & MENA, Phase II: Thoughtful Global Expansion**



***Technology***

**Provider of Green Hydrogen Technology**

- Sell and Install Fusion Fuel hydrogen generators to customers seeking to operate and own Green Hydrogen facilities
- Develop and sell Green Hydrogen plants for gas or electrical applications
- Remote tracking and monitoring of hydrogen generator performance, and maintenance flagging



***Project Development***

**Plant Operator & Seller of Green Hydrogen**

- Develop and finance Green Hydrogen plants by selling Green Hydrogen to customers across the utility, refining, ammonia, and industrial sectors
- Development based on long-term contracts (HPAs), creating visible and secure cashflow.
- Owner & Operator of Green Hydrogen infrastructure assets



## Fusion Group History

2008 – 2018

### Concentrated Photovoltaic

**Fusion Group, and its predecessor companies specialized in the creation of CPV solar solutions**

- Over 20 solar CPV plants installed throughout Europe and MENA.
- Over time became the leading CPV solar solution provider in Europe.
- Developed relationships with key stakeholders throughout the energy, regulatory, and commercial spheres.

2018 – 2020

### Fusion Fuel Launched

**Fusion Fuel is created to pursue Green Hydrogen R&D**

- Fusion Fuel begins development of an alternative to Brown Hydrogen, with the goal of minimizing the associated carbon footprint, and to provide a market solution for meeting emissions reduction targets.
- Starting with the principle of recovering waste heat from the solar energy conversion process, Fusion Fuel began to explore possibilities to use this energy to generate Green Hydrogen.
- Fusion Fuel's technology and concept is externally validated by the technology department from Lisbon's Instituto Superior de Técnico.

2020

### Fusion Fuel Go-Live

**Fusion Fuel is ready to bring its proprietary technology to the market**

- Fusion Fuel's Hydrogen generator has been developed and tested.
- External Hydrogen purity testing from the hydrogen generator has been done and purity confirmed for all major industrial purposes and Fusion Fuel key markets
- First Hydrogen plant designed, and project plans have been submitted to the Portuguese Government, including the application for an innovation grant for the development of this first project.
- Business development commences for projects in Southern Europe and MENA.

### Fusion Fuel Executives & Directors



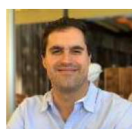
**Pedro Falcão e Cunha** – Chairman of Fusion Fuel

Previously CEO of Somague Environmental Group, the largest private company operating environmental infrastructure in Portugal. Managed Somague's activities in Macau and before that was a Lecturer on Hydraulics at Instituto Superior Técnico, one of Europe's leading engineering universities



**Joao Teixeira Wahnon** – Head of Business Development at Fusion Fuel

16 years experience in renewable energy project development, has overseen negotiations of more than €500m in renewable projects; background in Civil Works Contracting, and was previously Construction Director of the Somague Group; Degree in Civil Engineering



**Frederico Figueira de Chaves** – Chief Financial Officer of Fusion Fuel

Managing Partner of KFH Investments. Previously held various Managing Director roles in his 13 years at UBS AG in Asset Management and UBS AG Group



**Jaime Silva** – Chief Technology Officer of Fusion Fuel

13 years experience leading companies in the solar energy sector; inventor of several proprietary technologies in the renewable energy space; previously had 17 years experience as serial entrepreneur in the technology space; Degree in Electrical Engineering, Masters in Management and in Telecommunications

## Head Start: Exclusive Production Capacity Agreement

### Immediate Access to Production

- **Fusion Fuel** has an exclusive production agreement with MagP Inovação (MagP) to be able to deliver on its project pipeline through ~2023
- **MagP** has constructed and installed 20+ solar plants around the world, performing daily tracker performance monitoring with 98% up-time over the past 10-years
- **MagP's** 20,000m<sup>2</sup> production facility in Portugal currently has an annual production capacity of 700 trackers, representing ~700 tons of Green Hydrogen per annum
- Core technology, coupled with an **exclusive production capacity**, is a significant competitive advantage that reduces the early-stage risks – particularly as these challenges can be early barriers in the sector's development

### MagP Inovação Installations, Portugal



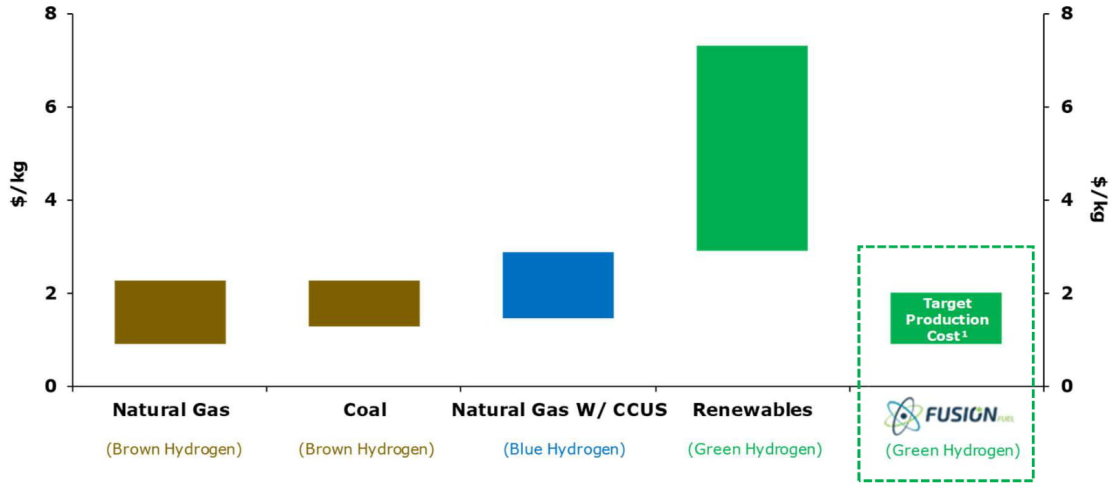
Fusion Fuel's Electrolyzer Attaches To CPV Modules Already Produced By MagP, Limiting Early-Stage Production Risks

## Business Model

---



### Hydrogen Production Costs



**Fusion Fuel Enables *Ultra-Competitive* Green Hydrogen Production That's ~50-80% Cheaper Vs Existing Solutions<sup>1</sup>**

<sup>1</sup> Ultimate cost is dependent on location / quality of solar irradiance (i.e., DNI between 1800 - 2700)  
 Source: The Future of Hydrogen, IEA, June 2019, Fusion Fuel Management estimates

**Multiple Business Pipelines**



**Technology**

**Selling Green Hydrogen Generators**

Will sell hydrogen generators to Refineries, Ammonia Producers and Natural Gas Distributors, and others

Fusion Fuel's Technology business also intends to supply its product development – using the Green Hydrogen Generators for its own Green H<sub>2</sub> plants

**Portugal** – ongoing discussions to close the following strategic projects for Fusion Fuel

- Evora – First full-scale Hydrogen Plant
- Portugal's Hydrogen Strategy – Sines 1-5 / Green Flamingo Projects (see project slide)

**Rest of Europe** – France, Spain and Greece

- Continued discussions with strategic players, and existing customers

**MENA** – Morocco

- Continued discussions with strategic players



**Project Development**

**Plant Development & Operation**

Intends to develop own facilities, selling Hydrogen to Refiners, Ammonia Producers, Natural Gas Distributors, Infrastructure asset managers, or others

Projects to be underwritten by hydrogen sold through long-term purchase price agreements (HPAs)

**Portugal** – ongoing discussions to close the following strategic projects and HPAs

- Sines 1-5
- H<sub>2</sub> production plants to supply hydrogen fueling stations for ground transportation

**MENA** – Morocco

- Preliminary discussions with strategic players for co-investment opportunities, HPAs



## Initial Project Overviews

### Evora Project

A **Green Hydrogen Utility Scale Demonstrator**, using Fusion Fuel's technology to produce Green Hydrogen. It has two phases and a total of 55 Hydrogen Generators:

1. 40 Hydrogen Generators to produce Green Hydrogen to affirm Solar to Hydrogen efficiency rate of 26.8% at the DC-PEHG level on a large-scale
2. 15 Hydrogen Generators to contribute to local hydrogen storage testing

**Location:** Evora, Portugal

**Commercialization Progress:** Expected to be supported by an innovation grant, negotiations ongoing with Hydrogen off-taker

**Potential EBITDA Contribution:** *NM – demonstrator project*

**Date Of First Revenue (Approx.):** H2 2020

### Sines Project

5 projects, each with a 25-year lifespan, installed from 2021-2025, 15-year HPAs, to be owned/operated by Fusion Fuel:

**Sines 1:** 1k tons (~1k generators)  
Potential EBITDA<sup>1</sup>: €3m/year

**Sines 2:** 3k tons (~2.6k generators)  
Potential EBITDA: €8m/year

**Sines 3:** 5k tons (~4.3k generators)  
Potential EBITDA: €12m/year

**Sines 4:** 8k tons (~6.9k generators)  
Potential EBITDA: €17m/year

**Sines 5:** 10k tons (~8.6k generators)  
Potential EBITDA: €17m/year

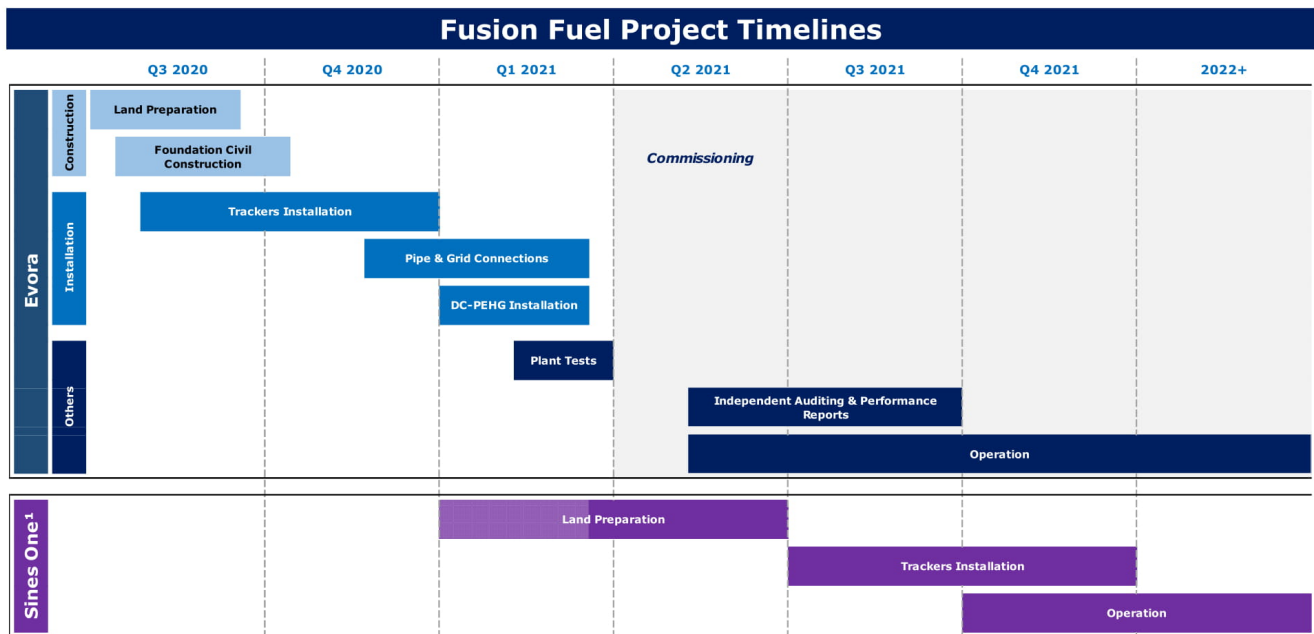
**Location:** Sines, Portugal

**Commercialization Progress:** In discussions with natural gas distributors, network and government stakeholders

**Date Of First Revenue (Approx.):** H1 2021

1. Projections are based on the financial and business model of Fusion Fuel management, constitute "forward-looking statements" and involve a number of risks, uncertainties or other assumptions that may cause actual results or performance to be materially different. See disclosures and disclaimers on slide 2 of this presentation.  
Source: Fusion Fuel Management estimates

# Fusion Fuel & HL Acquisitions: Business Combination Overview



1. Sines timeline is illustrative. Firm schedules are pending continued development w/ potential stakeholders. Completion and closing of both projects is still pending  
 Source: Fusion Fuel Management estimates

## Growth Driver in Portugal: The Sines Project

	2021	2022	2023	2024	2025	Cumulative
<b>Project Name</b>	Sines 1	Sines 2	Sines 3	Sines 4	Sines 5	<b>Sines 1 - 5</b>
<b>Concession Period</b>	25 years	25 years	25 years	25 years	25 years	<b>25 years</b>
<b>Project Capacity</b>	1,000 Tons / Year	3,000 Tons / Year	5,000 Tons / Year	8,000 Tons / Year	10,000 Tons / Year	<b>27,000 Tons / Year</b>
<b>HPA (Year 1 - 15)<sup>1</sup></b>	3.45 €/Kg	2.95 €/Kg	2.75 €/Kg	2.40 €/Kg	1.90 €/Kg	<b>1.90 €/Kg</b>
<b>HPA (Year 16 - 25)<sup>1</sup></b>	1.50 €/Kg	1.50 €/Kg	1.50 €/Kg	1.50 €/Kg	1.50 €/Kg	<b>1.50 €/Kg</b>
<b>Investment Required</b>	22,955,980 €	56,383,206 €	87,803,458 €	131,356,076 €	153,639,160 €	<b>452,137,882 €</b>
<b>Equity</b>	4,591,196 €	11,276,641 €	17,560,692 €	26,271,215 €	30,727,832 €	<b>90,427,576 €</b>
<b>Debt</b>	18,364,784 €	45,106,565 €	70,242,767 €	105,084,861 €	122,911,328 €	<b>361,710,306 €</b>
<b>IRR<sub>LEVERED</sub></b>	<b>26.40%</b>	<b>29.34%</b>	<b>29.26%</b>	<b>25.25%</b>	<b>17.83%</b>	<b>24.91%</b>
<b>Payback Period</b>	<b>3.8 Years</b>	<b>3.4 Years</b>	<b>3.4 Years</b>	<b>4.0 Years</b>	<b>5.6 Years</b>	<b>4.0 Years</b>

*In Negotiation*

*In Pipeline*

**Key Growth Driver - Sines Project: HPA Negotiations Ongoing With Portuguese Gov, Regulators & Stakeholders**

1. HPA's (Year 1-15) for 2021 and 2022 are currently being negotiated with the Portuguese Government, Regulator and relevant Stakeholders. For the following years we assumed a market tendency based on the prices from other projects in Europe and the expectations for the Green Flamingo Project in Portugal  
Source: Fusion Fuel Management estimates

**Geographic Concentration & Strategy**

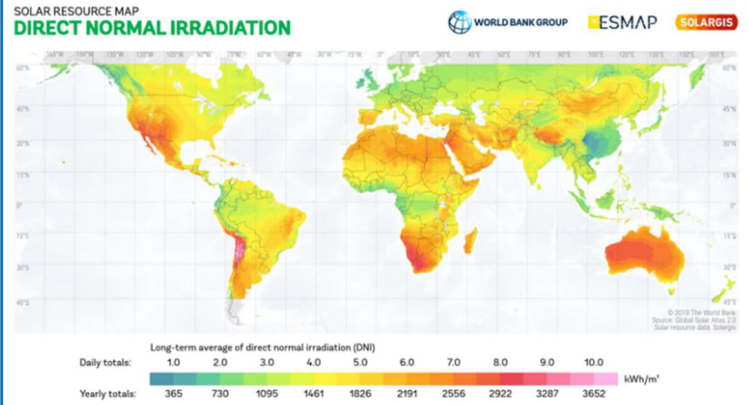
**Fusion Fuel Geographic Strategy**

Fusion Fuel's technology works at its optimal level in regions with high solar irradiation

Over time, Fusion Fuel's intention is to build out local business development platforms in regions that enable the production of renewable hydrogen at low costs, and where the addressable market size and commercial applications are most significant

- **Phase I:** Current pipeline is focused on Southern Europe and Northern Africa
- **Phase II:** High solar radiation locations around the world, e.g. USA, Australia, Middle East, etc.

**Hydrogen Production Potential by Geography**

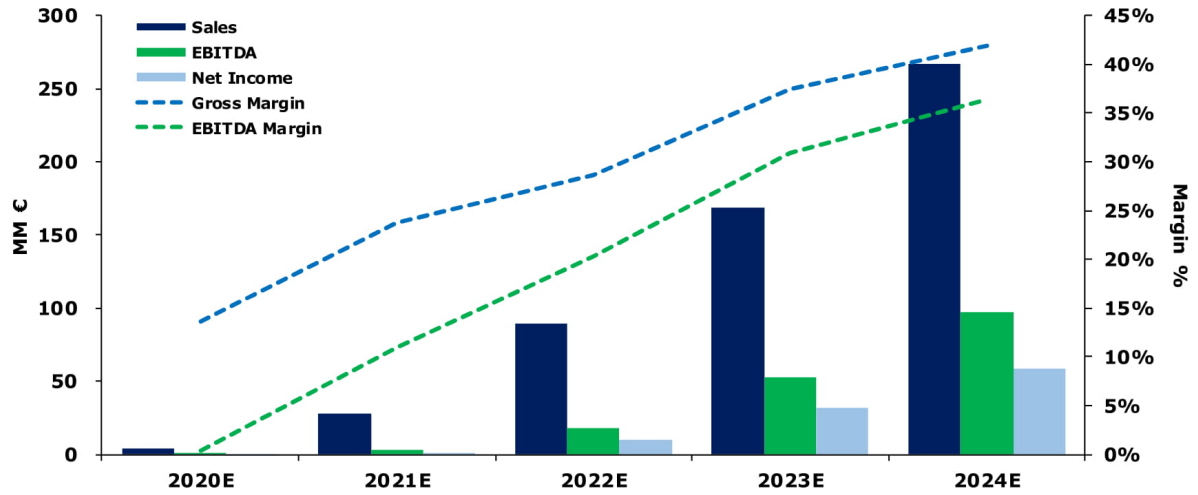


## Financial Overview

---



**Fusion Fuel: Baseline Model Projections<sup>1</sup>**



***As Fusion Fuel Ramps Production, It Expects Significant Revenue, EBITDA, & Income Growth***

1. Projections are based on the financial and business model of Fusion Fuel management, constitute "forward-looking statements" and involve a number of risks, uncertainties or other assumptions that may cause actual results or performance to be materially different. See disclosures and disclaimers on slide 2 of this presentation. Source: Fusion Fuel Management estimates



## Business Plan<sup>1</sup>

Notes
<ul style="list-style-type: none"> <li>• <b>Technology</b> revenue stemming from related projects could start as <i>soon as 2020</i>, with the potential commencement of the Evora project.</li> <li>• <b>Project Development</b> revenue is projected begin in 2021, with related revenue streams beginning in ~2022, and continuing for +20 years.</li> <li>• Total projected revenue by 2025 of ~€300m, with EBITDA margins potentially beyond 30%</li> <li>• Business plan requires suppliers and production facilities keep up with projected growth rate:                             <ul style="list-style-type: none"> <li>○ Current production partner has committed to deliver 4,250 generators from 2020-2023</li> <li>○ Product design changes being pursued to further increase scalability of production</li> </ul> </li> </ul>

C '000s	2020E	2021E	2022E	2023E	2024E	2025E
Technology Revenues	4,586	27,685	85,950	156,633	241,164	247,884
Project Development Revenues	-	-	3,450	12,321	26,144	45,499
<b>TOTAL REVENUES</b>	<b>4,586</b>	<b>27,685</b>	<b>89,400</b>	<b>168,953</b>	<b>267,308</b>	<b>293,383</b>
% Growth		504%	223%	89%	58%	10%
COGS	-3,957	-21,099	-63,795	-105,706	-155,164	-163,798
<b>GROSS MARGIN</b>	<b>629</b>	<b>6,585</b>	<b>25,605</b>	<b>63,247</b>	<b>112,144</b>	<b>129,585</b>
(%)	14%	24%	29%	37%	42%	44%
SG&A	-112	-891	-3,004	-5,804	-9,565	-12,357
Personnel	-496	-2,657	-4,394	-5,153	-5,153	-5,153
<b>EBITDA</b>	<b>21</b>	<b>3,037</b>	<b>18,206</b>	<b>52,289</b>	<b>97,425</b>	<b>112,074</b>
(%)	0%	11%	20%	31%	36%	38%
Depreciation	-558	-1,805	-3,939	-7,912	-12,909	-20,083
<b>EBIT</b>	<b>-537</b>	<b>1,232</b>	<b>14,267</b>	<b>44,377</b>	<b>84,516</b>	<b>91,991</b>
Financial result	-	-	-459	-1,561	-3,228	-5,666
<b>EBT</b>	<b>-537</b>	<b>1,232</b>	<b>13,808</b>	<b>42,816</b>	<b>81,288</b>	<b>86,325</b>
Tax	113	44	-3,418	-11,272	-22,814	-24,325
<b>NET INCOME</b>	<b>-424</b>	<b>1,276</b>	<b>10,390</b>	<b>31,544</b>	<b>58,474</b>	<b>62,000</b>
<b>KEY INCOME DRIVERS</b>						
<b>Hydrogen Generators</b>	<b>55</b>	<b>1,130</b>	<b>4,722</b>	<b>9,303</b>	<b>15,485</b>	<b>17,207</b>

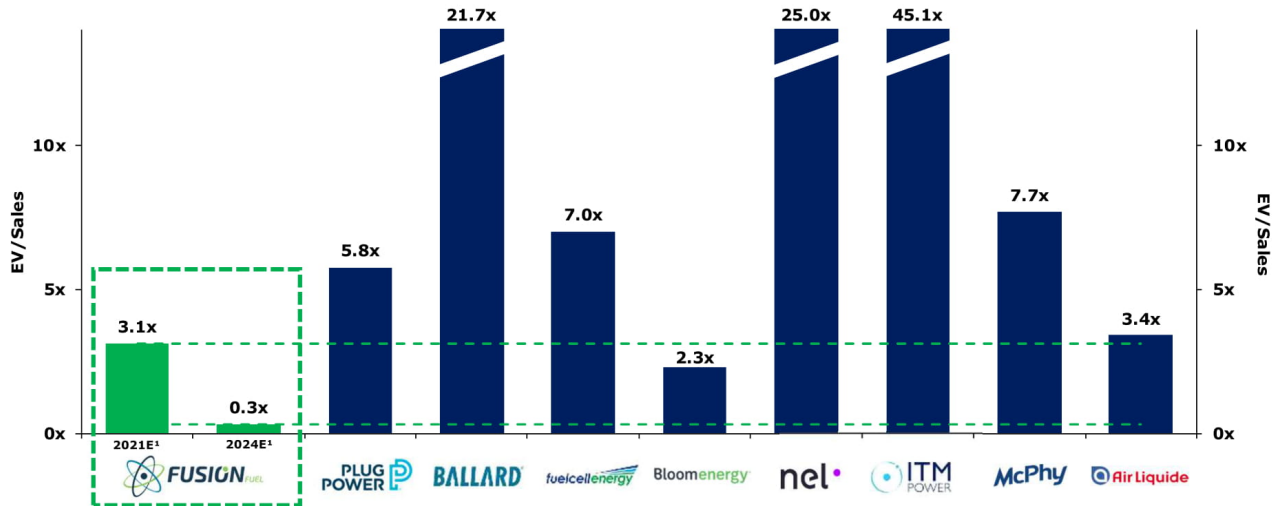
1. Projections are based on the financial and business model of Fusion Fuel management, constitute "forward-looking statements" and involve a number of risks, uncertainties or other assumptions that may cause actual results or performance to be materially different. See disclosures and disclaimers on slide 2 of this presentation.  
Source: Fusion Fuel Management estimates

## Valuation & Comps

---



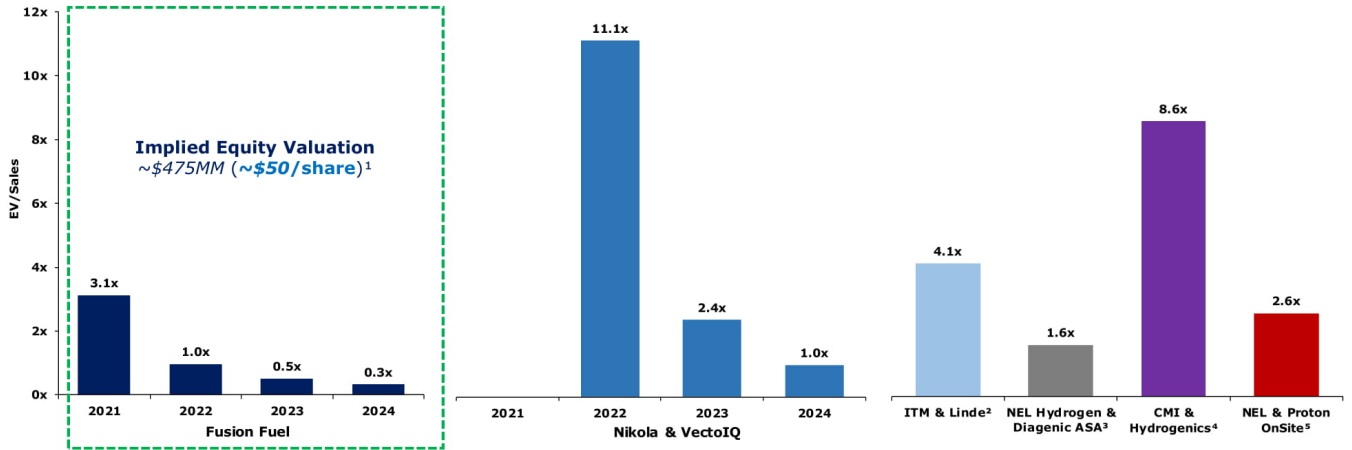
**Public Valuation Comps**



**Fusion Fuel EV/Sales Multiples Compare Favorably To Its Public Peer Group**

1. Assuming ~\$97MM EV and net sales of ~\$30MM in 2021 and ~\$300MM in 2024  
 Source: FactSet, Fusion Fuel Management estimates

**Fusion Fuel: Pro Forma Deal-Based Valuation Comps**



**Fusions Fuel: Exposure To Secular Hydrogen Growth, Significant Competitive Advantages, At A ~70% Discount**

1. Assuming baseline model execution, ~3.9x average comps, 10% discount rate, ~9.2MM outstanding shares, and USD/EUR exchange rate ~1.1  
 2. FY+1 Sales (2020 - including revenue under negotiation)  
 3. FY+1 Sales (2014)  
 4. FY-1 Sales (2018)  
 5. FY-1 Sales (2016)  
 Source: FactSet, Company filings, Fusion Fuel Management estimates

**Valuation Sensitivity Analysis<sup>1,2</sup>**

**Implied EV (\$MM)**

		Multiple				
		7.0x	8.0x	9.0x	10.0x	11.0x
Discount Rate	12%	\$372	\$426	\$479	\$532	\$585
	11%	\$386	\$441	\$496	\$552	\$607
	10%	\$400	\$458	\$515	\$572	\$629
	9%	\$415	\$475	\$534	\$593	\$652
	8%	\$431	\$492	\$554	\$615	\$677

**Implied Equity Value Per Share (\$)**

		2024 EBITDA				
		-20%	-10%	0%	10%	20%
Discount Rate	12%	\$42	\$47	\$52	\$57	\$62
	11%	\$43	\$49	\$54	\$59	\$65
	10%	\$45	\$50	\$56	\$62	\$67
	9%	\$46	\$52	\$58	\$64	\$70
	8%	\$48	\$54	\$60	\$66	\$72

**Implied Equity Value Per Share (\$)**

		Multiple				
		7.0x	8.0x	9.0x	10.0x	11.0x
Discount Rate	12%	\$40	\$46	\$52	\$58	\$64
	11%	\$42	\$48	\$54	\$60	\$66
	10%	\$43	\$50	\$56	\$62	\$68
	9%	\$45	\$52	\$58	\$64	\$71
	8%	\$47	\$53	\$60	\$67	\$74

**Implied Equity Value Per Share (\$)**

		2024 EBITDA				
		-20%	-10%	0%	10%	20%
Multiple	7.0x	\$35	\$39	\$43	\$48	\$52
	8.0x	\$40	\$45	\$50	\$55	\$60
	9.0x	\$45	\$50	\$56	\$62	\$67
	10.0x	\$50	\$56	\$62	\$68	\$75
	11.0x	\$55	\$62	\$68	\$75	\$82

**Execution & EBITDA Upside Could Eventually Support A Valuation Of +\$50/Share...+5x Its Current Value**

1. Assumes USD/EUR exchange rate ~1.1, Shares outstanding ~9.2MM, 2024e EBITDA ~€75MM  
 2. Projections are based on the financial and business model of Fusion Fuel management, constitute "forward-looking statements" and involve a number of risks, uncertainties or other assumptions that may cause actual results or performance to be materially different. See disclosures and disclaimers on slide 2 of this presentation.  
 Source: FactSet, Fusion Fuel Management estimates

## Transaction Details

---



## Sources & Uses Overview (in millions)<sup>1</sup>

Sources	
Parent Securities to Fusion Fuel at Closing <sup>2</sup>	\$26
Estimated Cash Held in Trust	\$54
Estimated Cash Contributed from Balance Sheet	\$0
<b>Total Sources</b>	<b>\$80</b>

Specific Capital Uses
• <b>Primary:</b> Project Investment in Evora & Sines 1-5
• Expanding Production Capacity Footprint
• Project Development In Southern Europe & MENA
• General Corporate Purposes (incl. R&D)

Uses	
Equity Consideration to Existing Fusion Investors <sup>2</sup>	\$26
Cash to Existing Fusion Investors	\$0
Cash for Growth & Corporate Purposes	\$47.5
Estimated Transaction Costs	\$6.5 <sup>3</sup>
<b>Total Uses</b>	<b>\$80</b>

1. Assuming no shareholders exercise redemption rights

2. Assuming the combined value of one Class B ordinary share and one warrant to purchase Class A ordinary shares to be issued to Fusion Fuel shareholders is equal to €10.73 and a Euro/US\$ exchange rate of \$1.13/1 €

3. Includes \$1.7m of sponsor credit to be repaid upon transaction close

### HL Acquisitions & Fusion Fuel: Deal Details



- Implied Equity Value of \$96.7 million<sup>1</sup>
- HL shareholders will retain 77% of the outstanding shares of the successor company after closing the transaction<sup>2</sup>
- Current Fusion Fuel shareholders will roll 100% of their holdings
- Fusion Fuel owners to receive 2,125,000 Class B ordinary shares<sup>3</sup> and warrants to purchase 2,125,000 Class A ordinary shares with an assumed combined value of €10.73 for one Class B ordinary share and one warrant
- Fusion Fuel owners can earn a contingent consideration of up to 1,137,000 Class A ordinary shares and warrants to purchase 1,137,000 Class A ordinary shares based on the net present value of Hydrogen Purchase Agreements (HPAs) executed with qualified counterparties by or before June 30, 2022 (with a combined value of one Class A ordinary shares and one warrant at €10.73)
- Closing is conditioned on HL having net cash proceeds at closing in excess of €22.8 million (calculated after redemptions, repayment of sponsor loans and payment of all transaction costs, and including any financing)
- Primary uses of proceeds: Capital Project development, expanded production capacity for Fusion Fuel's proprietary technology, and new market development
- The transaction is expected to be consummated during 3rd Quarter 2020

1. Based on 9,161,251 shares outstanding, excluding 9,875,000 outstanding warrants with a strike price of \$11.50 per share, and 1,137,000 Class A ordinary shares and 1,137,000 warrants that may be issued in potential earnout consideration, and current redemption price of \$10.56 per share.

2. Assuming no redemptions from trust account. Based on primary shares outstanding as described in Note 1 above.

3. Class B ordinary shares have same economic rights as Class A ordinary shares but grant Fusion Fuel shareholders protective provisions and effective Board control until Class B ordinary shares automatically convert into Class A ordinary shares in December 2023.



### The Deal's Earnout Incentive Ensures Alignment



- A significant component of Fusion Fuel's consideration is a **contingent payment** that **incentivizes management to deliver on robust business development targets** and **ensures alignment** between HL shareholders and the owners of Fusion Fuel
- The contingent consideration is earned as the company achieves different milestones, based on significant commercialization, financing, and operational benchmarks – all of which serve to **de-risk the company** and **unlock value for shareholders**
- Assuming the full earnout is awarded to Fusion Fuel owners, their **ownership of the merged company would be 30.6%** on a fully-diluted basis<sup>1</sup>

1. Assuming no redemptions from trust account. Based on primary shares outstanding; includes 11,012,000 outstanding warrants with a strike price of \$11.50 per share.

## Takeaways

---

---

## Executive Summary & Financial Projections (MM €)<sup>1</sup>

### Fusion Fuel Executive Summary

#### Vision

To become **one of the major players** in the global hydrogen economy over the next 10 years  
 To enable meaningful emissions reductions through viable economic means

#### Unique IP & Cost Advantage

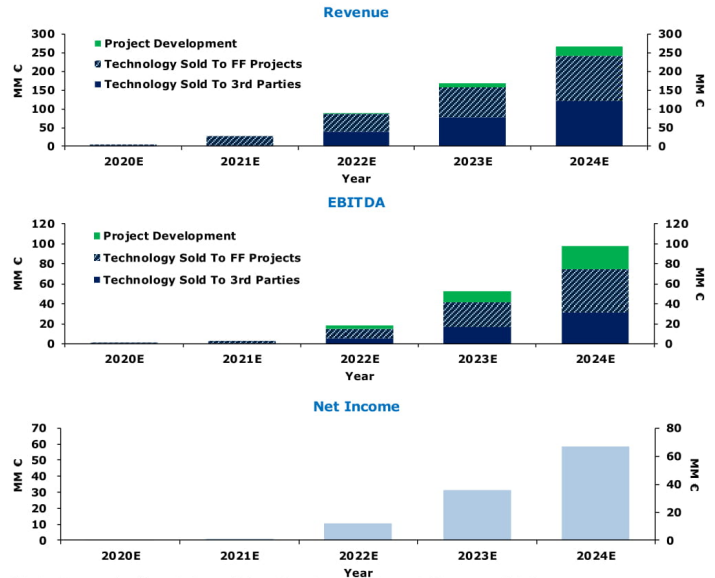
Fusion Fuel's electrolyzer produces Green Hydrogen **significantly cheaper** than the 3.5–7.5 €/kg from conventional competitors

#### Diverse Revenue Model

**Project Development:** Selling hydrogen into natural gas networks, clean transportation fuels, and other markets  
**Technology:** Selling proprietary technology to end users to produce Green Hydrogen

#### Extensive Managerial Expertise

The Fusion Fuel Management estimates team possesses 40+ years of collective experience and a successful track record in the energy and environmental infrastructure sector



1. Projections are based on the financial and business model of Fusion Fuel management, constitute "forward-looking statements" and involve a number of risks, uncertainties or other assumptions that may cause actual results or performance to be materially different. See disclosures and disclaimers on slide 2 of this presentation.  
 Source: Fusion Fuel Management estimates

### Investment Highlights



**Massive Addressable Market**, With A Significant & Visible Commercial Ramp



**Governments Actively Supporting** A Decarbonized Hydrogen Industry



**Proprietary Technology** Enabling Ultra-Competitive Green Hydrogen



Significant **Local Content Advantages**



A Growth Driver In Their Own Backyard: **The Sines Project**



The Deal's **Earnout Incentive** Ensures Alignment



Solid **Management Track Record**, With Existing Expertise & Production Footprint

## HL Acquisitions Overview

---



### HL Acquisitions Key Leadership Team



#### **Jeffrey Schwarz** – Chairman & CEO

Mr. Schwarz is the co-founder of Metropolitan Capital Advisors, Inc., a New York-based hedge fund founded in 1992. He served as Metropolitan's Chief Investment Officer from the firm's inception until his retirement in 2012. Since 2012, Mr. Schwarz has served as the Managing Member of Metropolitan Capital Partners V LLC, the investment vehicle of the Schwarz family office. He previously served as Chairman of the Board of Molopo Energy, Ltd., and Director of Cyberonics, Inc. Mr. Schwarz is a graduate of the University of Pennsylvania's Wharton School, summa cum laude, having received a BS in Economics and an MBA.



#### **Rune Magnus Lundetrae** – Independent Director

Mr. Lundetrae served as Deputy Chief Executive Officer and Chief Financial Officer of Borr Drilling Ltd. from its inception in December 2016 through December 2019. From August 2015 to December 2016, Mr. Lundetrae was a Managing Director and Head of Oil Services of DNB Markets, the investment banking subsidiary of DNB, Norway's largest financial services group. From 2012 to June 2015, he served as Chief Financial Officer of Seadrill Ltd, the world's largest offshore driller.



#### **Ajay Khandelwal** – Independent Director

Since December 2017, Mr. Khandelwal has served as the Chief Executive Officer of Chi Energie Private Limited, an LNG logistics and distribution business. From 2013 to September 2017, he served as President (Petroleum and Production) of Reliance Industries Limited. From 2010 to 2013, he served as CEO of Jubilant Energy, an E&P company based in India. From 2006 to 2009, he served as an investment advisor to the family office of John Fredriksen, one of the world's largest owners of shipping and oilfield services businesses. From 2001 to 2006, he served in several positions with Shell International, most recently as Lead Investment Finance Advisor, focusing on LNG business development and upstream M&A.

### HL Acquisitions Leadership & Stakeholders



**Jon Guss** – Independent Director

Mr. Guss joined Bogen Communications International in November 1997 as Chief Executive Officer. From 1994 to 2005, he served on the Board of Directors of Alliant Techsystems, Inc., a Fortune 500 defense contractor. Between 1981 and 1990, he was a consultant with the Booz-Allen & Hamilton. He received an MBA with Distinction from the Harvard Graduate School of Business, and a Bachelor's Degree in Economics, Phi Beta Kappa, from Reed College.



**Benjamin Schwarz** – VP of Business Development

Mr. Schwarz has served as VP of Business Development at HL Acquisitions since its inception. Prior to that, he spent two years working an engagement manager with Stratalis Group, a boutique strategy and innovation consultancy. He started his career as a consultant with Deloitte's internal corporate strategy practice, where he worked from 2011 to 2018. He received a Bachelor's Degree in Science, Technology & Society, from the University of Pennsylvania.

**Primary Capital Providers**

- Schwarz Family
- Joel Greenblatt (Founder and Co-CIO of Gotham Capital)
- Karen Finerman (CEO & Co-Founder of Metropolitan Capital Advisors, Panelist on CNBC's Fast Money)

## Appendix

---

---



**Fusion Fuel IP**

**Patent 1 – Already filed**

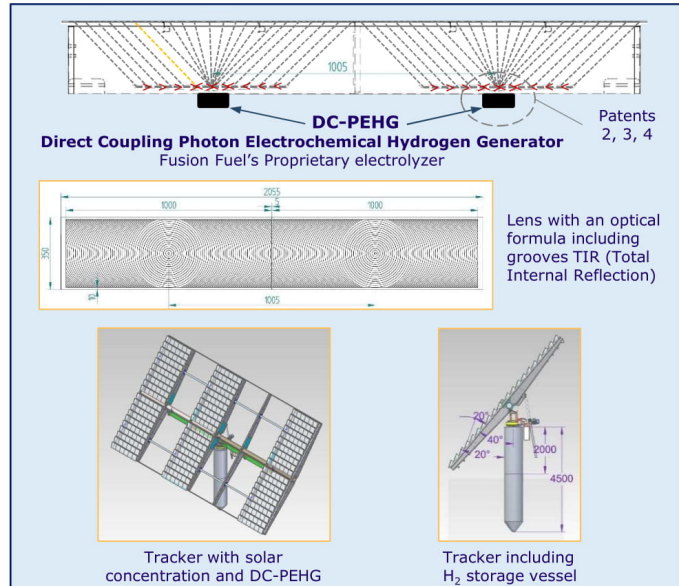
- Overall concept and approach to hydrogen production through CPV

**Patent 2, 3 & 4 – In preparation**

- Patents all relate to elements of the proprietary developed electrolyzer which converts water (H<sub>2</sub>O) into H<sub>2</sub> and O<sub>2</sub>

**Further Competitive Advantages**

- Fusion Fuel benefits from other proprietary knowledge and experience gained from over a decade of production optimization of CPV technology



Source: Fusion Fuel Management

**Efficiency Comparison: DC-PEHG vs. Centralized Electrolyzer**

Electrolyser Efficiency Calculations		Fusion Fuel DC-PEHG	Centralized Electrolyser	Basis for Assumptions for centralized electrolyser
<b>Stack Electrical Usage</b>				
Cell voltage	volts/cell	1.65	1.75	Based on literature and industry input (assuming 1.5A/cm <sup>2</sup> current
Voltage Efficiency	% LHV	74.5%	70.3%	Equation: 1.23/cell voltage.
Dryer Loss	% of gross H <sub>2</sub>	3%	3%	The 3% Dryer loss comes from industry input ("3-4%").
Permeation Loss	% of gross H <sub>2</sub>	0.7%	0.7%	Based on industry input.
<b>Total Stack Energy Usage per mass H<sub>2NET</sub></b>	<b>kWh<sub>elec</sub>/kg<sub>Net H2</sub></b>	<b>46.42</b>	<b>49.23</b>	Based on 33.33 kWh/kg H <sub>2</sub>
<b>BOP Loads</b>				
Power Inverter Efficiency	%	NA	94%	Based on industry input.
Inverter Electrical Load	kWh <sub>elec</sub> /kg <sub>Net H2</sub>	NA	2.95	
Dryer Thermal Load	kWh <sub>therm</sub> /kg <sub>Net H2</sub>	0.34	0.34	Based on Hysys Simulation.
Dryer Efficiency	kWh <sub>elec</sub> /kWh <sub>therm</sub>	3.67	3.67	Based on industry input for the ratio of net electrical energy for the chiller
Dryer Electrical Load	kWh <sub>elec</sub> /kg <sub>Net H2</sub>	1.25	1.25	
Misc Electrical Load	kWh <sub>elec</sub> /kg <sub>Net H2</sub>	NA	1.2	Based on industry input for current.
<b>Total BOP Electrical Load</b>	<b>kWh<sub>elec</sub>/kg<sub>Net H2</sub></b>	<b>1.25</b>	<b>5.40</b>	
<b>Summary</b>				
Stack Electrical Usage	kWh <sub>elec</sub> /kg <sub>H2</sub>	46.42	49.23	
BOP Electrical Usage	kWh <sub>elec</sub> /kg <sub>H2</sub>	1.25	5.40	
<b>Total System Electral Usage per mass net H<sub>2</sub></b>	<b>kWh<sub>elec</sub>/kg<sub>Net H2</sub></b>	<b>47.7</b>	<b>54.6</b>	

NA - Not Applicable

**Capex / kW Comparison: DC-PEHG vs. Centralized Electrolyzer**

Electrolyser CAPEX (per KW)		Fusion Fuel DC-PEHG	Centralized Electrolyser		Basis for assumptions for centralized electrolyser
<b>Stacks</b>					
Stacks		116 €	385 €	41%	
<b>BOP</b>					
Hydrogen Gas Management System-Cathode system side		NA	94 €	10%	
Oxygen Gas Management System-Anode system side		NA	47 €	5%	
Water Reacant Delivery Management System		56 €	56 €	6%	
Thermal Management System		NA	47 €	5%	
Power Electronics		NA	188 €	20%	
Controls & Sensors		NA	28 €	3%	
Mechanical Balance of Plant-ss plumbing/copper cabling/Dryer valves...		NA	47 €	5%	
Item Breakdown- Other		NA	9 €	1%	
Item Breakdown-Assembly Labor		NA	38 €	4%	
<b>Total BOP</b>		<b>56 €</b>	<b>555 €</b>	<b>59%</b>	Uninstalled cost on centralized electrolyser
<b>Summary</b>					
Stack	€ / kW	116 €	385 €	41%	
BOP	€ / kW	56 €	555 €	59%	
<b>Total CAPEX per kW</b>	€ / kW	<b>173 €</b>	<b>940 €</b>	<b>100%</b>	

NA - Not Applicable

## Cost Comparison: Fusion Fuel vs. Comparable PV-based Hydrogen Production

- The production of 500 tons of green hydrogen per annum with the traditional solar PV + centralized electrolyzer model would require a **capex investment of €24.7m**
- Fusion Fuel's solution requires **66% less capex** for the same output – assuming only daytime production

Fusion Fuel System		Data	Assumptions
<b>Solar Energy Power Required</b>			
Yearly Hydrogen Production	tons	500	
Yearly Energy Required	kWh	23'834'728	Considering the energy efficiency of DC-PEHG
Capacity Factor	%	24.0%	Typical capacity factor of 2-axis tracker with direct solar radiation of 2'200 kWh/m <sup>2</sup> p.a.
Solar Concentrated Power	MW	11.3	Total power required on concentrated modules
<b>Hydrogen Generation Trackers</b>			
CAPEX per Tracker	€/trk	14'805 €	Includes hydrogen solar concentration modules, trackers, control systems, and connections on the tracker
Hourly production of a module	grams of H <sub>2</sub> /h	3.19	Hydrogen production of a module, under a DNI of 1'000W/m <sup>2</sup>
Number of trackers	Trackers	518	Number of trackers with 144 modules each
Total Hydrogen Trackers CAPEX	€	7'668'788 €	
<b>Installation and networks (BOP)</b>			
Civil Construction	€	388'500 €	Include foundations and concrete pedestals
Installation	€	181'300 €	Include tracker assembling, modules and control systems
H <sub>2</sub> & Electrical Auxiliary Network	€	404'040 €	Electrical auxiliary network, communication network, H <sub>2</sub> network, ...
Water Management System	€	320'066 €	Water equipment, control and network
Total BOP CAPEX	€	1'293'906 €	
<b>Total CAPEX</b>	€	<b>8'962'694 €</b>	

Solar PV + Centralized Electrolyser		Data	Assumptions
<b>Solar Energy Power Required</b>			
Yearly Hydrogen Production	tons	500	
Yearly Energy Required	kWh	27'315'445	Considering the energy efficiency of centralized electrolyser
Capacity Factor	%	20.0%	Typical capacity factor of 1-axis tracker with direct solar radiation of 2'200 kWh/m <sup>2</sup> p.a.
Required PV Power	MW	15.6	Total power required after DC/AC, inverter and transformer losses
<b>PV Installation</b>			
CAPEX per MW	€/MW	570'000 €	Industry value per installed MW, including solar modules, tracker, electrical networks, electrical boards, inverters, transformers and connection panels
Total PV CAPEX	€	8'897'031 €	
<b>Central Electrolyser</b>			
Required Electrolyser Power	MW	15.6	Equivalent to the maximum solar power available
CAPEX per MW	€/MW	940'000 €	
Installation cost	%	7.5%	Based on industry input
Total Electrolyser CAPEX	€	15'772'719 €	
<b>Total CAPEX</b>	€	<b>24'669'749 €</b>	

Source: NREL, Fusion Fuel Management