

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(d) OF THE
SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): December 4, 2020

HL ACQUISITIONS CORP.
(Exact Name of Registrant as Specified in Charter)

British Virgin Islands (State or Other Jurisdiction of Incorporation)	001-38563 (Commission File Number)	N/A (IRS Employer Identification No.)
499 Park Avenue, 12th Floor New York, NY (Address of Principal Executive Offices)		10022 (Zip Code)

Registrant's telephone number, including area code: (212) 486-8100

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- ☒ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Units, each consisting of one ordinary share, one right, and one redeemable warrant	HCCHU	The Nasdaq Stock Market LLC
Ordinary Shares, no par value	HCCH	The Nasdaq Stock Market LLC
Rights, each to receive one-tenth (1/10) of one ordinary share	HCCHR	The Nasdaq Stock Market LLC
Redeemable warrants, each exercisable for one ordinary share at an exercise price of \$11.50 per share	HCCHW	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01 Regulation FD Disclosure.

On December 4, 2020, HL Acquisitions Corp. (“HL”) published on its investor relations website, hlacquisitions.com, the recording of a live video presentation and question and answer session with representatives from HL and its business combination partner, Fusion Fuel Green PLC (“Fusion Fuel”), presented by SPACinsider, which was held on December 2, 2020. A transcript of the video presentation is included as Exhibit 99.1 to this Current Report on Form 8-K.

Fusion Fuel intends to post a link to the video presentation on its LinkedIn profile and/or its website (www.fusion-fuel.eu) and other social media outlets. Fusion Fuel 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 Fusion Fuel. It is possible that certain information that Fusion Fuel posts on social media or its website, or disseminates in press releases, could be deemed to be material information, and Fusion Fuel encourages investors, the media and others interested in Fusion Fuel to review the business and financial information that Fusion Fuel posts on its social media channels, website, and disseminates in press releases, as such information could be deemed to be material information.

The information furnished hereunder, including the related exhibit, shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, nor shall it be deemed incorporated by reference in any disclosure document of HL, except as shall be expressly set forth by specific reference in such document.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits:

Exhibit	Description
99.1	Transcript of video presentation.

ADDITIONAL INFORMATION AND FORWARD-LOOKING STATEMENTS

THIS CURRENT REPORT ON FORM 8-K AND THE EXHIBIT HERETO SHALL NOT CONSTITUTE AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY SECURITIES OF HL NOR SHALL THERE BE ANY SALE OF ANY SUCH SECURITIES IN ANY STATE OR JURISDICTION IN WHICH SUCH OFFER, SOLICITATION, OR SALE WOULD BE UNLAWFUL PRIOR TO REGISTRATION OR QUALIFICATION UNDER THE SECURITIES LAWS OF SUCH STATE OR JURISDICTION.

THIS CURRENT REPORT ON FORM 8-K AND THE EXHIBIT HERETO INCLUDE “FORWARD-LOOKING STATEMENTS”. ACTUAL RESULTS MAY DIFFER FROM 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,” “BELIEVES,” “PREDICTS,” “POTENTIAL,” “CONTINUE,” AND SIMILAR EXPRESSIONS ARE INTENDED TO IDENTIFY SUCH FORWARD-LOOKING STATEMENTS.

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ADDITIONAL INFORMATION CONCERNING THESE AND OTHER RISK FACTORS IS CONTAINED IN THE DEFINITIVE PROXY STATEMENT/PROSPECTUS FILED WITH THE SEC BY HL AND FUSION FUEL ON NOVEMBER 10, 2020. ALL SUBSEQUENT WRITTEN AND ORAL FORWARD-LOOKING STATEMENTS CONCERNING HL AND FUSION FUEL, THE PROPOSED TRANSACTIONS OR OTHER MATTERS ATTRIBUTABLE TO HL OR ANY PERSON ACTING ON ITS BEHALF ARE EXPRESSLY QUALIFIED IN THEIR ENTIRETY BY THE CAUTIONARY STATEMENTS ABOVE. READERS ARE CAUTIONED NOT TO PLACE UNDUE RELIANCE UPON ANY FORWARD-LOOKING STATEMENTS, WHICH SPEAK ONLY AS OF THE DATE MADE. NEITHER HL NOR FUSION FUEL UNDERTAKE OR ACCEPT ANY OBLIGATION OR UNDERTAKING TO RELEASE PUBLICLY ANY UPDATES OR REVISIONS TO ANY FORWARD-LOOKING STATEMENT TO REFLECT ANY CHANGE IN THEIR EXPECTATIONS OR ANY CHANGE IN EVENTS, CONDITIONS OR CIRCUMSTANCES ON WHICH ANY SUCH STATEMENT IS BASED, EXCEPT AS REQUIRED BY APPLICABLE LAW.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: December 4, 2020

HL ACQUISITIONS CORP.

By: /s/ Jeffrey E. Schwarz
Jeffrey E. Schwarz
Chief Executive Officer

HL Acquisitions SPAC Insider Webinar Transcript

Good afternoon and thanks, everyone, for joining today's investor presentation and live Q&A session with HL Acquisitions Corp. and Fusion Fuel. Presenting today will be Benjamin Schwarz, who is the vice president of Business Development at HL Acquisitions Corp., along with Federico Figueira de Chaves, the CFO of Fusion Fuel. And finally, we also have Cody Slach from Gateway IR who will be moderating Q&A session to start. The teams will be giving a brief presentation overview of the intended combination that will be followed by a live Q&A session. Please note that participants can submit questions directly to the panel at any time via the Q&A icon found by hovering your mouse at the bottom of your screen. With that being said, I'd like to turn it over now to Cody.

Thanks, Kristi. And thank you for allowing us to be on your platform today. And we're really excited. So, my name is Cody Slach. I'm a senior managing director at Gateway Investor Relations and I'm joined by my colleague Georg Venturatos. So, we do the corporate communications for both the SPAC, HL Acquisitions and then excitingly Fusion Fuel going forward. So, as Kristi said, we're going to do a canned presentation here that will kick off shortly, followed by Federico to kind of walk through the business and then happy to take your questions. We'll look for some of those that pop up in the Q&A portion of the right side of the screen. And so, without further ado, it's my pleasure to introduce the VP of Business Development at HL Acquisitions, Benjamin Schwarz.

Thanks, Cody, and thanks also to Kristi in this bank insider team for hosting this webinar. My name is Ben Schwarz. I'm just a few minutes talking about the journey to date, how we got here, what attracted us to fusion fuel and green hydrogen, after which I'll hand it off to Federico, who will walk us through the Fusion story. I also want to mention that this presentation is available on both the HL and Fusion sites in case anyone is interested in a closer look. So, little about us and my father and I started way back in July of 2018 with an intention of focusing on the energy space and more specifically, opportunities to invest in and accelerate the energy transition. Initially, we were looking at deals in what would be characterized as traditional energy and the logistics ecosystem. However, in the two years between our IPO and when we signed the definitive agreement with Fusion, the energy industry changed dramatically. And we now find ourselves in a place where renewables are cheaper than baseload gas on a levelized cost of energy basis. That transition occurred faster than many people anticipated, including ourselves. And so we made the decision to expand the scope of our search to include opportunities in new energy and fusion fuel came on our radar screen a little more than a year ago, and after hearing the story, it was clear that these guys had a completely different approach to the challenge of producing low-cost Green Hydrogen.

And then if they got it right, they would have the potential to completely change the conversation. And so many of you have noticed, probably noticed that hydrogen is having a bit of a moment. And it's really the culmination of four separate drivers. Society is finally beginning to recognize the urgency with which it needs to address the climate crisis and shift away from its reliance on fossil fuels. Secondly, there's a growing policy focus around decarbonization and the development of a hydrogen economy. That's an effort that's being primarily led by Europe and Asia at the moment, that we are hopeful that the incoming administration will throw their weight behind green hydrogen to play catch up. Third, we're starting to see a broad level of commitment on the part of the investment community and large multinationals to the principles of sustainability and social responsibility. And finally, and perhaps the most important piece of the puzzle, we're also seeing the maturation of electrolyzer tech and the ability to compete with fossil-based hydrogen. And we believe fusion technology represents a meaningful leap forward in that regard. So, they say timing is everything in this business. And that's certainly the case here, we think. And we couldn't be more excited to partner with Fusion to help build it into a global player. So, I'll stop talking now and let Federico take over for a deep dive into the business, addressable market and fusion's core technology. Federico.

Thanks, Ben, appreciate that and thanks to everyone who's listening. I'm going to cover a little bit about the hydrogen market, how we see it, where we're focused on, and then go into about what sort of makes us different and the core elements and business lines of the company. So, but I'll first set the scene so please bear with me if this is already old stuff for people on the call.

Just as a small recap, the hydrogen market today is already a very sizable market, but one hundred and fifty billion euros worth today. So, it's not that. It's something that's new and emerging. It's already an existing, very large market. Nearly all of that hydrogen goes to two main purposes. One is the creation of ammonia, which then goes towards fertilizers, and the other is it's consumed in the oil refining process. Pretty much all of that hydrogen is something called brown hydrogen, which is has a sort of carbon base to it. Best case for every sort of for every ton of hydrogen you're creating, you're emitting about nine tons of CO₂. That's on the best case. So actually, the production of hydrogen today is an enormous source of carbon emissions. It would be if it were a country, it would be one of the top 10 most polluting countries in the world. So, this is a challenge that the whole world is facing of how to actually decarbonize sort of these industries.

Now, if so, as I mentioned, that was on brown hydrogen, there are two other types of hydrogen there's blue hydrogen, which is the producing brown hydrogen and the traditional way through steam, methane reformers, etc. and then you put a cap on carbon capture on top. So, you're actually encouraging all the same costs as your production and then you're adding the additional costs of having to capture the carbon created and burying it. So obviously still better than admitting it into the air. But you're not avoiding them. You're just capturing them. The other is green hydrogen. This is where we're focused on this is where you actually break down the H₂O elements of water into the H₂ and O₂. So, you pass an electrical current through a membrane and through that it breaks up the water molecules into hydrogen and oxygen. So, there is no carbon involved in the entire process as long as the electricity you use is from a renewable source. So, this is zero percent carbon emissions and your byproduct is oxygen. So, this is seen as sort of one of the holy grails of decarbonization, of heavy industry. And in Europe has been a big focus on this, especially during this year. So nearly all countries in Europe have come out with a sort of specific green or blue or sort of clean hydrogen strategy focused on decarbonizing the various industries that I mentioned.

In addition to decarbonizing those existing industries, hydrogen is being seen as a way to reduce the carbon footprint of the natural gas networks, so Europe imports between 400 to 500 billion cubic meters of natural gas each year. One of the ways to reduce that carbon footprint is to actually mix green hydrogen or blue hydrogen. So clean hydrogen with that natural gas. So, you're not completely killing the carbon footprint, but you're reducing the carbon footprint of the natural gas network. So, most countries across Europe have come out with specific targets. So, Portugal is targeting 10 to 15 percent mix by 2030, France 10 percent, Germany over 10 percent and so on. So just to this is a new market that's getting created. Adding a 10 percent mix to the natural gas network in Europe would be a new 11-billion-euro market for hydrogen that doesn't exist today, that's being created in the next 10 years. That alone is huge and that is just Europe.

Now, we are not considering at this point hydrogen for transportation. We know hydrogen for transportation, especially heavy transportation will be a big thing. We don't think it's something that's immediate in the next sort of two or three years in a very large size. It will be, it will come. But our actual business plan just assumes a zero on that front, mainly because you need to have the maturity of having the fueling station networks, the fleets of the vehicles and so on. We also are setting aside the hydrogen as energy storage, so using electricity to produce hydrogen to then again produce electricity at night or so with completely ignoring that, that we don't believe the various technologies are efficient yet enough to make that a sort of viable a viable path forward. So that might be the case in five or 10 years, but we don't think that's the situation today. So, we've completely ignored those two markets that get a lot of media coverage, that they are still in the relatively sort of their relative infancy. So for us, what we see as our addressable markets again are the refineries, ammonia producers, the chemical companies and the mixing with the natural gas networks, that's all sort of key core markets that we will be focused on the next three to four years. Now, in Portugal, those markets that I've just mentioned or have about a billion euros of market size, just shy of a billion euros of market size. And then our sort of secondary addressable market, which is Morocco, Spain, France, Italy and Greece, that that market would represent about 11 billion euros of hydrogen consumption per year. So, for us, those are the secondary markets, because we've been involved in the solar industry for over a decade and we have existing relationships with clients and partners in all of those countries.

So that for us is all sort of the immediate market, sort of from southern Europe and Morocco. Morocco, important to note, because it's one of the largest consumers of ammonia. They have phosphate mines. So, it's actually a huge consumer of ammonia. And ammonia is dependent on hydrogen. Just now specifically for Portugal, Portugal has come out with its 2030 hydrogen targets, it's aiming to produce 350000 tons of hydrogen by 2030. So, 350000 tons per year, our business plan is aiming to target less than 10 percent of that newly created market. So, we're not being overly ambitious in sort of our market share capture. We actually believe we have technology that's advanced enough to try and grab more market share. But our business plan is pretty solid and conservative. So, we're less than 10 percent of Portugal's planned growth, let alone the planned growth of Spain, Greece and so on. I'm going to talk a little bit about us as a company, so we believe we have the technology to become a major player in the global hydrogen economy of the next 10 years. So, we want to be part of this hydrogen revolution. In fact, we'd like to even be leading the way in this hydrogen revolution. Now, one of our missions is to actually enable meaningful carbon emission reductions through viable economic means. This is to say that we don't believe funds should be paying a premium to go green. We believe we can make it that they don't have to incur additional costs to actually go green.

So, the way we do that is that we've combined sort of proprietary solar technology with a with our own proprietary electrolyzer, so we are not buying our electrolyzer. This is an electrolyzer than we have designed and created ourselves.

So, to, to know where it started. We take a CPV, which is a concentrated photovoltaic solar panel. We concentrate the solar rays 1400 times onto a solar cell, producing enormous amounts of very localized and concentrated energy. 41 percent of that energy is converted to electricity, and currently 59 percent is given off as heat. So, for those who can see on that small screen, what I'm holding here is actually where that electricity is created now. So solar arrays come up here, electricity grids in the cell, and it's given off as heat in this in this box down here. And we were we spent quite some time wondering, what can we do with all that wasted energy that we just give away? Fifty nine percent of that energy is just given off with no use. And we looked at could we actually use the heat to increase the efficiency of the of the electrolysis process? In in taking on that challenge, what we had to do is we had to approach the creation of an electrolyzer in a completely different way to the rest of the market.

So, what the market is doing is they're going for bigger and bigger electrolyzers, sort of, you know, full room sizes or containers or whole factories. So, the bigger they are, the lower that sort of fixed costs per unit of hydrogen. That's the sort of standard direction that the industry has taken because we had to attach our electrolyzer to the back of these panels, these solar panels, to give everyone an idea. They have about a thousand square foot surface area. So, the Europeans 100 square meters, and they track the sun. So, they move up down, left and right. They move on two axes so we couldn't have an electrolyzer that was extremely heavy attached to those solar panels. So, we had to completely take apart sort of the electrolyzer concept, rebuild it, simplifying it, keeping it light, keeping it small and enabling the actual membrane to be close to the source of the heat. So, with that, we actually ended up with an electrolyzer. That is what I have in my hand. So, it's very similar to the previous electricity piece.

It's actually a miniaturized electrolyzer. So, as I mentioned, most are going for sort of huge electrolyzer in a big room to sort of warehouse size. This is also truly miniaturized and it has to be because I need these need to attach the solar arrays, get concentrated here on the top and the sort of bubble the electricity is produced and it's consumed immediately below in the in the electrolyzer. So, and the electrolyzer being that close to that source of energy absorbs the heat right away. Now, with that, as I mentioned, we had to take away all of the norms of electrolyzer building and had to massively simplify it, take a lot of the weight off. And what happened with it was actually there's some beauty and simplicity that actually we managed to achieve massive cost reductions in our Capex per kilowatt of the electrolyzer. So, each of these produces very little hydrogen, produces only about 20, 20 grams hour of hydrogen. But we have thousands of these, tens of thousands of these in a hydrogen form. However, instead of seeing a sort of electrolyzer capex per kilowatt cost of around the sort of 800 euro per kilowatt that that you get with traditional centralized electrolyzer, we can approach a cost level that's under two hundred euros per kilowatt. Just announced that will be once we have our assembly line that's fully automated up and running today where we're not too much north of that number. But that fall under 200 euros is with the assembly line that gets put into production next year. So, we are less than half and target about a quarter of the cost of electrolyzer in the traditional sort of pen-based solutions. Just so just for everyone who's familiar with the electrolyzer, our technology is a pen based electrolyzer. So, we're not alkaline or so on, we are still a pen based electrolyzer. So this was the beauty of the technology we created, we not only take advantage of that waste heat when we're producing the electricity through the solar, but we also managed to achieve huge cost savings from the entire redesign and recreation of the electrolyzer, which we've been working on for the last three years.

Now, to tell you a little bit about our business strategy, so we have two core business lines. One is to sell and install these hydrogen generators, what we call hydrogen generators is the solar panel with actually each of those solar panels takes 288 of these electrolyzers attached to the back and you have a sort of self-contained unit producing hydrogen. So, from sun to hydrogen directly, you're not separating the production of electricity with the production of hydrogen. This is a two and one source of product. So, one, we will sell those hydrogen generators to people who want to build their own hydrogen farm. So, this could be, for example, an oil refinery that wants to have its own its own hydrogen farm. It will buy the technology from us and then we can put it up and running and they'll be producing and consuming it themselves. On the other side, we have from a project development perspective, we want to own and operate our own green hydrogen farms. So, this is where we will enter into long term hydrogen purchase agreements. So, we'll have an offtake for the hydrogen. So, have, for example, in case the refinery, they don't want to undergo that sort of expensive capex that's related with building the hydrogen farm, but they're quite willing to enter into some purchase commitments over 15 years for the green hydrogen. So, this we will own operate. And instead of selling the technology, we're actually selling hydrogen as an end product. So those are two the two business streams that we have.

Now, as I just wanted to briefly mention and say, Fusion Fuel is not a startup, if anything, it is a spinoff as a group. We've been involved in the concentrated photovoltaic industry for over 12 years now. And as I mentioned, in 2017, we gave ourselves the sort of mental challenge of what we could do with that heat. And the results of that was of the of 2018 we launched fusion fuel to actually go after the sort of R&D into how is the R&D that went into creating our own electrolyzer and how we could create this cost efficient hydrogen production. So, the last three years, 2018, 19 and 20 has been product development and testing.

Now we're actually in the process of developing and installing our first hydrogen farm in Evora. So, we're now ready where we are. I don't want to we already we are going live now with the first large scale hydrogen farm and to go live end of March. So, in production now and to go live end of march. Now, to ensure that we can actually deliver on our business plan. We're not counting only on the assembly line that I mentioned before that we will be developing in 2021 during the summer. We already have secured the production agreement with a company called MagP to use its production output to secure the commitments and our projects for 2021. So, we will already have over a thousand of these hydrogen generators available for projects in 2021. We do not, we're not constrained by waiting to start up our own production facility in order to then start doing live. So, we've got a starting phase using this. This also sort of production facility. MagP is the last remaining CPV factory in Europe. It was a sister company until this this transaction. So, it's intimately familiar with the development and combination of both the electrolyzer with this CPV technology. So, it's already up and running. Now, as I mentioned, part of our vision and mission, but also one of the results of having this is technology at the cost levels that we have is that we have a target production cost of green hydrogen that is on par with or with brown hydrogen. So, again, as I mentioned, you're not taking a premium for going it's not costing you a premium for going green. This is significantly cheaper in a significantly different offering than what's available now in the green hydrogen space and market.

We already have a healthy pipeline for both business lines at the moment, and naturally there are times in cases where one feeds off the other. So if we're developing an SPV for one of our own projects to supply the refinery, those SPVs will be buying the technology from the technology entity. So, there is some cross pollination between the two business lines. However, we've said we're discussing the sort of the Evora and Sines projects in Portugal. I mentioned those in a second, but we're already in advanced discussions with potential off takers and buyers in Spain, Greece, Morocco, France that I mentioned before. Our sort of secondary markets. That is not a future target. Those are all business developments already active in developing the discussions in all those markets. On the on the product development side, we'll see for us of whom we have sent home base buyers. So, the sort of hottest projects are in Portugal we're starting with. But we also have discussions on the potential for investment opportunities for hydrogen farms in Morocco as well.

Now, as I mentioned before, the Evora project, the one that's now in and development, this is our first sort of utility scale demonstration. So this is where any potential buyer of the technology can come in and see test it and get proof of the output on an industrial scale. So no longer in a sort of one sort of one- or two-unit scale, but actually having 55 of these hydrogen generators operating, working, the gas being compressed, going into storage tanks and so on. So that's the plan for Evora. As I mentioned, Evora is planned to go live with hydrogen production in April, it is Portugal's first hydrogen farm. It will also be Portugal's first mixing of green hydrogen into the natural gas network. Sines, these are bigger projects. I have a few more details on Sines in few slides so I will just leave Sines for it for a second, two slides from now.

Just as I mentioned, our own timeline, the Evora, which is the ones in blue on the top that is actually in the development now, it's probably a bit behind schedule on the bits you see there in Q3 for Q3 part actually only started in Q4. We're still planning with the same go live and commissioning types. Sines 1 the insulation and development is planned for the second half of 2021 of next year.

So what you see now is the Sines actually a portfolio of projects, so what Sines is, is five different projects, one for every year, and it's on it each year the projects are bigger, so the first projects is a thousand tons per year. The third project, five thousand. The fifth project, ten thousand per year. So, it goes increasing the capacity of production of hydrogen per year gets bigger and bigger. On the HPAs, just to remind everyone that our hydrogen purchase agreement, these are the prices that we are negotiating with the off-takers of what they would actually pay to take the hydrogen off of our hands. We expect that as the market develops, the price of hydrogen, green, hydrogen to actually come down. That's why, you see it starts with three point four five down to one point nine in 2025. We took these figures from discussions we've had with the very sort of working groups of hydrogen in Portugal and with the governments here. So, these are sort of the in the ranges that are being discussed. These are the sort of lowest numbers that are discussing. So that's what we've used for our business plan. Now, these projects have a pretty healthy levered IRR, so these are the projects that we very much want to, as much as possible, own and operate ourselves. The total investment required for these projects is north of 450 million euros. So, it's unlikely that we will do all of them. But as much as possible, we would like to do the first ones and at least co-invest in the later ones to the extent that we can. So, the what you see there on the second to the bottom sort of row, low level of IRR is what makes it so attractive for us to hold these projects last for twenty-five years and have a very attractive levered IRR.

Now, just to note, we are not the solution for every single hydrogen problem, that we have two main constraints. The first can be seen on this map here because we're a concentrated photovoltaic or married with a concentrated photovoltaics solution, we actually need a high degree of TNI. So, everything you see here on this map, that's yellow, orange, red is great for us when it gets into the Greens, not so much. So, this solution of concentrated photovoltaic, together with a miniaturized electrolyzer doesn't really work for Northern Europe, Southern Europe, Northern Africa, large parts of the US and then Australia and so on. That would be great but northern Europe less so. So, the second sort of let's call it downside for us is that because we're attaching the electrolyzer to the to the solar solution as well. We need a lot of space. So, you need acres and acres of land for a hydrogen farm. This works well with a lot of sort of refineries that tend to not be in sort of cities and so on. If you were to go into the fueling station situation, then we can't be building a hydrogen farm in a built-up area. First of all, the land is not available, and if it is, it's too expensive. So, we have our own niche of the markets and we believe that there's no one who can really compete with us in our niche, but we very much acknowledge that we don't have the solution to every hydrogen question out there.

So, we have significant aggressive growth targets, as can be seen here in. For full disclosure, the 2020 estimates, given that that was done sort of towards the start of this year, that was related to the Evora project with the delay of the transactions, most likely part of this will just merge into 2021. But what you see here is the sort of ramp up of those Sines projects. And as our production capacity comes online, we can sell more and more. Our main issue and the issue we're facing is not a demand issue at the price levels that we can produce is the ability for us to have an actual production facility that can deliver on the demand, the target market. So, to note here and again, just for full disclosure, the numbers here do not include the potential costs, or the cost associated with being a public company. So, these are costs pre being a public company. But still, this is the business plan that we have. What you see on the very bottom line, that is the hydrogen generators produced. So, 2020 in 2021, there's a thousand sort of one hundred for 2021. Those are being produced in that MagP production facility that I mentioned for 2022 we need to have our assembly line up and running so that we can. We can add to the a thousand one hundred, three thousand six hundred coming out with our own production unit and so on right to the following years, we need to have substantial sort of investment into our production facilities to be able to meet the demand.

Even so, I know what we're seeing is such an explosion in demand in Europe that. To the extent that we can accelerate our growth of production, we will do so because it's a hydrogen has truly exploded in that in the last in the last few months. I think just before going to Q&A, I just want to maybe talk about one point here or maybe just to finish on the fact what you see on the top line, the technology revenues, just to be clear, that's the sale of the actual hydrogen generators. If we were selling it to third parties, to the SPVs, the project development revenues, those are actually the hydrogen revenues. So those are the projects that we own and operate when we sell hydrogen. So, in 2021, we're developing a hydrogen farm, but the revenues from that farm will only materialize in 2022. That's why there's a delay of those revenues only materializing in 2022. Now, for us, this is an incredibly exciting sector. I think just to note, obviously, we're excited to join Jeffrey and Ben with the HL side and come up with a way to make it a materially, much stronger company to be able to attack all the potential that's out in the markets us from. We are four partners of fusion fueled moments. Just to be clear, if anyone wasn't aware. But from the transaction, we are rolling 100 percent of all of our interest as equity.

We're taking no cash from the deal because we just see the potential of this industry is as truly very exciting. So, I think with that, I will stop it.

Excellent. Thank you very much, Frederico. That was super helpful. Got a bunch of questions that have come in here. And so, I'm going to start with the announced JV in Spain. Obviously, the presentation here was from a few months ago that wasn't included. So, can you go kind of walk through more details of that JV?

Yeah, absolutely. So, with this a JV, the we're incredibly excited about Spain in the last few months has announced its own hydrogen strategy.

They're aiming to produce around 700000 tons of hydrogen. So that's double the Portuguese target production. And the Spanish companies are moving incredibly quickly, as people may have seen with the announcements from Iberdrola, et cetera, in this space. So, we've been engaged in a lot of discussions with potential off takers and clients in Spain, and that is moving very, very quickly. Now, what this what a partnership that we entered into allows us that it's a partnership focused on the development of the farms. So, we've partnered with a team that has a lot of experience in developing large scale solar farms in Spain. So, they're used to all the regulatory demands that that requires. They have a good network of not only the on the client side, but also with all of the suppliers for those farms and in addition, those partners that are already involved in waste to gas technology. So, they have extensive experience with gas management as well. So for us, this was a brilliant partnership of having a partner who's not only very familiar with the solar side, but also familiar with the gas side and now with Spain moving so fast, which really sort of armed to be able to go after that Spanish market share, the JV itself, the mandate is to develop the farm. So, it's not a technology provider or the technology producer. This is really for development of the farms. This was a revenue and business line that wasn't even included in our original business plan. So, this is actually a sort of new revenue stream for us as we enter the development to farm business as well.

Great. Thank you so. Next question is, I'm curious about the partnership with MagP. You mentioned it was is or was a sister company. That's obviously an advantage for efficient production. Wondering if they are merely contractors/producers for your product, or do they have any partnerships with you in IP? Do they hold a share of some or all of your patents?

So, thank you for that. Just on IP actually didn't cover that before, so this electrolyzer here that's patented by Fusion Fuel. We also have electrolyzer patents on the on the inside of it, as well as developing two more on the way. So those patents belong to the Fusion Fuel to make that clear. Fusion group as such, what I mentioned before, it owns 70 percent of MagP. So now what we're doing is we're doing the spin-off of Fusion Fuel for the hydrogen business. MagP is fully focused on solar to electricity now because it's has been for the last 12 years. So, the sister company to the Fusion Fuel has entered into a production agreement where it will supply the first few thousand hydrogen generators to Fusion Fuel. Fusion Fuel has the choice of whether or not to buy, uh, from MagP, but the MagP, we are enabled to use existing MagP production facilities. So, I'm actually sitting in MagP right now. So, this is the MagP factory sitting on the bottom right corner.

You'll see that now what we've done to avoid all sorts of conflict of interest, et cetera, is together with the partners, we developed a multiyear contract where the price for the production output has been predefined. So, it's baked into our business plan. There are limits. The power is on fusion fuel to what it does consume or not. But for us, it was very important to have this partnership just be to have the speed to the market. If not, we would only be able to be delivering to the market hydrogen generators in 2022.

So at least that allows us to hit the ground running. Probably the most important piece about hitting the ground running is not really the business volume. That's nice, but not the most critical piece. The critical piece that we have an industrial sized hydrogen farm that is generating track record by generating track record, the technology becomes bankable and allows you to then for subsequent projects or for anyone who buys it to get project finance on the on the project. If not, we'd be starting in 2022 without people being able to get financing on the technology. This way, we actually are able to produce immediately a very importantly produce accelerating track record of industrial scale farms in order to be able to allow for project financing for the bigger project.

Got it, thank you. Next question is multipart around the Sines project, so sounds like this listener might have missed it, but is this a project where you run the plants or where you sell the technology? That's number one. And then how do you intend to finance it?

So, the number one is, yes, as in it's actually both pieces, as I mentioned, it is the total equity value of this. You can see it here is four hundred and fifty million. So, it's a substantial capital investment. As I had mentioned before, we will try and capture as much as much of this as we will own and operate ourselves. We think the IRR is attractive enough that we want to hold onto these farms. Question mark to what extent will have the capital availability to be able to do that? But definitely seen as one and two. We want to own and operate ourselves as three or four to five or the equivalent of these of these projects. We would want to if as much as possible, we want to co-invest. So, did I answer both parts of just one part. Just the last part was just how do you finance it?

So, this first one Sines 1 in 2021 will have to start by financing it fully with capital, actually capital from the from the transaction. What we expect to do in 2022 with what I was mentioning before, the technology being bankable with the hydrogen purchase agreements that you're setting here. So, you have a large refinery with all of the known names that exist out there. You have a bankable counterpart and a bankable technology. You can then finance the project after it's established that you need that you first need that track record of the technology, which we will get from the Evora project. So, we expect 2021 projects we will finance by ourselves at the beginning and then we'll go get finance project financing afterwards. So typical project financing, as you would do with the sort of solar farm.

And then staying on the financing side, we've got a question out there, does the two-hundred-euro kilowatt capex include the energy production unit, the CPV as well, on only the electric electrolysis unit?

So, the which was the first number, the two hundred million, yeah, the 200-kilowatt capex, that's electrolyzer pure electrolyzer. So, when you come towards the bottom and again, this presentation is available on both ours and HL's website. But what you see here, and this is fully disclosed, so this is electrolyzer capex. How much of our electrolyzer capacity? If you go to the very last slide, you would see what a side by side comparison of a hydrogen farm on the left with a Fusion Fuel system to produce five hundred tons, including electrolyzer and including the electric electricity production with the solar radiation levels of Sines. So important to mention that for us, the solar radiation levels very important for the cost of when calculating the cost of the farm. So, at the level of Sines talking just under sort of 10 billion euros for 500 tons per year, sort of farm. If you were to go to a solar PV with centralized electrolyzer. So, apples to apples, not just electrolyzer, but electrolyzer with the solar installation.

And we also break up the capex of the solar. So, for anyone who's interested in or has different numbers for the price of renewable energy per megawatt, we can just feed that into that. That would actually come out sort of just shy of twenty-five million. I want to note that to be fully fair to our competitors, these figures come from NREL from 2018.

The market has moved so probably closer to about the 20 million mark on the on the competitive basis. It's not the twenty-five of two thousand fifteen. If you were to go for twenty-one or twenty-two, you'd probably be looking more at the sort of 20 million mark.

Gotcha. OK, and then why question that a question, why is it important to capture the wasted heat? How does it impact the electrolysis process?

So actually, with the water, when you have. The walls are heated up. It actually makes the breaking of the of the molecules easier. So, it means that the membrane and the electrical current, you can use a lower electrical current or you need a lower electrical current to pass through the membrane in order to break up the water molecules. So actually, that lowers your electrical load. Needed per kilo of hydrogen required. So that is what you see here on the slide. So, we need forty-seven point seven kilowatts a kilo of hydrogen. This is pen to pen, just to note also the other numbers I showed before were pen to pen electrolyzers back using the 2018 NREL numbers, what, fifty-four point six kilowatts per kilo. Likely. As I say, competitors are also making their own advance. So true numbers, probably somewhere between 50 and 52 currently on centralized electrolyzer. But that advantage of ours comes from two things. One, the heat. So, we're able to use less electricity per kilowatt hour for less kilowatts per kilogram of hydrogen produced. But also, because I'm coming back to if you go see my screen and I have here, the electricity is being generated attached to the electrolyzer. You have no electrical losses, so you don't have the electrical losses of for example, producing electricity in a wind farm and transporting it all the way to a centralized electrolyzer, having to have an inverter and so on. So, both the fact that the water requires less energy with the fact that we're also losing less electricity makes our process more efficient. It's I would argue that that's not where the game changer comes from. The game changer is truly when we miniaturize the electrolyzer and we had those enormous cost savings, but we've also had a more efficient pen system.

Ok, great. And maybe just to give you a little bit of a break, Frederico, maybe we could bring Ben back into the conversation. We've got a couple of questions surrounding the deal, timing and sort of any signposts that we should be paying attention to as we near the closing of the deal.

Yeah, you know, big week coming up Friday at 10 a.m. Eastern Time, we have our annual general meeting of shareholders where our shareholders will be voting on the business company's agreement, as well as the nomination of the directors to the board Fusion Fuel. So assuming all goes well and our shareholders approve, which we hope they will, the transaction and all the proposals we expect to close early to mid-next week, at which time Fusion or HL will cease to exist as its own entity will become part of Fusion Fuel PLC. And it will trade on Nasdaq under the ticker HTOO. So, we're very much looking forward to all of that putting the transaction behind us.

Great, thanks.

So, returning to some questions that are probably better aimed to Frederico, as you say, the competition advances and improves, how do you see potential to further improve your technology?

Yeah, so that brings me very nicely onto product development, so everything I've talked about is with the sort of products that we have now, but actually the same way that everyone else is targeting advancement. So are we, we see advancements in two ways. One is always lowering the cost of the technology. And we consider that just normal sort of. In a normal evolution of the existing technology, but in addition, we don't want to be a one product company. So, over the coming years, we want to develop sort of two or three other products. The one obvious one, which is sort of the next evolution of this, would be to have the same electrolyzer producing hydrogen during the day and during the night. So, this is still an R&D project, but actually you can feed an electricity at night to this. You don't have the benefits of the heat and of the of avoiding the losses that you're producing a substantial amount of more hydrogen with the same Capex. So that is one of the next sort of natural evolutions to this, that if you go from there, you can then move on to using our system with photovoltaics.

So not requiring concentrated photovoltaic. So, to know what we do now is we have a special lens that concentrates the solar rays onto that cell. We're not using mirrors. So, it's we're not giving off sort of concentration out into the air. It's all happening in a box. But you could actually sort of reengineer the product to also potentially work with traditional photovoltaic at that point, more of the sort of northern European markets open up, lastly and sort of much longer term. And, you know, to what extent could you actually use our concept without the solar piece? We established significant cost reductions on the pure electrolyzer. What would be the impact if we actually try to replicate that without actually the solar piece? So, there is a number of product development projects that were going on. Those are all very green fields, so they're far away. I don't want to get anyone's hopes up, but we only believe that we'll stay relevant if we keep innovating. So, we're very much focused on doing that.

And then just moving sort of down the timeline there, how do you guys think about sales selling, selling the product and kind of getting revenue out there?

So, for us, our sales, we expect the sales to grow aggressively because actually more and more of what's going to happen is that you have early movers in Europe to these sorts of 20, 30 targets. You're going to have some early movers in Europe who are sort of dipping their feet in hydrogen. And then all of a sudden it becomes a big a big rush. So, in the last five years of this coming decade, the demand for green hydrogen solutions is going to it's going to massively increase with everyone who's been waiting for the first five years. So, for example, we know of a number of heavy industrial processes, like, for example, cement production and so on, that their furnaces, that they're still burning old tires, that burning trash and so on. In certain cases, by 2025, they have to move to cleaner fuels. So, they're not thinking of that yet in the coming years, they're going to they're going to need sort of hydrogen at least to mix with the fuel they choose to lower their carbon footprint. So, the way we see it is that the initial sort of projects will have now will be projects with people who are starting to get into the hydrogen phase. And as hydrogen gets more and more mainstream, we're going to be seeing bigger and bigger projects, which nicely coincides with our sort of ramp up production. We wouldn't be able to deliver more faster in the next two or two and a half years anyway.

Got it, thanks. Next question. You are one hundred and twenty days away from the fifty-five micro generators being turned on at Evora any recent developments, giving you more confidence versus one hundred days ago.

But no, I mean, to the same point that we're not changing the timeline for us, a big piece of this is getting those solar panels installed. Each of those solar panels weigh about four tons. So, a lot of sort of the early work is building the foundations for those and getting those sorts of structures emergent and up and running. So, this is what we've been doing for the last 12 years. We don't truly foresee any problem with those at the moment. Question mark will be when we were truly doing this sort of hydrogen installations. But again, at this point. Nothing has truly changed for us on those projects and just to note with this project, it is a demonstrative project. So, we're not looking at the financials of that project too much with the Evora project. However, I will note two things. We have applied for a one point five million grant on that project. So, when hopefully we will get that on second point to note that the project is because it's a demonstrative plant. There's a very substantial part of those costs that we can offset with a tax credit. So, in Portugal because we've been recognized as a national company of innovation any spend that we do in R&D or a portion of the spend we have in R&D personnel, machinery, but also being demonstrative farms. We can actually request a tax credit, which is then why for, I believe, six to eight years that we can use. So, we don't expect the financials of the project to be substantial. It's also a small project with only sort of fifty-five generators. But when you add in the sort of so-called parallel advantages you get with a possible grant in addition to those, to the tax credits, actually the sort of net present value to the fund can be substantial for its size. It's still small.

Great, thanks. Next question is, what is the efficiency of the electrolyzer compared to an ordinary solar panel, which is roughly 20 percent?

So, what we're talking about two different things. So, the first is the solar panel being 20 percent. Those are the traditional photovoltaic solar panels. But the concentrated photovoltaic, which is what we're using, has, as I mentioned before, an efficiency rate of forty one percent. So just it's more expensive than traditional PV, but it's actually more efficient. So just if we're talking about the efficiency rate, that's just purely of the solar so back to pure solar piece, that's actually a 41 percent efficiency rate. The DC peg efficiency rate just from when the sun actually gets there. The solar energy hits this power. That's about sort of 26 percent level. So solar to energy, solar to hydrogen. I want to note that this is at this level, not of the lens level of the of the concentrated photovoltaic. This is that at this level, these are the sort of I say that, but these are the units that we have here. Of course, this is the exact reason why we need the Evora project so that we can prove all of these figures on an industrial scale. All very good and having a number of these producing it. But does that efficiency level change when you have sixteen thousand of these? So that's the sort of efficiency level that we need to prove on the Evora project also for the again, to make sure that technology is bankable.

Got it. Got probably a few more questions. Now we're nearing the start time or stop time, but we do have lots of Q&A and lots of good questions, so maybe just a few more. Do you see an opportunity to develop hydrogen farms in the US given the solar map shown on page twenty-six?

Absolutely. I mean, for us, the US, when the market truly takes off in the US, what we've seen is in Europe there's a huge sort of political and government sort of commitment to hydrogen. But as the as the US market also develops, I mean, the potential for us is huge. It actually has a solar radiation levels that are more attractive for us than southern Europe. The point to remember with the US is that brown hydrogen in the US is cheaper than brown hydrogen in Europe, but natural gas is cheaper than in the US than in Europe. And brown hydrogen is the price of brown hydrogen is very much driven by the price of natural gas. The cost of natural gas. So, for example, right now, natural gas being at a very low-cost level in Europe or somewhere around the one point sixty-one point seven euros, a kilo of brown hydrogen in the US would probably be around a dollar or so. So, the US is significantly cheaper. That means that in order for a company not to have an economic impact from going brown to green, technology across the world in the green hydrogen sector has to sort of keep advancing in order to truly be competitive for us. As I mentioned we currently have limited production capabilities in the next couple of years, our focus is having to be sort of southern Europe just from our own limitations. But as I mentioned, with our product development and our production capacity increase would definitely very interested in the US. And of course, it was part of our thinking of joining up with the US SPAC naturally.

I'll just chime in on that very briefly, you know, I think that the next step in the technology roadmap and Federico alluded to this is the development of our own production capacity. And that's going to be a kind of fully, fully automated robotized facility. And, you know, the first one is going to be extremely important because once that one is developed and we have the kinks out, you can then replicate that and drop a production facility anywhere, anywhere where it makes sense from a from a solar resource perspective. So certainly, the southwest of the U.S. or Australia or the Middle East and Africa, those are all great, great places where, as Federico said, it's hard to find someone who can compete with the cost profile. So that's that is certainly the US as being our own home base. Our personal home base is it's certainly on our radar.

Thanks, Ben. So, the last question I'm going to hit, really, so there's lots of questions around patents and just I know, Frederico, you talked about that a little bit and we're getting sort of more variations of questions around the patents. But I'll end it with this. The technology you're presenting is absolutely unique versus what others see elsewhere in the hydrogen electrolysis sector. So how strong are the strong patents? And then have you been approached by third parties to enter into technology sharing agreements?

So just on the technology sharing we've been approached by a number of companies who are very interested in doing sort of technology development JVs, so this is something that where we're considering. But so, so, so that's a yes on that front, on the on the patents. I mean, obviously, we believe that they're strong and that's why we submitted them. But I want to know the we see protection of our technology in three ways. You have the sort of hard protection, which is your, your patents. And as I say, we have two patents filed already. Two more on the way, just on the on the sort of miniaturized electrolyzer concept, because we are truly approaching this in a different angle than the rest of the industry. But we have also some soft protections as well. So, as I mentioned before, MagP is the last remaining CPV factory and technology in Europe. So if someone wanted to copy what we were doing and we have maybe just clarified, we have exclusive rights to that solar technology for hydrogen, if someone wanted to replicate what we were doing, they would need to reinvent the sort of concentrated photovoltaic panels in the way we do it. So not with mirrors and so on. That's itself a, you know, a barrier to entry of a few years of development, of rebuilding, not only the knowledge of CPV, which pretty much disappeared in Europe with the entry of the Chinese photovoltaic panels, but also in these sort of building up those you know, how a production facility.

Also, there are elements that have from this to give you an example, this little piece of black here at the top, that's an adhesive that has to take an enormous amount of solar radiation over 25 years. So that thing is battered by if you were to take the over 30000 years' worth of sunlight. So that's something that's been it took over two years to develop just that little element. It's not patented, but it's a closely kept sort of secret should we say. And just to test it, it's very hard to even do a quality assurance testing on something that you would need to batter it with 30000 years' worth of sunlight. So, we have elements like that that have come through being in the decade of concentrated photovoltaic, of dealing with these sorts of problems that we've solved for that someone would have to replicate and start from scratch. So, we see our protection as. We're using the last production facility of CPV in Europe with know how that would take people years to replicate and we have also our patents on our miniaturized electrolyzer.

Great, that seems like a pretty good place to wrap, I know we're running out of time, so I want to be respectful of everybody's calendars. But if there's any follow up, I think most who are on participating is the attendees know how to reach me and reach the company. So please feel free to do that if we were able to get to your questions. Thank you, Kristi, for the platform here today. This has been great, and we appreciate everyone's time.

Thank you so much.