



Heliogen Business Combination with Athena Technology Acquisition Corp.

Investor Conference Call Transcript

July 7, 2021

Operator

Good morning, and welcome to the Heliogen and Athena Technology Acquisition Corp., or ATHN, investor conference call.

I would like to first remind everyone that this call may contain forward-looking statements including, but not limited to, Heliogen and Athena Technology Acquisition Corp.'s expectations or predictions on financial and business performance and conditions, expectations or assumptions in consummating the business combination between the parties, and product development and performance. This includes, but is not limited to, the timing of development milestones, competitive and industry outlook and the timing and completion of the business combination. Any statements made on this call that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are inherently subject to risks, uncertainties (some of which are beyond the control of the parties) and assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements and they are not guarantees of performance. I encourage you to read the press release issued today and to review Athena Technology Acquisition Corp.'s filings with the SEC (which include a copy of the investor presentation) for a discussion of the risks that can affect the business combination, Heliogen's business, and the business of the combined company after completion of the proposed business combination.

Athena Technology Acquisition Corp. and Heliogen are under no obligation and expressly disclaim any obligation to update, alter or otherwise revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by applicable securities laws.

The information discussed on this call is qualified in its entirety by the Current Report on Form 8-K that was filed by the Athena Technology Acquisition Corp. on July 7, 2021 and may be accessed on the SEC's website. Security holders are urged to read the Form 8-K and other SEC filings in connection with the proposed transaction carefully. We also encourage you to read the press release issued today, the accompanying presentation, and Athena Technology Acquisition Corp.'s public filings with the SEC, including a Registration Statement on Form S-4 and the joint

proxy statement/prospectus included therein, that will be filed in the near future and available on the SEC's website, and, in particular, to the section or sections captioned "Risk Factors," for a discussion of the risks that can affect the transaction, Athena Acquisition Corp.'s and Heliogen's businesses, and the outlook of the combined company.

During this call we will discuss certain non-GAAP financial measures, including EBITDA and free cash flow. Please refer to the investor presentation accompanying the Form 8-K for a description of these and other non-GAAP financial measures, as well as a reconciliation of such measures to their respective most directly comparable GAAP financial measures.

This call is for informational purposes only and shall not constitute an offer to sell, a solicitation of a proxy, consent or authorization or the solicitation of an offer to buy any securities pursuant to the proposed business combination or otherwise, 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. No offer of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act.

I will now turn the call over to Bill Gross, CEO of Heliogen. Please go ahead.

Bill Gross – CEO, Heliogen

Thank you operator, and thank you to everyone listening this morning.

Our mission at Heliogen is to replace fossil fuels with concentrated sunshine by making concentrated solar energy more efficient, affordable – and nearly always available. We believe there's a huge market opportunity right now in this energy transition to do that. In pursuing this mission, we're honored and excited to be working with Athena Technology Acquisition Corporation, and believe this transaction will allow us to scale our technology and make a significant impact on the world. I was thrilled when I first met Phyllis Newhouse, Athena's CEO, as we are both driven by making a positive difference in society. The team that Phyllis has put together is talented and experienced, and shares our same vision. Phyllis, let me turn it over to you for a moment just to talk about how we view this opportunity together, and then I'll go into the technical presentation.

Phyllis Newhouse – CEO, Athena Technology Acquisition Corp.

Thanks Bill. We are incredibly excited to be working with you and Heliogen, and to make our shared vision of reliable concentrated solar energy a reality. Athena is a woman-led SPAC, drawing on expertise from business founders, operators, venture capitalists, private equity partners, and former investment bankers. So when we looked at doing a combination with a company, it was really about purpose, about a founder with passion, and from the moment that I had the opportunity to talk with Bill, I knew that Heliogen was the company we wanted to do a deal with.

Through several rounds of due diligence, our team looked at the technology behind Heliogen, we looked at their operations and market for growth, the management experience and expertise, and we discussed their level of public market readiness. We brought in two technical due diligence firms. We brought in Ernst & Young, EY, to do the financial due diligence and really stress test the assumptions in Heliogen's projections and their model. The Athena team visited Heliogen facilities, and took our time to get to know the business deeply. We were impressed by what we found in all regards, and believe Heliogen is truly a disruptive company, one that can contribute to decarbonization of economies and societies worldwide. So we're excited to announce this business combination, and now, Bill, I'll turn it back over to you to discuss the company and technologies - Thank you.

Bill Gross – CEO, Heliogen

Thanks Phyllis.

Heliogen is a concentrated solar company, which means that we take the sun's rays and redirect them, using mirrors, to focus one spot on a tower. That process has the ability to generate temperatures that can exceed 1,000 degrees centigrade. That heat can then be used for several applications, including the generation of clean power, industrial heat, and green fuels such as hydrogen. Although the process of concentrating sunlight is not new, Heliogen has developed innovations which we believe fundamentally improve its potential.

Heliogen's innovation focuses on refining that process to improve the output and to solve the largest problem confronted by renewable sources of energy: intermittency.

First, Heliogen has invented a new way to utilize artificial intelligence to make a large field of mirrors act as an enormous, precise magnifying glass to achieve very high temperatures. Other people have built mirrors before, and other people have done concentrated solar before, but no one has ever combined AI and software to make those mirrors both less expensive and to focus more accurately and achieve such high efficiencies. Our proprietary technology allows for automatic adjustment of the mirrors at all times of day, enabling optimal concentration, which is what enables us to generate ultra-high temperatures. This is what we call a closed-loop tracking system.

Second, we have a unique modular system design that utilizes small mirrors, which will be manufactured at scale in a highly repeatable process. We will use these to build one 5 megawatt module, and replicate it with each additional module generating another 5 megawatts. By building modularity, we can build essentially the same thing over and over again, which is expected to reduce overall costs. And we're the first company in concentrated solar that we know of to develop a modular system like that.

We have a strong portfolio of patents covering key aspects of our plant and process, including our closed-loop tracking system which is the linchpin of our solution. We have six patents already granted and 13 patents pending on the technology. Why is this so important? This technology can be a game changer for many of our customers. We want to scale this in a very large way and down the road we may license this technology to others – but it is not currently baked into our forecasts.

Lastly, and most importantly, we believe Heliogen's technology will solve the intermittency issues that have plagued most other renewable sources.

Intermittency has been the bane of renewable energy because if you can't depend on it, you can't produce power at peak times you need on the grid, you can't power industry which runs 24 hours a day, and you can't produce reliable, low-cost, green hydrogen. So our technology will allow those things to happen. Heliogen's technology is designed to store the energy generated from concentrating the sun's rays into solid media – either rocks, sand or ceramic material – in the form of heat. This is a lower cost form of storage than what other solar energy companies have used, and it will be made possible by the high temperatures enabled by Heliogen's

technology. We will store that energy, and then when it is needed, use a heat exchanger to bring that energy either to an engine, or to a manufacturing facility, or to an electrolyzer to make green hydrogen. Every electron you generate, you have to use. So if you have extra electrons at noon, it's just as bad as not having enough. Right now, in fact, there's a lot of curtailment of solar photovoltaic power in the Southwest United States, and all the hot regions where they put in a lot of solar panels, because they need more power at seven in the evening, but they have too much at noon. We believe our technology will solve that.

So, Heliogen's technology will really provide flexibility. It is flexible in scale, it is flexible in application, and it is flexible in time of use. Talking like that, it starts to sound like an ideal source of energy. But, importantly, that didn't occur overnight – Heliogen's team has spent 8 years improving all aspects of our technology with the goal of achieving the record temperatures from concentrated sunlight that we have described. From the mirrors, to the sunlight receivers, to the full systems themselves, we are now on the fourth generation of technology innovation, and we will continue to innovate.

This innovative spirit is one element, aside from our technology, that has attracted our clients to us. We are currently working with ArcelorMittal, the largest steel manufacturer in North America, South America and Europe; Rio Tinto, one of the largest mining and metals companies in the world, with operations in 35 countries; and we have recently been selected by the US Department of Energy for an award to develop, build and operate a thermal storage test facility supplied by concentrated sunlight. Our technology has wide application, and large energy companies and government agencies are recognizing that.

So the technology is exciting, and it's the main story – our mission to create large scale renewable energy generation that is designed to solve intermittency and produces zero carbon emissions. To go into more of the details around our financials and the transaction with Athena, which we are also very excited about, I now want to turn to Heliogen's CFO, Christie Obiaya.

Christie Obiaya – CFO, Heliogen

Thank you, Bill.

First, I'd like to tell you about the other aspects that we believe make Heliogen such a compelling opportunity.

The market in renewable energy and more broadly across the energy transition space is incredibly strong. Global analysts consulting firms such as McKinsey predict that renewable power capex spend of approximately \$8.5 trillion will be required from 2020 to 2030 in order to achieve the carbon emissions reductions that would support the 1.5 degree global warming target established by the Paris Agreements. As we plan to also provide solutions for hydrogen production and industrial heat, Heliogen's total addressable market is even larger.

This macroeconomic view is corroborated by the level of inbound engagement that our team has had with prospective customers. Our potential sales pipeline is extremely diverse, and ranges from global oil and gas companies, to mining and metals companies, to steel and cement industrial players. Geographically we are focused initially on the US, but as you might expect, there's huge opportunity worldwide especially in locations with strong solar resource such as Mexico, South America, Australia, and Africa.

So how do we make money in this landscape? In the near to medium term, we expect two primary sources of revenue. The first source is our delivery of complete Heliogen energy plants to long term owner-operators, and we are hiring EPC contractors to do the installation of Heliogen's technology. And the second is from the sale of Heliogen's heliostats onto projects that we develop on behalf of the energy plant owner-operators. In the long term, we expect to use more of a licensing type model, in which we license our patent-protected technology and heliostats to owner-operators and EPC companies. This model will result in lower revenue per module but a stronger profit margin, and it's not built into our financial forecast and therefore represents potential upside.

We forecast revenue to grow from about \$8 million in 2021 to nearly \$200 million in 2023. That revenue will derive from our deploying three new projects with one module each. These three projects are currently in various stages of development and contract negotiation. As the business scales, we expect that in 2026 our topline revenue will grow to \$2.4 billion, and we expect 2026 EBITDA over \$800 million. Along with that growth, Heliogen sees a path to positive EBITDA and positive free cash flow in 2025. It's important to note that our revenue will come from deploying our technology rather than from selling energy commodities, as we do not intend to be an owner-operator of energy facilities. So that will help us pursue a relatively asset-light approach to generating profit. In addition, we are fortunate to have no debt, and we have been deliberate about that choice in our trajectory thus far.

Now let me provide a brief overview of the proposed business combination. The deal is based on a company valuation of \$2 billion, implying a revenue multiple of 0.8x our 2026 forecast revenue of \$2.4 billion.

Proceeds from the transaction will be used to fund heliostat manufacturing, to maintain our competitive edge through research and development, to support global project development and execution, and to strengthen the balance sheet. Heliogen's existing shareholders will roll over 100% of their equity. The combined company will be listed on the New York Stock Exchange under the ticker HLGN, and we expect the merger to close in early Q4 2021.

We are in an increasingly supportive environment for Heliogen's technology, and we are incredibly excited about the potential Heliogen has to transform the world's energy production landscape.

With that, I'd like to turn things back to Bill.

Bill Gross – CEO, Heliogen

Thanks Christie.

As I said at the outset, Heliogen is excited to announce this transaction, and to be working with an incredible partner in Athena to bring Heliogen's AI-enabled concentrated solar technology to as diverse a set of applications and as wide a market as possible.

What we are developing at Heliogen – a completely renewable, emissions-free source of dispatchable energy that is enabled by artificial intelligence – could be truly game-changing. We expect it to address the key challenges of traditional renewable energy sources, while adding to the list of positives. At the end of the day, we also expect the business built on this technology to be sustainable, scalable and profitable.

Thank you to everyone for listening, and for your interest in Heliogen. Operator, you may now disconnect.