



**Embark Technology, Inc.**  
**1Q22 Earnings Call Prepared Remarks Transcript**  
**May 10, 2022**

**Operator**

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Good afternoon, and welcome to the Embark Technology First Quarter 2022 Earnings Conference Call. Today's call is being recorded, and all lines have been placed on mute to prevent any background noise. After the speaker remarks, there will be a question-and-answer session. I will now turn the call over to Bill Ong, Head of Investor Relations.

**Bill Ong, Head of Investor Relations, Embark Technology, Inc.**

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Thank you, operator, and thank you everyone for joining us today. Joining me on today's call are Co-Founder and CEO, Alex Rodrigues, and CFO, Richard Hawwa.

Before I discuss our disclosure statements, I want to introduce myself as I just recently joined Embark as the Head of Investor Relations. As a quick background, I have more than 35 years of experience in investor relations, corporate finance and engineering at VIAVI Solutions, Applied Materials and Intel. I've also worked at a number of major investment banking and brokerages firms as a sell-side and buy-side analyst. I look forward to engaging with all of you in the coming weeks and months.

Embark issued its first quarter 2022 press release and presentation which we will refer to today. These can be found on the Investor Relations section of our website at [investors.embarktrucks.com](http://investors.embarktrucks.com).

Please note this call will include forward-looking statements based on current expectations and assumptions, which are subject to risks and uncertainties. These statements reflect our views only as of today and should not be relied upon as representative about our views as of any subsequent date. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements in light of new information or future events. These statements are subject to a variety of risks and uncertainties that could cause actual results to differ materially from expectations. Please refer to our filings with the SEC including our Annual Report on Form 10-K filed on March 21, 2022, particularly the risk factors described in those filings that could affect our financial results.

We will discuss non-GAAP financial measures, which we believe are useful as supplemental measures of Embark's performance. These non-GAAP measures should be considered in addition to, and not as a substitute for, or in isolation from, GAAP results.



These additional disclosures regarding the non-GAAP financial measures in today's press release and our filings with the SEC are posted on our company's investor website.

Finally, we are recording today's call, and we'll make the recording available this evening also on our website.

I would now like to turn the call over to Alex.

### **Alex Rodrigues, CEO, Embark Technology, Inc.**

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Thank you very much Bill and welcome to Embark - we're excited to have you on the team! Good afternoon, everyone.

I am going to begin on **slide 3**.

Last quarter was our first earnings call as a public company, and as such we provided detailed background on Embark, our differentiated technology, and our asset-light business model. Today, I want to highlight some helpful resources for anyone that is new to the story or that wants to take a deeper dive on Embark.

I want to specifically highlight the technology section of our website. There you can find an interactive graphic for Vision Map Fusion, this allows you to visualize what the truck sees when encountering a situation where lane lines have been paved over and the road no longer reflects what an HD Map may expect.

In the investor relations section of our website, you can find all of our filings, presentations, and events, as well as our inaugural ESG report, which we released last month. If you haven't already, I would encourage you to watch our first earnings call webcast on our site - where I give a primer on Embark's history and differentiation for public investors.

Finally, I want to mention our Medium blog, where you can hear directly from Embark's executive leaders with in-depth perspectives on the industry, IP, software development, government relations and more. If you want to deeply understand all the angles on the self-driving truck industry, this is the best place to go.

All of the resources mentioned are hyperlinked in the investor presentation for easy access.

**Turning to our business updates on slide 4**, I would like to discuss key business updates since our last call. I'm excited about the progress we have made in such a short time.



We received the first trucks for our Truck Transfer Program these were purchased by Knight-Swift. As you recall, Embarc's Truck Transfer Program, or TTP, is an industry-first program we highlighted in detail during our Q4 earnings. We believe TTP will unlock the next level of integration and deployment learnings ahead of scaled commercialization, and it represents the natural next step by having carriers own, operate and maintain an Embarc-equipped autonomous truck.

On commercial and operations, we recently commenced 24 hour-a-day testing on the I-10 in Texas. Not only has this allowed us to more than double the testing capacity of our trucks, but it also allows us to refine our technology for night-time driving and ultimately prepare for a world where trucks drive around the clock. By increasing the number of miles from each tractor and by maximizing the engineering benefit of each mile under a variety of scenarios, we are able to rapidly advance our technology in a highly capital efficient manner.

As you may have seen last week, we announced that US Xpress has joined the Embarc Partner Development Program. We believe Embarc's partnership with US Xpress is highly differentiated, in that it goes beyond typical pilots to focus on preparing US Xpress's terminals to receive and launch Embarc equipped autonomous trucks. This is a significant milestone and marks the first time a carrier's terminals will be added to the Embarc Coverage Map. This will unlock additional efficiencies for US Xpress and enable Embarc to remain asset-light. Embarc has pioneered work on the transfer point model since 2019, setting the groundwork for us to bring this expertise to partners like US Xpress.

Lastly, I want to highlight some recent progress on the Partner Development Program - a critical program that enables Embarc and our carrier partners to prepare to scale Embarc's technology. As we have shared in the past, we believe that the rate of adoption can be positively impacted through deep, early collaboration between Embarc and carriers to identify and resolve the friction points that will otherwise hamper deployment and scaling. One example that I want to highlight to this effect, is a recent upgrade we have made to our customer analytics environment, where we run various strategic and operational analyses on lane level datasets that are provided by our PDP partners. These recent upgrades have unlocked a few new benefits for Embarc and our partners, most notably:

- **1 - Increased Efficiency:** We've automated our analysis and reduced time-to-run from days to hours which will enable us to bring on and serve more partners in the future.
- **Number 2 - Dynamic Planning:** This streamlined interface enables us to run more "what-if" scenarios in partnership with carrier leadership teams. We can iterate and converge on strategic and operational decisions more quickly by being able to look at alternative views of the data in real time.



- **And Number 3 - We are now able to Answer a Broader Set of Questions:** By bringing together a more cohesive modeling framework and interconnecting more factors such as lane density, rollout sequence, unit-economics, terminal availability, sustainability implications and delivery time gains, to name just a few, this allows us and our carrier partners to be better informed for key decisions.

Now turning to updates on leadership. We continue to selectively grow our exceptional and highly experienced leadership team and are tracking to the overall headcount targets across the organization. We're proud to have been able to attract experienced, top caliber candidates in an overall challenging labor market to fill positions that are critical to advancing the technology and operations of our business. We think this really speaks volumes on our culture, our mission, and the belief in what we are doing at Embark.

A few key hires I'd like to highlight today:

- We recently announced the appointment of Sarah Quick as our Head of Operations Safety. Sarah will coordinate efforts to identify and mitigate risk in our on-road operations. Most recently Sarah served in a leadership role at Virgin Hyperloop, and she brings over a decade of experience spanning safety and transportation in rail and on-road operations.
- Emily Warren recently joined as Embark's Head of Public Policy to continue our collaboration with policymakers in preparation for commercial deployment. Emily brings over a decade of mobility and logistics policy experience to Embark, having previously served in senior policy roles at Lyft, Lime, and Amazon.
- Finally, as I mentioned at the outset of this call, we are excited to welcome Bill Ong to lead our investor relations efforts.

I know I mentioned the addition of JB Passot and Sam Loesche last quarter, but I want to highlight them again as they have written some very interesting and in-depth blog posts on their respective functions, and I want to encourage you to read them.

On the Embark Coverage map, we specifically said that in 2022 we would launch the Backbone of the Embark Coverage Map across the Sunbelt. I'm excited to update on the progress we've made on this initiative with Ryder and Alterra in a couple of slides.

On the technology roadmap, we said that we would accomplish two of the remaining five capabilities in 2022. Those two capabilities being Emergency Vehicle Interactions in Q2 and Evasive Maneuvers later this year. These milestones continue to be on track and we look forward to providing more detailed updates over the course of the year. Also, as promised on our Q4 earnings call, I will be reviewing the results from our Snow testing, which we believe are transformational for the AV trucking industry, as we prepare to operationalize and commercialize our technology not just in the initial Sunbelt region but across a broader set of lanes in the years to come.



Lastly, turning now to the community and our commitment to ESG, I wanted to provide an update on our Little Robots program. As you know, I promised to donate my entire 2022 salary and bonus to launch a grant program and fund a number of projects in STEM Education. While I believe this provides a clear alignment with all Embark shareholders and living our values, I find it personally rewarding as well. I was fortunate enough to go back to the First World Championship in Houston last month, which I participated in and won back in 2009. It was very energizing to see the excitement around robotics and I'm thrilled that Embark can be a part of advancing the next generation of engineers. To date, we've already provided grants of more than \$50,000 to three organizations, including the Afghan Girls Robotics team, FIRST Robotics Canada and to the team I founded way back in the day, Team ATAA.

**Turning to slide 5**, as we discussed on our last call and as I previously mentioned, it is important to us to provide clear milestones so that our progress to commercialization can be measured and tracked. To that end, I want to take a moment to reiterate what we plan to deliver in 2022, consistent with what we outlined in our Q4 earnings:

**First.** To deliver the first trucks into the fleets of carrier customers through our Truck Transfer Program.

**Second.** To accomplish two of the remaining five capabilities in our technological roadmap, bringing the total capabilities accomplished to 13 of 16 by the end of 2022; and

**Third.** To launch the backbone of the Embark Coverage Map across the Sunbelt region.

As I highlighted on the previous slide, we're already making substantive progress on these key milestones, and I look forward to diving in a bit deeper on the coverage map in a few slides.

**Turning now to slide 6**, I wanted to provide an update on our snow testing that we conducted this winter in Montana, and where we released the results just yesterday. Results from the testing demonstrate that in roughly 90% of runs through snowy conditions under study, Embark's proprietary, patent-pending Vision Map Fusion technology should be able to operate successfully or pause and resume travel within acceptable shipper delivery windows.

Let me go into more detail on the entire process and why we are excited with the results.

Beginning in February, we began snow testing in Montana with Embark-powered trucks traveling in a 60-mile round trip route on public roads between Clinton and Missoula, Montana in a variety of winter weather situations. In addition to on-road testing, Embark developed a comprehensive weather model using over 8 billion historical weather data



points – dating back over 10 years on all major US routes – to analyze the impact of snow at a lane level across the US.

The testing and weather analysis show significant technical and commercial promise. Review of Embark’s testing and performance indicated that our Vision Map Fusion technology worked within tolerance thresholds for safe operation in snowfall rates up to one-sixth inch per hour and with snow accumulation of 1 inch on the road over 3 hours, conditions that cover the vast majority of snowy weather based on Embark’s analysis.

Embark’s Vision Map Fusion technology has enabled this progress by moving beyond LiDAR-centric mapping and localization approaches. Instead, by relying heavily on the camera-based sensing modality in snowy conditions, Vision Map Fusion is capable of filling in the gaps and mitigating the uncertainty created by accumulating snow on the roadway, unlocking critical shipping lanes and increasing uptime beyond the Sunbelt where inclement weather can often hamper operations. Embark successful snow testing creates a path to unlocking Northern lanes, on which roughly 1 of 5 runs experience some snowy conditions. The inclusion of the snowy northern lanes will more than triple our serviceable market when we expand beyond our Phase I coverage map which is focused on the Sunbelt region.

Now to be clear, snowy conditions are not one of the 16 capabilities on our technology roadmap that we are shooting for to commercialize in 2024. However, there are only so many winters between now and 2026 when we plan to expand to the northern part of the United States, so it is important to make each one count.

**Turning to slide 7**, we released our inaugural ESG report last month on Earth Day. We view this report as the first step in Embark’s ESG efforts as we strive to improve the AV trucking industry for all stakeholders: the community, truck drivers, shippers, carriers, regulators, employees and investors. You can access the full report on our investor relations site but I want to summarize a few key highlights.

On the environmental front, we’re working with fleet partners to help them comply with environmental standards such as those in the EPA’s Clean Truck Plan. One example is the electric vehicle drayage pilot that we’ve completed with HP Inc. aimed at utilizing both autonomous and electric vehicle technology to reduce HP’s diesel emissions network-wide and create a more sustainable supply chain from end-to-end for shippers.

One of Embark’s primary “Social” missions is to help enhance safety on public roads. To date, Embark-powered trucks have driven more than one million real world miles without a Department of Transportation reportable safety incident. Embark’s collaboration with the Arizona Department of Transportation to improve highway work zone safety aims to reduce the 102,000 work-zone related crashes which caused 857 deaths in the U.S. in 2020. Trucks have played a large part, being involved in 26 percent of the fatal crashes.



The company also re-emphasized and prioritized its commitment to diversity and inclusion, by establishing a company-wide OKR to measure our progress.

I am proud of our efforts on the ESG front to date and am excited for what is to come as we continue to prioritize ESG initiatives to better serve all of our constituents, from the employees and investors to carriers & truck drivers and the communities they serve.

**Next, we'll move onto Slide 8** where I will provide a commercial update regarding our Embark Coverage Map.

As we discussed on our last call, the Embark Coverage Map is a nationwide network of points between which carriers can dispatch Embark-equipped trucks. Launching the backbone of the Embark Coverage Map in the Sunbelt region is a key focus for 2022 and we are excited about what we have accomplished so far.

Over the past few months, Embark has begun to further develop some of the key partnerships necessary to activate a nationwide network of sites between which Embark-equipped trucks can operate. As we have shared before, we see our network consisting of two distinct site types:

- **First**, we are in the process of establishing a network of anchor terminals that are Alterra-owned and Ryder-operated to enable carrier partners to conduct transfers at the edge of major freight markets.
- **Second**, in time we will look to supplement these anchor terminals with existing high-volume carrier and shipper facilities between which partners will be able to run freight directly, unlocking a new level of efficiency.

The Embark Coverage Map is the aggregation of these two facility types into a nationwide network of transfer points between which Embark-equipped trucks can operate.

Regarding our anchor terminals, we have some exciting updates to make. Our partnership with Alterra has already begun to bear fruit. The Alterra team has initiated searches in multiple Sunbelt markets and is leveraging our site assessment rubrics to quickly assess and act on properties. This approach has already yielded results, with Alterra initiating its first property acquisition process.

Our work with Ryder has also led to some meaningful achievements recently. Just this week, we launched our first Ryder operated site in Houston. This is the culmination of months of hard work by both teams to develop a portfolio of standard operating procedures ranging from gate access to pre-inspection to Bill of Lading Handoffs. We look forward to gathering learnings from this initial deployment and continuing to expand this service to other sites across the Sunbelt.



On the carrier and shipper facilities front, we are very excited about what we are working on with our recently announced new PDP partner, U.S. Xpress. U.S. Xpress' nationwide terminal network presents an opportunity for a carrier to leverage its existing real estate footprint to support efficient autonomous trucking operations. Through this partnership, Embark and U.S. Xpress will identify priority terminals based on traffic patterns, customer needs, and technical requirements. The companies will then start by preparing two terminals in Sunbelt states, creating a clear path to opening a high-volume lane for autonomous hauling. As U.S. Xpress looks to grow its autonomous program, the ability to run Embark trucks directly from terminal to terminal provides an added level of efficiency for US Xpress, while having the added benefit of enabling Embark to remain asset-light.

And with that, I will turn it over to Richard to discuss the financial details.

### **Richard Hawwa, CFO, Embark Trucks**

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Thanks Alex.

**Let me turn to slide 9**, let me highlight some of the key financial metrics that support our business progress.

Our cash and cash equivalents were approximately \$245 million as of March 31, 2022. Our free cash flow spend for the quarter was \$19.9 million. There is a bit of noise when comparing our free cash flow spend to our Q4 2021 free cash flow spend, which I'll talk through on the next slide, as I want to ensure you have a clear quarter-over-quarter comparison of our cash spend.

For your benefit, the key takeaway is: We feel very good about the discipline in free cash flow spend, while still achieving measured headcount growth, as well as the liquidity to execute on our 2022 plan.

And, more generally, given all the business initiatives we've delivered on in the quarter, the prospects of what we expect for the remainder of the year, the best way to sum up the quarter is: "very solid".

As such, we have not revised any guidance previously provided related to free cash flow spend, and we are on track for our initial guidance for full year free cash flow spend of \$125 to \$140 million. We believe that given the market conditions and the process improvements we've identified in the quarter, we're likely to come in towards the lower end of the range. I also want to reiterate that we believe our ability to develop a leading technology while being extremely capital efficient is the direct result of our focus, which



helps ensure we continue to be prudent stewards of capital as we advance towards commercialization. I will also continue to reinforce the differentiation of our business model relative to other mobility businesses, in that, as an AV company, we don't need to build a manufacturing facility or hard asset to have one sale. We are able to have flexibility to define and refine key initiatives, key partners and the resources required to execute upon them.

Given headcount represents a majority of our free cash flow spend, let me spend a minute discussing headcount and hiring.

We ended the quarter with 312 employees, up 76 employees from Q4 2021, or 32% quarter-over-quarter growth. Of these employees, 246 were in our R&D organization, representing quarter-over-quarter growth of nearly 43%. To give you a bit more perspective, the relative percentage of R&D employees to total employees at the end of Q4 2021 was 73%. However, at the end of Q1 it grew to 79%. Despite current market conditions, I don't want to downplay the challenging hiring environment, particularly for software engineers, but we are succeeding in attracting not only high quality executive level talent, as Alex highlighted earlier, but talent across the organization. We view this to be very disciplined growth by targeting very specific needs within the organization. So, what contributed to our success in the quarter?

- **1)** While our core hiring market remains the Bay Area, with hybrid work we have unlocked the rest of the US talent pool which has allowed us to scale without compromising on quality - as well as save on compensation expense.
- **2)** Our conversion rate and hiring percentages have remained near constant throughout our growth - which means we have been highly consistent in our hiring practices.
- **3)** And lastly, it's important to note that we aren't growing simply to meet specific hiring targets. At Embark, we are not willing to lower the bar of candidates, as quality of hires always edges out quantity. Culture is also critically important part to Embark, and culture is key to continuing to advance our technology in a capital efficient manner by having the right quality of people within our organization.

To summarize on hiring, ultimately, the proof is in the pudding. Look at what we have done with a more focused approach relative than our competitors. This speaks to the quality of people across the organization at Embark, as well as culture and capital efficiency discipline. We feel we are winning on all these fronts, which continues to give



us conviction on achieving the milestones we have asked you to measure our progress on.

Let me walk you through some of the results and reconciliations.

First quarter net loss was \$18.4 million.

First quarter adjusted EBITDA loss was \$23.1 million compared to adjusted EBITDA loss of \$7.7 million in the prior-year period and \$20.3 million for Q4 2021. We've provided a non-GAAP reconciliation in the appendix for your reference. You will notice there was a \$22 million gain related to the change in the fair market value of our warrants outstanding. This is a non-cash gain, purely relates to the way GAAP requires us to account for the warrants on our balance sheet, and is also directly related to the change in share price at March 31st 2022 relative December 31st 2021.

Another material non-cash expense is stock-based compensation. Let me provide some additional detail on stock-based compensation, as I know this non-cash expense is an important input to many of your models.

For Q1 2022, we recognized stock-based compensation expense of \$16.6 million. When removing the impact of Section 16 officers, approximately 60% of this expense is attributable to our R&D organization.

As I mentioned on our last call, given the closing of the Business Combination in November last year, as well as the implementation of new compensation policies, now as a public company, there is a bit of noise in the stock-based compensation figures. I've provided a reconciliation in the appendix for reference so you can have a good apples-to-apples comparison on the quarter-over-quarter change. What you'll see is on an adjusted basis, Q1 2022 stock-based compensation expense was \$17.8 million and for Q4 2021 adjusted stock-based compensation was \$16.5 million. I would note that in both Q1 and Q4, much of the noise is related to the way GAAP actually allows us to recognize the expense, as well as some one-time items related to the Business Combination.

As a reminder, approximately \$2.6 million of the quarterly stock-based compensation expense is related to our Founders PSU Grant. That does not begin to vest until our share price is at least \$20, aligning our Founders' interest with long-term investors. Moreover, we do view stock-based compensation as a core part of our compensation philosophy to not only align our Founders, but to align all employees, and as such, we believe stock-based compensation tends to be a larger component of our compensation philosophy relative to other technology companies.

**Turning to slide 10**, Let me provide you the key takeaways:



- First: quarter-over-quarter our free cash flow spend went up approximately 14% when you adjust for fluctuations in net working capital, primarily related to pre-pays, as I mentioned on our Q4 call. There are also some additional considerations around some one-time adjustments related to the closing of the Business Combination in Q4, including one-time cash bonus payments.
- Second: We believe this growth in free cash flow spend was highly efficient given the growth in headcount, growing 32%, with 45% growth within our R&D organization
- Third: While there are some timing considerations to explain the headcount growth relative to spend, we were very efficient in the quarter, which is reflective of our general view on compensation philosophy, which I'll talk through

As I mentioned, a majority of our free cash flow spend is related to headcount, and should we need to flex our plan, we can and we will. We are constantly evaluating the resources required to execute on our initiatives. I mentioned earlier the uniqueness of Embark's culture and quality of our hires – this speaks to how we can have a trend like the one you see on this page. Stock-based compensation is a key part of our compensation philosophy, not because it simply results in a more efficient free cash flow spend, but because we believe it speaks to the upside potential new hires see in Embark, as well as their desire to be part of something unique. I also think it's well understood at Embark that this is not simply an academic project, but this is truly a mission to develop, operationalize and commercialize our technology, and create a business for the long-term.

And finally, before I move to the next slide, I want to reiterate one last point that I made on our last call. As a pre-revenue company, we are very cognizant that every dollar we spend must have a clear and obvious use to advance us towards commercialization. At the end of the day, we are a people and engineering organization. I've walked through our accomplishments on hiring, and detailed our free cash flow spend, and how we view the business model. Our disciplined free cash flow spend is the result of our focus, discipline, culture and asset-light business model approach. Ultimately, when you evaluate our technology, and what we've accomplished with our resources to date, it speaks for itself. We feel very well positioned today and, as I mentioned, will continue to make prudent decisions taking into account business needs and market conditions as we have always done.

**Moving to slide 11**, please mark your calendars and save the date for the second annual Embark Day to be held on September 21st 2022, with an event the evening before. We are very excited to host analysts and institutional investors once again in San Francisco. However, this time the event will be at our new 50,000 square foot headquarters – only a few blocks from our current headquarters. I think you will find the space to be very impressive and reflective of Embark's culture, being at the cross section of leading



engineering talent with a highly experienced operations team. I would note that finding tech space, while also having multiple truck bays in downtown San Francisco can be quite challenging, so we are excited to show it off in September. And more importantly, we are excited to provide you the opportunity to interact with our management team and get updates on our Truck Transfer Program, our Partner Development Program, experience a new truck demo and much more. We also might have a bit of fun if we can squeeze that in as well. Please reach out to our investor relations team if you are interested in attending.

With that, I will turn it back to Alex for closing remarks.

### **Alex Rodrigues, CEO, Embark Trucks, Inc.**

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Thank you, Richard.

**I would like to conclude on slide 12** by thanking our partners and customers, our employees for all of their hard work, and our investors for their continued long-term support.

Here I have the same slide that we showed at the end of the Q4 presentation. I want to bring it up again to re-highlight why we believe Embark continues to be a highly attractive investment opportunity with a thesis that continues to strengthen over time.

First, the macro environment that we've read about and hear about daily: Driver Shortage, Inflation, Supply Chain challenges – our technology addresses these challenges and makes Embark's value proposition clear and present.

Second, there are limited number of players actually focused on addressing these challenges. AV Trucking is a huge market, and we're the forefront given our longevity in attacking the problem not just technically, but also operationally. And I think this is very obvious given some of the updates I just walked through.

And lastly, we have an attractive asset-lite Software as a Service business model, this allows us to go-to market and scale in a highly efficient manner. And, we aren't just saying this, we are already proving this in the way we are partnering on building our coverage map, and the work we are doing through the truck transfer program and utilizing trucks that are purchased, owned and operated by the carrier.

The excitement amongst our employees, partners, and investors could not be greater.

With that operator, let's begin the question-and-answer session.