Amprius Technologies
First Quarter 2023 Earnings
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Presenters
Kang Sun, CEO
Sandra Wallach, CFO

Q&A Participants
Colin Rusch - Oppenheimer
Chris Souther - B. Riley
Chip Moore - EF Hutton

Operator
Good afternoon. Welcome to Amprius Technologies' First Quarter 2023 Earnings Conference call. Joining us for today's presentation are the company's CEO, Dr. Kang Sun, and CFO, Sandra Wallach.

At this time, all participants are in listen only mode. Following management's remarks, we will open the call for questions. Please note that this presentation contains forward-looking statements, including, but not limited to statements regarding future product commercialization, new customer adoption, and timing and ability of Amprius to build its large-scale manufacturing facility, expand it manufacturing capacity, scale its business, and attain a sustainable cost structure.

These statements involve known and unknown risks, uncertainties, and other important factors that may cause Amprius' results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied in such forward looking statements. For a more complete discussion of these risks and uncertainties, please refer to Amprius' filings with the Securities and Exchange Commission including, but not limited to the discussion of Amprius risk factors in its quarterly report on Form 10-Q filed on March 30, 2023.

Finally, I would like to remind everyone that this conference call is being webcast and a recording will be made available for replay on the company's investor relations website at ir.amprius.com. In addition to the webcast, the company has posted a shareholder letter that accompanies these results, which can also be found on the investor relations website.

I will now turn the call over to Amprius Technologies' CEO, Dr. Kang Sun, for his comments. Sir, please proceed.

Kang Sun

Welcome, everyone. And thank you for joining us this afternoon. After I report on our progress and accomplishments at Amprius in the first quarter, our CFO, Sandra Wallach, will discuss our financial results for the period. After that, I will share some closing remarks before opening the call for questions.

As some of you may know, Amprius is a ultra-high energy density lithium-ion battery developer and manufacturer. Our high performance batteries are based on Amprius' proprietary high capacity silicon anode technologies. Today Amprius delivers commercial batteries with 450 watt-hour per kilo specific energy density and the 1150 watt-hour per liter volumetric density (ph). Our batteries also have up to 10C power capability and enables extreme fast charging rates of zero to 80% full (ph) charged in approximately six minutes.

Amprius batteries are viewed for the tough operating environments with the durability to pass the United States military benchmark nail penetration test as well as the versatility to operate in an extremely wide temperature range of minus 30 degrees Celsius to up to 55 Celsius. Is our belief that there is no one else in the commercial market that can perform at these levels.

Amprius has over 80 patents and extensive new (inaudible) in silicon anode manufacturing technologies. Amprius has been in commercial battery production since 2018 so the company has many years of manufacturing experience of high energy density, high power density, lithium-ion batteries.

Our near term goal is to scale our manufacturing with the long term goal of becoming a mainstream battery solution with applications across all segments of electrical mobility, including aviation and EV (ph) industries.

Using our momentum from last year, we believe that we have hit the ground running so far in 2023 with new technological breakthroughs, continued commercial successes, and additional developments for our production capacity expansion. Our first quarter achievements were important steps towards accomplishing our goal for 2023.

I would now like to highlight a few events. In March, we announced the Amprius new battery platform, which is independently verified for 500 watt-hour per kilo specific energy density and a 1350 watt-hour per liter volumetric energy density.

Our 500 watt-hour per kilo battery platform was purposely designed to serve the needs of certain strategical customer projects, such as (inaudible), the Airbus subsidiary developing high altitude pseudo satellites or (inaudible). We expect to be able to send (ph) port (ph) packs to these selected customers before and end of 2023.

Amprius 500 watt-hour per kilo and the 1250 watt-hour per liter battery platform not only enhances our customer applications it also demonstrates the robust product roadmap for Amprius silicon anode technologies. The company will continue to move along that roadmap to deliver the most advanced lithium-ion batteries available on the market.

This achievements follows our most recent announcement in December of 2022 that an independent third party had verified our passing of the military performance benchmark (ph) and nail penetration test with unprecedented 390 watt-hour per kilo cell (ph).

Amprius (inaudible) polymer electrolyte prevents the penetrating nail from creating a more resilient (ph) shorter circuit as indicated by the minimal increase in cell temperature after penetration and only small increase in cell voltage. After nail penetration, the cell is still functioning and providing power. A critical capability for variable batteries used by soldiers.

Also we announced earlier this month and after a vigorous a selection process Amprius high energy density batteries were select that the University of Michigan solar car team for their upcoming 3,000 kilometer race at World Solar Challenge in Australia. The batteries for the race must provide exceptional performance in tough conditions. Our leading performance characteristics are undeniable and this should provide the team with an edge for the event. We look forward to working with their team in the coming months.

Moving to our business development efforts. We continue to see significant demand for our products in the first quarter, especially in the aviation and the EV tall (ph) markets. As cruising distance and the weight are critical property for aviation, our high energy density lightweight batteries provide the ideal solutions, allowing us to develop (inaudible) roads in the industry.

This quarter was highlight by the successes both cross already existing customer, as well as the new customer opportunities. We shaped the two landing customers in the first quarter, including several new deal counts. Among serious ongoing new business development opportunities, we kick off a new technical engagement this quarter, with the leading aerospace OEM, codifying next steps towards testing and evaluation of Amprius batteries.

Also, within our existing clients, we spend our relationship with AeroVironment to be the supplier of a key power element in AeroVironment Switchblade 300 Block 20 missile. We expect to continue our regularly scheduled commercial shipments to AeroVironment as well as to (inaudible) to repeat customers and the strong partners for Amprius.

In addition, we have received a significant the interest from other existing battery (inaudible) manufacturing partners for sizable extended contracts to serve the larger aviation segment.

Including in hundreds of megawatts through 2025 and beyond, our pipeline of interest partners continues to grow, and we believe that our efforts to build out our manufacturing capacity will lead to additional new and extend orders in the coming quarters.

As we think about our goal for the next several years, our primary focus will remain spending capacity to meet the demand and ultimately achieve a sustainable cost structure at a scale. After transformation in 2022, with several strategical moves, including two cost sharing grants that we were select to receive from the United States Department of Energy, we continued to make important strides toward our goals in our first quarter.

First, we recently expanded our facility at Amprius lab in Fremont, California to accommodate our first and largest scale annual production machine from central (inaudible). We now process the second half of our existing facility, which we expect allows us to both perfect our high volume manufacturing processes and increase our capacity for silicon anode battery production to approximately two megawatt hour or 10 times our current production capacity exiting 2033. We look forward to better serving strategical aviation customers' needs and the supporting prototyping and codification projects with the new customer who are currently in our backlog.

We also announced in March that we had a selective site in Brighton, Colorado as the location for our approximately 775,000 square foot largest scale production facility. The first mass production setup for next generation battery technology in the United States. The selection of the Colorado for our gigawatt scale factory marks important milestone for Amprius. Initial phase of our (inaudible) will provide a potential of up to five gigawatt with expansion capability for up to a total potential manufacturing capacity of a 10 gigawatt.

As a reminder, Amprius (inaudible) facility is already equipped with electrical power and the existing structure layout needed for gigawatt scale lithium-ion battery factory. This will reduce build out costs and the time to market with the goal of being operational in 2025 (ph). Also, Brighton is closer to some of our materiality shooters in the Northwest United States, which we expect will lower operational costs over the long time factory (ph).

As part of our 18 to 24 months plan to scale, we signed our lease for Amprius (inaudible) in April. We are aiming to begin retrofitting the facility towards the end of summer. Overall, this new facility will transform our long term production capabilities. In the near term, we will continue to develop and achieve cutting edge products from Amprius lab in Fremont while we refine our manufacturing processes

to further derisk the handle of our mass production to Amprius Fab in Brighton, Colorado in the coming years.

I have one final update before I turn the call over to Sandra. Labeling (ph) our entire operation here at Amprius is our exceptional team and the ongoing support from our board of directors. We recently announced that we have extend our board and appoint Katherine Bayless as an independent director and our auditing committee chair. With her extensive management and the board experience, we look forward to her unique perspectives on our board moving forward. We are excited to have her on our team as we work to execute our growth strategy.

With the overview complete, I will now turn the call over to our CFO, Sandra Wallach, to review our financial results for the quarter. Sandra

Sandra Wallach
Thank you, Kang. I would now like to spend a few minutes covering some key updates. As a reminder our detailed financials can be found in our shareholder letter.

We closed out the first quarter with 0.7 million in revenue, compared to 2.1 million in Q1 2022. This decrease was partially due to a decrease of 1.5 million in development services revenue, and a decrease of 0.1 million for the quarter year over year in product revenue, both partially offset by an increase of 0.2 million and government grant revenue.

Of note, due to the timing of customer shipments, we ended the quarter with both 0.5 million more in product inventory than in the same quarter last year and 2.5 million in increased deferred revenue pending final delivery of performance obligations later this year.

As we've noted in previous quarters, our product revenue is driven by customer purchase orders arriving at uneven times throughout the year and development services revenue is intermittent based on revenue recognition timing.

However, as Kang mentioned earlier, we shipped to nearly 20 customers this quarter, including four new customers, and we believe that our business development efforts continue to gain traction. Once our capacity expands and more customers transition to commercial orders, we expect to see a more even ramp of product revenue.

Our GAAP gross margin was negative 504% In the first quarter, primarily due to non-recurring startup charges for our large scale manufacturing facility. These charges included both a 1.4 million broker charge for our economic incentives negotiation and 0.3 million of pre-construction design firm startup

costs. As the buildout continues, we expect that more onetime charges are likely to arise. Still, we forecast that our GAAP gross margin will begin to normalize as we reach our capacity expansion goals in the coming years.

Moving now to our operating expense management. Our GAAP operating expenses for the first quarter increased to 6.3 million, largely due to increased public company cost and additional investment in R&D staffing.

Our GAAP net loss for the first quarter was 9.1 million or a net loss of $0.11 per share. Our shares outstanding at March 31, 2023 were 85 million.

As of March 31, 2023, there were 65 full time employees primarily based in our Fremont, California location, and our share based compensation was 0.7 million for the first quarter.

Now turning to the balance sheet. We exited the first quarter with 64.2 million in cash and no debt. The key drivers of our cash activity for the quarter were 6.5 million used in operating activities. As we previously discussed, our run rate for cash used in operating activities is projected to be around 2 million per month in addition to 2022 audit cost and transaction related expenses.

Other drivers include 1.1 million of investment into the expansion of our Amprius Lab facility in Fremont and 2.1 million in financing cash inflow related to usage of our committed equity facility. These activities resulted in a total net use of cash of 5.5 million for the quarter.

Considering our business achievements and ongoing projects, we believe we have been efficiently using capital to drive Amprius forward.

Moving to our outlook, we still expect to be limited by manufacturing capacity until we exit 2023 when our new two megawatt capacity is projected to come online.

Regarding revenue, we have several ongoing development services programs with performance obligations that we expect to complete within 2023, which means that we should see increased revenue recognition weighted more heavily towards the latter part of the year.

We anticipate that our G&A costs will continue at the higher rate we experienced exiting 2022 when accounting for additional public company expenses. Also, we plan to continue to be lean on other operating expenses as we strategically add critical mass to our Amprius Lab and Amprius Fab operating units and allocate the majority of our capital to scaling up our manufacturing.

To this end, we expect higher capital expenditures going forward as we continue to fully build out the two megawatt capacity at Amprius Lab and design and construct our gigawatt hour scale and Amprius Fab facility.

Our spending pattern is dependent on several factors outside of our control, including the timing of rezoning approval for the Colorado site so we expect to provide more specific projections as we have additional information to share.

As we work to fund the capital requirements for our scale up in excess of our previously noted cost sharing grants from the US Department of Energy, we expect that we will continue to have strong support from the US Inflation Reduction Act as we access production tax credits at the anode and cell level.

In addition, we have received over $10 million in state and local incentive packages related to our gigawatt scale facility, which is the result of significant partnerships built in Colorado through our selection process. We believe that these tailwinds will further enhance our economics as we accelerate our scale to meet our massive market.

Overall with the strength of the balance sheet and multiple vehicles to generate additional funding through both equity, such as warrants and are committed equity facility, and non-dilutive sources, such as grants, loans, and incentives, we believe we will have enough cash to execute on our strategic plan.

One last item. Based on the recommendation of a special independent board committee, we entered into a merger agreement with Amprius, Inc, our 77% stockholder. Under the merger agreement, among other things, the shares of common stock currently owned by Amprius Inc. will be canceled and we will issue to the stockholders of Amprius, Inc. new shares of our common stock based on the negotiated and dismounted exchange ratio, and we will assume all options and warrants outstanding at Amprius, Inc.

The newly issued shares will be subject to the same lockup that applies to Amprius, Inc.'s current shares. The merger is conditioned on, among other things, the approval of a majority of the stockholders of Amprius Technologies that are not affiliated with either Amprius, Inc, or held by any of our directors or officers. We expect the special meeting to approve the merger will occur in the third quarter of this year. For more information, please reference the Form 8-K we filed earlier today.

With that, I will conclude the financial discussion and pass the call back to Kang.

Kang Sun
Thanks, Sandra. I'd like to reemphasize a few points before closing.

First, we are delivering next generation commercially available lithium-ion batteries today. Our market leading technology and the position in the aviation space are reflective of our unmatched performance in real world applications and our purchase (ph) ability to solve real world problems.

As shown by our recently increase in battery specific energy density from 450 to 500 watt-hour per kilo, we will continue to enhance our product performance and set new industry standards.

Second, we have (inaudible) commercial products since 2018. So our focus today is not on commercializing, instead, we are building out the scale to serve a significant demand in the US to support a US base the supply chain resilience (ph).

Next (ph), in 2023, we'll further pull out our largest scale manufacturing process and the parameters with our two megawatt hour production line at the Amprius Lab in Fremont. We are also moving swiftly to prepare the build out of Amprius Fab, our gigawatt scale facility in Brighton, Colorado, but the first 500 megawatt hour demonstration program with the United States Department of Energy. In the meantime, we are using our limited capacity to provide the necessary samples to potential customers moving through the technical to commercial validation process.

Third, we are looking forward to several exciting milestones over the rest of the 2023. In the second half of the year, we expect to finalizing the optimal (inaudible) process for our mass production to develop for the for silicon anode, begin construction of Amprius Fab, deliver prototypes of our 500 watt-hour per kilo battery to (inaudible) customers, and to operationalize our two megawatt production line at Amprius Lab by end of the year.

As we look to the rest of the year, our strategy and the focus at Amprius remains unchanged. We have a tremendous opportunity ahead. We support our portfolio that position us to both growth (ph) in the aviation market and extend it to other industries, taking batteries with a stronger performance and a faster charging time. We are continuing to build our early lead with technological advancement and the strategical partnerships. Both the private and the public sector, we now have the capital and are building the capacity to become the leading commercial provider in a sustainable mobility sector.

Finally, we believe we have the right team in place to execute our mission and deliver what we have planned and the promise over the last decade. Thank you for your continued support of Amprius Technologies.

With that, I will turn it back to the operator for the Q&A.

Operator
Thank you. The floor is now open for questions. If you do have a question, please press star one. If your question has been answered, you can remove yourself from the queue by pressing one. The company requests that each participant limit their comments to one question and one follow up. Please hold while we pull for questions.

And our first question comes from Colin Rusch from Oppenheimer. Go ahead, Colin.

Colin Rusch
Thanks so much, you guys, for the update. And I'll start, Sandra, just with the -- this merger agreement. I just want to make sure that there's no fundamental change in the capital structure of the organization. You're just going to be able to distribute the shares to the individual holders of the whole co. And then, you know, those folks will have -- they'll be subject to the same lockup as the whole co was previously. Is that the correct way to understand this merger?

Sandra Wallach
Yes, it is.

Colin Rusch
Okay, perfect. And then, Kang, in looking at the Colorado facility can you talk a little bit about how far along you are in terms of the design and the engineering process and how much flexibility you have with that still as you work through the two megawatt scale up in Fremont?

Kang Sun
Okay, Colin. For the Colorado facility at this moment, we almost -- we are at the final stage of a selection of our production as to decide our production specifications in a -- we have almost all the equipment lined up, okay -- I mean, the supplier lined up. We are -- in June, we probably have the pricing negotiation. Okay, we already finished the technical specifications. This is very, very fast for us because we have -- our team has a lot of experience in dealing with equipment suppliers and the (inaudible) manufacturing processes. So we still working on a few regulatory issues. We hope we can start construction, okay, bring it to ground -- we don't need to bring it to ground. We just need the retrofitting -- retrofit the facilities sometime in early fall.

Colin Rusch
Perfect. And then in Fremont, can you talk about any sort of surprises, either positive or negative, that you're seeing with the tool as you get it installed and start working through some of the testing processes?

Kang Sun
Yeah, Fremont. We do a very rigorous testing in Fremont, also in Germany. So far, we are moving forward according our own schedule. So I think the next month, June, is important a month for us. This is the time we will complete the most critical part of the evaluation of this process. (inaudible) should be relatively smooth.

Colin Rusch
Excellent. Thanks so much, guys.

Operator
And our next question comes from Chris Souther from B. Riley. Go ahead, Chris.

Chris Souther
Hey, guys. On the CapEx plan, I didn't see any incremental detail on the anticipated amount and timing for the five gigawatt hour Colorado expansion. It sounds like any material changes will become clearer after June, but just wanted to get a sense of how the sizing and cadence are shaping out, you know, as far as the CapEx plans?

Sandra Wallach
Yeah. So we -- once we have more detail and certainty about the timing for the first 500 megawatt, which is the DOE demonstration project, then we will be putting together the CapEx plan to get us through the five gigawatts. But the estimates that we've shared prior remain unchanged.

Chris Souther
Okay, that makes sense. And then in the shareholder letter, you called out that several of the customers who have the potential for hundreds of megawatts through 2025 and beyond. Could you give us a sense of the size and scope of the 20-ish customers today? I assume you count several customers among that size, ones that you've named like (inaudible) Airbus, AeroVironments, but I'm just kind of curious of the 20 how many do you think are in that kind of size range, you know, if you had the capacity today?

Kang Sun
We -- the -- we call them the hundreds of megawatts inquiries and the discussions with our customers. Those are -- the -- would it be the off takers for Colorado manufactory. Among those customers, when we see 20 customers, so those customers are included -- or they lose 20 customers, we probably will finalize those deals sometimes in the later part of the July. (inaudible). When we do the Colorado facility is a very important we have a customer to take orders from that facility. So company is working very diligently to build a strong pipeline for our largest skilled manufacturing facility.

Chris Souther
Got it. That's a process that probably starts in July or you think, you know, in July, August live kind of details around. You know, I guess kind of the plan dedicated capacity by customers would be something you guys think you'd have?

Kang Sun
In July, we probably -- when we are working very fast on building this manufacturing facility here. The manufacturing facility in 2025. This is a 500 megawatt manufacturing facility. We like to have a team (ph) operation in 2025. So there's 2025, whatever it is, this factory can produce put -- over the 500 megawatt because the they is set up the customer evaluation, factory inspections, all those kind of activities to make sure we have sufficient -- we have full capacity. During -- once we started operation. Okay, we need to run the full capacity, we need to have very strong pipeline. So pipeline needed to be hundreds megawatt hours. So the deals, we are in discussion. I expect to conclude in the later part of the July. So that it will give us the customer base for our largest scale manufacturing facility in Colorado.

Sandra Wallach
To further answer, many of the customers that we're serving today, not just these two pack manufacturers who serve a more diversified aviation sector. Many of our nameplate customers, our hallmark customers have significant demand that we can’t support so that will be -- that is also part of how we're building the pipeline for 2025.

Chris Souther
Yeah, that's really helpful on the visibility. Thanks, guys.

Operator
Thank you. And our next question comes from Chip Moore from EF Hutton. Go ahead, Chip.

Chip Moore
Good evening. Thanks for taking the question. And congrats on all the progress year to date. I guess, I wanted to follow up on the commercial pipeline. Right. Great to see that growing. Curious then you can talk a bit how you're balancing, you know, new customers versus existing. Good to see, you know, new logos coming in. And then maybe talk a bit about the qualification process, you know, what that takes, how long that takes, and really how you balance that to your point of getting that demand in place.

Kang Sun
We have existing customers, they expanded their purchase from Amprius. That's part of the business. So far, the most of those capacities, we are playing planning for large scale manufacturing in Colorado, our existing customers. We're also working with new customers exploring new applications.

So the qualification process depends on who will be the customer. We have the customer, the qualification time is relatively short -- shorter, I mean in (inaudible). If this is a new project for the customer, there are two types of customers. One customer use our battery to replace their existing applications. They already have their own devices, have their own application already identified. Those customers qualification time will be short. They just test our batteries and put in their device then they can use.

Another type of customer we have to work with them on their new project. For example, they design a new flying devices require our battery support. Those kinds of projects that you will be taking a little bit of a longer time.

For bear (ph) to a qualification for our customer -- our current customer applications normally takes about six months to two years depends on how sophisticated the application will be. Now, most of the time, the delays not come from Amprius, most of the time the delay because the customer, their own project have been delayed.

Chip Moore
That's very helpful, Kang. And I could ask one more. You know, with regards to Colorado and ramp up there, you know, you've talked about sort of derisking production with what you've learned, maybe expand on that process. And it sounds like you're already tested the central therm equipment overseas, is that something you can incorporate? And just how do you go about incorporating some of those learnings? Thanks.

Kang Sun
Yep, that's two megawatt. That's why there's two megawatts really, this is what we call two megawatt because the machine (ph) really designed more than two megawatts which is assuming we can deliver two megawatt capacity end of the year. So this is very, very important exercise at Amprius. If this machine can meet our specification, scale up or not, will be the issue.

So far, we tested in Germany and in Fremont give us a very encouraging results. This is a much higher thoughtful (ph) and much robust process than what is the process we have today. If these two megawatts work, so two purposes, why is the validation. This probably the most important thing to us. The second part is give us 10 times more capacity to serve our customers.

Chip Moore
Okay, I appreciate it. Thanks very much.

Operator

At this time, this concludes our question and answer session. If your question was not taken, you may contact Amprius previous investor relations team at ir@amprius.com. I would now like to turn the call back over to Dr. Sun for his closing remarks.

Kang Sun

Thanks again, everyone for joining us today. I'd also like to thank our employees, partners, and shareholders for their continued support. As a reminder, you may learn more about our company from the additional updates and learn about upcoming events and the presentations from the investor relations section of our website. We look forward to updating you on Amprius progress on our next call. Thanks.

Operator

Thank you for joining us today for Amprius Technologies First Quarter 2023 Earnings conference call. You may now disconnect your lines and have a wonderful day.