Amprius Technologies, Inc.
Third Quarter 2023 Earnings Conference Call
November 9, 2023

Presenters
Kang Sun, CEO
Sandra Wallach, CFO

Q&A Participants
Colin Rusch - Oppenheimer
Chris Souther - B. Riley
Timothy Moore - E.F. Hutton
Kailash - Northland Capital
Amit Dayal - HC Wainwright
Jeff Grant - Alliance Global

Operator
Good afternoon. Welcome to Amprius Technologies Third 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 the timing and ability of Amprius to build its large-scale manufacturing facility, expand its manufacturing capacity, scale its business, and achieve 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.

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'll now turn the call over to Amprius Technology's CEO, Dr. Kang Sun for his comments. Sir, please proceed.

Kang Sun
Welcome, everyone, and thank you for joining us this afternoon. On today's call, I will report our progress and accomplishments at Amprius in the third quarter. And 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.

The third quarter was an exciting quarter for us. Before I give the quarterly report, I would like to briefly introduce Amprius to those who may be new to the company. Amprius develops, manufacturers, and markets high energy density and high-power density batteries with applications across all segments of electric mobility, including aviation and the EV industries. As a pioneer of silicon anode battery technologies, Amprius has spent the last decade developing various silicon anode structures and robust manufacturing processes as well as a strong patent portfolio of over 80 patents.

Amprius silicon anode batteries provide industry-leading performance today, including 450 watt-hour per kilo specific energy density and the 1,150 watt-hour per liter volumetric energy density available commercially since early 2022. And the 500 watt hour per kilo, 1,300 watt-hour per liter battery platform in our lab independently verified back in early 2023. Our battery performed up to 10C power capability, extreme fast charge rate of 0% to 80% state of charge approximately six minutes, a wide operating temperature range of minus 30 degrees to 55 degrees Celsius and the safety design feature that enable us to pass United States military benchmark nail penetration test.

Amprius has been in commercial battery production since 2018. So the company had many years the experience manufacturing high-energy density and high-power density lithium-ion batteries. It's our belief that there are no other commercial batteries on the market that can perform at these levels.

Amprius high-performance batteries have attracted market attention and customer demand. Company's priority today is to build additional manufacturing capacity as quickly as we can to meet the increase in demand for our products. Our production capacity scale up activities in both California and Colorado are moving along well.

This quarter, we delivered new technologies and the new batteries, engaged with and sold to additional customers, and moved closer to completing our battery production capacity expansion in our California factory. I would like to take this opportunity to note a few highlights of our progress.

In August, we unveiled a breakthrough battery cell chemistry and a design that enables 400 watt hour per kilo energy density with a simultaneously 10C power capability. The energy and power

delivered by this cell make it an ideal solution for electric mobility applications, such as aviation and EVs. So eVTOLs, this battery is designed to provide the necessary propulsion, power, and energy for taking off, cruising and landing, while also extending flight range by as much as 50% as modeled based on commercially available alternatives. We plan to make this battery available for customer evaluations this year and to have a commercially available sales in early 2024.

Also, to enhance our customers' product performance, Amprius has developed and delivered three additional formats of 450 Wh/Kg of sales. This customer cells were developed in collaboration with Amprius' strategical customers to address their unique high-altitude pseudo satellite qualification requirements and they enable them to operate in highly challenging environments. With greater energy density and the longer cycle life than previously 400 Wh/kg platform, we believe that the new 450 watt per kilo cells are the only known commercially available batteries that can provide enough power and endurance for HAPS' overnight stratospheric flight.

Recently, we announced that we had signed purchase orders with three premier electric aviation manufacturers for customer cells from the company's 450 Wh/kg ultrahigh-energy density platform for battery pack development and qualification.

In addition to high-energy drone applications, these new customer cells form factors are positioned to improve performance of high-energy storage applications for the military as well. We expect the first cells to be commercialized and that we will begin shipping this year.

Another exciting accomplishment is the performance that our batteries delivered at the Bridgestone Word Solar Challenge last month. In this race, the four teams that were powered by Amprius batteries swept the top four places out of 32 teams.

As reported by Cosmos during the race, Amprius power packs provided around 30% better energy capacity for roughly the same amount of weight of units used by other competitors and are expect to be the standard across all teams by the time the 2025 event rolls around. Although the competing vehicles are not commercial vehicles, their performance requirements test our battery in very challenging driving conditions.

Moving to our customer contracts from the quarter, Amprius silicon anode batteries continue receiving strong attention from the customer as well as the industry. In the third quarter, we shipped to 38 customers, up from 27 in the second quarter. This group includes repeat customers who continue to place new orders such as Aalto, AeroVironment, Teledyne Flir, as well as 18 new accounts, up from 10 last quarter.

In addition, we received a volume purchase order from a premier eVTOL OEM during the quarter, which signaled our existing technical engagement and our move into the internal qualification

process for our custom cells. Amprius' advanced cells now serve the UAS, UAM, and eVTOL segments of the growing aviation market for electric mobility. The pipeline of new customer projects remains strong as well, with the third quarter progress across several areas.

First, for example, we successfully completed the U.S. Army RCCTO program where we demonstrated our technology's capabilities for the nano unmanned aircraft systems market. This is a new market segment for our business, and now that we have proven our viability in the nano-UAS market, we have transitioned to the commercial production.

Secondly, another example is our partnership with Tenergy to utilize our high energy-density cells in their rechargeable battery packs. The combination offers a significant performance benefit, including both a 31% weight reduction and a 6% energy boost over other comparable rechargeable battery packs. We believe this partnership will open multiple opportunities for our high energy and high power batteries.

Third, recently, we also received forecast customer demand to serve the large aviation segment that attends of megawatts of production through 2024 and beyond.

With this demand in mind, we moved to a long-term supply agreement with one of the two battery pack manufacturers to which we started shipping samples in Q4 of 2022. Overall, we are still facing demand that greatly outstrips our supply and are confident that we are building towards enough customer commitments to fill our increasing capacity in the coming years.

As I mentioned earlier, expanding our production capacity is our main priority. Currently, we have two expansion projects under development. First, our megawatt scale production capacity expansion in Fremont, California is nearly completion. This facility has a lithium-ion battery manufacturing capabilities with Amprius silicon anode technology. We plan to deliver 2 megawatt capacity initially in 2024, which is about 10 times of our current production capacity. The additional capacity at our California factory is critical for Amprius to serve both as a production facility for increase the customer orders and as a pilot facility for large-scale manufacturing process optimization. Our 2024 capacity in Fremont is already sold out, and our list of customer commitments for 2025 continues to grow.

For a look at how we manufacture our ultra-high energy density silicon anode lithium-ion batteries, please check out the overview video post to the technology section of our website. Also, we look forward to hosting institutional investors and analysts in Fremont, California for our open-house event on December 14th, when we will showcase Amprius' high performance silicon anode battery manufacturing facility.

Our other production capacity buildup is in the state of Colorado. The manufacturing facility in California is a pilot facility for our gigawatt-hour scale factory in Colorado. So far we have leased

774,000 square feet of the production space with an additional 525,000 square feet available for expansion. The initial production capacity is expect to be 500-megawatt hour annually and we will focus on aviation batteries in this stage. We plan to have this phase operational in 2025 and to then increase capacity over time with 5-gigawatt hour module production expansions to keep up the demand.

With that, 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 financial updates. As a reminder, our detailed financials can be found in our shareholder letter.

We finished the third quarter with $2.8 million in revenue, a $2 million increase compared to $0.8 million in the same quarter last year and up $1.2 million sequentially. There were two main drivers of this increase.

First, our product revenue increased by $1.7 million from the prior year period to $2.2 million, largely driven by shipments to 38 customers in the quarter, a second consecutive quarterly record for Amprius. Although our product revenue remains largely driven by customer purchase orders that can arrive at uneven times throughout the year, we have shown consistent new customer growth and diversification in recent quarters. In the third quarter, we even limited the number of customers that account for greater than 10% of our revenue to only four customers in the quarter compared to five such customers last quarter.

Second, our development services revenue was $0.6 million, a reflection of our successful completion of the RCCTO program for the U.S. Army as Kang previously mentioned.

Moving to our profitability metrics, our gross margin was negative 152% for the third quarter compared to negative 185% in Q3 2022 and an improvement from negative 186% in Q2 2023. As we've discussed in prior quarters, we see significant gross margin variation as our product and service revenue mix fluctuates. Also, we anticipate that factory start-up costs will ramp up as we start Colorado construction in earnest. Longer term, we are confident that our GAAP gross margin will begin to normalize as we approach our capacity expansion goals.

Now on to our operating expense management. Our operating expenses for the third quarter were $4.9 million. We maintained a lean operating structure to date, even when accounting for G&A fluctuations in the previous two quarters for transaction-related expenses and targeted staffing increases in R&D in Q2.

Our GAAP net loss for the third quarter was $8.5 million or a net loss of $0.10 per share. As of September 30, 2023, our weighted average number of shares outstanding was $86.4 million. Also, as of September 30, 2023, there were 76 full-time employees, up from 72 in the second quarter with those employees primarily based in our Fremont, California location. Our share-based compensation for the quarter was $1.1 million.

Turning now to the balance sheet. We exited the third quarter with $53.4 million in cash and no debt. The key drivers of our cash activity for the quarter were negative $8.7 million in operating cash flow, although excluding transaction costs, our run rate remains at approximately $2 million to $2.5 million per quarter, a negative $8.9 million related to the build-out of the Fremont facility and ordering of long lead time equipment for Colorado, and positive $6 million added through the usage of our committed equity facility. Considering our business achievements and ongoing projects, we believe we are efficiently using capital to drive Amprius forward.

Before I turn the call back over to Kang, I would like to take a moment to discuss our outlook. We expect to be capacity constrained until the end of 2023 when our new 2-megawatt capacity is expected to come online. That project and our build-out of Amprius Fab in Colorado remain our top capital allocation priorities.

As we project our capital expenditures for the rest of 2023 and the beginning of 2024, we expect to spend another $5 million to $7 million over the rest of the year to complete the build-out of the Fremont facility. Also, we estimate that we'll spend another $20 million to $30 million over the balance of 2023 and the beginning of 2024 on the start of construction for the Colorado facility and on procuring long lead time items in production equipment.

As part of our ongoing business planning, we filed a shelf registration of October 2nd and included a new at-the-market facility for $100 million in that filing. We have terminated the committed equity facility concurrent with the effectiveness of the shelf.

Overall, with the strength of our balance sheet and multiple vehicles to generate additional funding through both equity issuances such as warrant exercises and sales under our ATM and nondilutive sources such as grants, loans, and incentives, we believe that we will have enough cash to continue executing on our strategic plan.

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 key points before closing.

First, Amprius Silicon anode technology continues to demonstrate unmatched performance in our industry. Amprius batteries command a firm lead with their combination of safety, energy,

power, charging time, and temperature performance, and are uniquely positioned for the electric mobility market.

Second, Amprius battery are commercially available today. We have been shipping commercial products since 2018, and our technological advancement continues to bring in significant customer demand. This quarter, we not only delivered to repeated customers and expand our technical engagements, we add 18 new customers as well. Our demand pipeline is robust and we look forward to further building out our customer book in the coming quarters.

Third, we are scaling our manufacturing capacity to serve significant demand ahead with our 2 megawatt hour production line nearing completion. We are expanding our footprint and the capacity at Amprius Lab in California. We also remain on track to build out Amprius Fab, our gigawatt scale facility in Colorado, which we expect to be operational entering 2025.

Finally, we are looking forward to several exciting milestones as we head into 2024. We expect to operationalize our megawatt-scale silicon anode battery manufacturing facility at Amprius lab, continue securing customer commitments to fulfill Amprius Fab, expect production capacity for 2025 and delivered 500 Wh/kg battery prototypes to select customers.

As we look to the rest of the year, our strategy and focus in Amprius remains unchanged. We have a tremendous opportunity ahead with a product portfolio that positions us to both growth in aviation market and expand to other industries seeking batteries with leading performance.

The opportunities in front of Amprius are enormous, including the $49 billion aviation battery market by 2025, the $67 billion EV battery market by 2025, and the $1.25 billion conformal wearable battery market by 2030, of all of which are Amprius growth path in coming years.

2023 has been a very productive year for the company thus far. Our solid third quarter performance has demonstrated our team's capability to deliver what we have planned and promised. Thank you for your continued support of Amprius Technologies.

With that, I will turn it back to the operator for questions and answers.

Operator

Thank you. We will now conduct a question and answer session. If you would like to ask a question, please press star one on your telephone keypad. A confirmation tone will indicate your line is in the question queue. You may press star two if you would like to remove your question from the queue. For participants using speaker equipment, it may be necessary to pick up your handset before pressing the star keys. Once again, that’s star one at this time. One moment while we pull up our first question.

Our first question comes from Colin Rusch with Oppenheimer. Please proceed.

Colin Rusch
Thanks so much, guys. I'll just pack them all into a single line of questioning. Can you talk a little bit about your potential price leverage given the higher energy density to the cells? Any risk to capital climate coming from international sources into the U.S. as you start to ramp up? And then for Sandra, if you could address timing for any potential incremental sources of capital? And I'll hop back in the queue after that. Thanks.

Kang Sun
Okay. Colin, thanks. Yes. First, at this moment, we have a significant leverage in terms of our product selling price because this is the only product which can perform at a desired level. And there is no other commercial product that can perform at 450 Wh/kg with the power capacity we deliver. So we do have better pricing than alternatives as far as I know.

Secondly, in terms of production equipment, we have entire large scale, I mean, the megawatt scale, 500 megawatt scale production equipment is specified, and supplier select. At this moment, we're working on the details of the purchasing contracts.

Sandra Wallach
Great. And I'll step in and answer the timing of any potential capital needs. Colin, great question. So right now, we don't have any immediate plans. We filed the shelf for $400 million. We have $100 million ATM facility in place. And I think as our schedule becomes more confirmed as far as the build-out, we'll be taking a harder look at timing.

Operator
Our next question comes from Chris Souther with B. Riley. Please proceed.

Christ Souther
Hey, guys. Thanks for taking my questions. Maybe just around the customer progress. Can you talk a little bit about the overall size of the orders from this pre-premier electric aviation manufacturers you called out and timeframe that those orders cover. Maybe you could kind of frame the overall opportunity set there as part of a broader conversation around the backlog building activities. I'm trying to get a better sense of where we are in starting to sell out capacity in Colorado.

Kang Sun
Yes, Chris. Well, first, as we mentioned, we sold out our 2024 production capacity in California because that's the place we have the manufacturing factory. So we also have a very strong forecast because those customers will not give us orders until this year, we have production capacity available. But we did receive a commit, okay, forecast tens of megawatts at this moment.

We are keep building the pipeline. If we look at the entire forecast, the entire forecast is very strong. We have customer give us the indication, okay, over 100 megawatts, but in terms of signed agreements, we have tens or several tens of megawatts the capacity engaged at this moment.

Chris Souther
Got it. Okay. That's really helpful. And it certainly makes sense around seeing Colorado in action before a lot of the formal large orders. So on the point around 2024 capacity being sold out, I assume existing customers with like commercial products are prioritized, but how are you prioritizing new potential customers versus existing customers who are looking for samples? It seems like you continue to add new customers to the fold here. Just what does the mix look like of new and existing customers kind of next year?

Kang Sun
Yeah. We do allocate a certain capacity to serve new customer. As we mentioned, for something for the piping (ph), but our primary commitment will be to the customer we already serve. But we believe we do have -- yes, we do have a sufficient capacity allocation for new customer engagements.

Chris Souther
Okay, yeah, that's what I was hoping. Thank you.

Operator
Thank you. Just as a reminder, the company requests that each participant limit their comments to one question and one follow up.

Our next question comes from Tim Moore with E.F. Hutton. Please proceed.

Timothy Moore
Thanks. Given that the aviation market prioritizes safety first and energy and power, how meaningful of a breakthrough could that electric vertical takeoff and landing purchase order that you recently got, be for you to help serve now all the major segments of the electric mobility and aviation. Can you bundle and cross-sell a complete offering now that you got the vertical take-off and landing quarter?

Kang Sun
Yeah. We do have Integrity group building blocks for electric mobility applications. We truly believe that's the case because the energy, the power, safety, charging time, tentative performance, even the pressure performance, low pressure performance we delivered to the aviation market can be applied to other markets, especially for EVs. At this moment, we don't have a large formal battery manufacturing capability at Amprius, but that would change. I think we have all the technical building blocks available for this applications.

Timothy Moore
That's helpful. That's nice to hear. And then my other question, just my follow-up question would be your Colorado Scale Factory cleared that ordinance milestone six weeks ago. Can you just walk us through what else you need to meet or achieve beginning the operations of the fab in the first half of next year besides receiving the equipment. Is there any other kind of hurdles or actions that you need to do besides just receiving and installing equipment?

Kang Sun
The equipment part, we have a select, I would say, the most advanced lithium-ion battery manufacturing equipment suppliers in this industry. We select four suppliers for the internal manufacturing line. The delivery time would be three time a month. We have--at this moment, we are negotiating the final details of the purchasing contracts. So that's not the problem.

Currently, we're still working on some regulatory issues. I think the regulatory issues is the major bottleneck for us to move forward. For example, air permitting, okay, those kinds of things, we need to work out. We, at this moment, look at the schedule we have here, we probably need push our construction time to early next year instead this month. Before we thought that we can get this thing done this month now, we probably push it to some time in January to start the construction.

Timothy Moore
Great. That's helpful, Kang. Thanks for sharing that. And I'll save the rest of my questions for offline later tonight. Thanks.

Kang Sun
Thank you.

Operator
Our next question comes from Abhi Sinha with Northland Capital. Please proceed.

Kailash
Hi. This is Kailash on behalf of Abhishek. So with respect to the conformal (ph) wearable batteries, we just wanted to know if you could deliver to militaries outside the U.S.?

Kang Sun
Abhi, we can to certain countries, for example, for allies (ph), Australia, Japan, those countries, we shouldn't have a problem. But for certain countries, we do need to have an export license for that engagement.

Kailash

All right. And as a follow-up, can you remind us how much revenue you would need to break even with respect to gross margin? And when do you expect that to happen? Thanks.

Sandra Wallach
So as of now, we haven't given guidance as far as our financial model. So we haven't disclosed that.

Kailash
Perfect. Thank you.

Operator
Thank you. Our next question comes from Amit Dayal with HC Wainwright. Please proceed.

Amit Dayal
Thank you. Good afternoon, everyone. Can you remind us, guys, for the Colorado facility, what the total CapEx requirement is to get to that 500 megawatt hour Phase 1 capacity target?

Sandra Wallach
Yes. We have given some ranges before. What we've updated as we get more information is we now know that the production equipment will run between $70 million and $100 million, including tariffs for delivery to Colorado and the construction costs are still being updated based on the 60% drawings for the facility. So we haven't updated that range recently.

Amit Dayal
Okay. Thank you, Sandra I guess a follow-up to or adjacent question to that with respect to the Fremont capacity is how should we think about modeling for the ramp at three months for the 2 megawatt hour?

Sandra Wallach
So we'll have the equipment online and available. We're very excited to showcase it on December 14, along with the rest of the 2-megawatt facility. We would expect that it will ramp up slowly throughout the year, sequentially each quarter. It won't all be available Q1.

Amit Dayal
Okay. All right. Yeah, that's all I have for now. I will follow up with you offline. Thank you.

Operator
Thank you. The next question comes from Jeff Grant with Alliance Global. Please proceed.

Jeff Grant

Afternoon. Thanks for the time. With the impending additional capacity at Fremont, I imagine there's some potential to add more new customers while also increasing allocations to existing customers. Is that something you guys are considering at all? Or are there any constraints internally from maybe a personnel standpoint in managing more new customers?

Kang Sun
That would be the case. We view this capacity expansion with a new customer in mind. One of the reasons we built this new capacity because we're already out of the capacity for current customers. So the new capacity will enable us to engage more customers.

Jeff Grant
Great. Thank you. And can you talk at all about the time line to commerciality of the 500-watt hour battery that you guys are working on? And what are kind of the early demand indications you see in terms of where that fits in the market relative to some of the existing offerings that you guys have already commercialized?

Kang Sun
We already have a customer demand, actually quite a strong demand. So we expect to--we start to install our equipment and start initial manufacturing in 2025. At that time, we can have a customer factory inspection. We can provide, we call, pilot production prototypes to customers for evaluation.

Jeff Grant
Great. Thank you for the time.

Sandra Wallach
Yes, I think, Jeff, if your question was more around the 500 watt hour per kilogram or the 500 megawatts?

Jeff Grant
Sorry, it was more specific to the 500-watt hour battery that you guys are testing. I believe you talked about piloting that soon, but I was just wondering the path to commerciality.

Sandra Wallach
No. So that we'll be hoping to shift prototypes to select strategics by the end of this year and then move into commercialization in the first part of 2024. To Kang's point, those products have already been designed into several of our customer platforms. So we're expecting that to ramp next year as well.

Jeff Grant
Great. Thank you.

Operator
Thank you. At this time, this concludes our question answer session. If you have any additional questions, you may contact Amprius Investor Relations team at ir@Amprius.com. I'd now like to turn the call over to Dr. Sun for his closing remarks.

Kang Sun
Thanks, again, everyone, for joining us today. As a reminder, you may learn more about our company, find additional updates, and learn about our upcoming events and presentations from the Investor Relations section of our website. We hope to see you at the advanced automotive battery conference in San Diego next month and at our Fremont, California expansion showcase event shortly thereafter. And we look forward to updating you on Amprius' progress on our next call. Finally, I would like to thank our employees, partners, and the shareholders for their continued support. Operator?

Operator
Thank you for joining us today for Amprius Technologies Third Quarter 2023 Earnings Conference Call. You may now disconnect.